PREM 19/205

PART 5.

SECRET.

confidential filing.

Energy Policy.

Discussions on world oil situation and Prices.

Meetings of the International Energy Authority (IEA)

Nuclear Power Policy.

North Sea Oil and Gas Depletion Policy.

315.

ENERGY.

Part 1: May 79.

Part 5: May 80.

Referred to	Date	Referred to	Date	Referred to	Date	Referred to	Date
~~13.5.80.~~		~~26.11.80~~					
~~27.6.80~~		~~27.11.80~~					
~~30.6.80~~		~~8.12.80~~					
~~3.6.80~~		10-12-80					
~~5.6.80~~		ends					
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~~9.9.80~~							
~~26.9.80.~~							
~~3.10.80.~~							
~~5.11.80~~							

PREM 19/205

PART 5 ends:-

MOSCOW to FCO 10.12.80

PART 6 begins:-

E(80) 143 11.12.80

TO BE RETAINED AS TOP ENCLOSURE

Cabinet / Cabinet Committee Documents

Reference	Date
CC(80) 23rd Conclusions, Minute 2 (Extract)	11/06/80
E(80) 60	27/06/80
E(80) 23rd Meeting, Item 3	01/07/80
E(80) 137	25/11/80
E(80) 41st Conclusions, Item 2	26/11/80
JIC(80)(N) 87	27/11/80

The documents listed above, which were enclosed on this file, have been removed and destroyed. Such documents are the responsibility of the Cabinet Office. When released they are available in the appropriate **CAB** (CABINET OFFICE) CLASSES

Signed Waylana Date 1 July 2010

PREM Records Team

SECRET

5

Energy

10 DOWNING STREET

From the Private Secretary

10 December 1980

OIL PRICES: PRESIDENT GISCARD'S MESSAGE

The Prime Minister was not entirely happy with the draft message from her to President Giscard enclosed with your letter to me of 9 December. It was, therefore, somewhat recast here. I enclose the text in the form in which it issued late yesterday evening.

I am sending copies of this letter, and its enclosure, to Julian West (Department of Energy), John Wiggins (HM Treasury) and David Wright (Cabinet Office).

M. O'D. B. ALEXANDER

Paul Lever, Esq.,
Foreign and Commonwealth Office.

KRB

2.22.
G 20.00 Z.
Misc 23

SECRET
IMMEDIATE.

To go on the Direct Line to Paris.

T 240/80 9.XII.80

MESSAGE FROM THE PRIME MINISTER TO PRESIDENT GISCARD

My Dear President,

Thank you for your message of 7 December.

I entirely agree with you about the consequences of a further substantial increase in the price of oil. Inevitably it would seriously affect the operations of the world economy and would be against the interests of all the developed countries of the West, even of those who are not significantly dependent on imported oil. Clearly we must do our utmost to arrest such a development.

One element in our policy must be action by the consumers. I fear that the moderates in OPEC will be unable to hold prices indefinitely unless we ourselves have shown our willingness to act effectively. The discussions at the Energy Council on 27 November were a useful step forward. The IEA meeting today will also be important.

These meetings will provide the background to consideration of any high-level political approach to the Gulf oil producers. Since such an approach would have to be made before the meeting of OPEC oil ministers in Bali on 15 December, our Foreign Ministers should certainly take the opportunity of their meeting tomorrow to review the situation. Peter Carrington will be interested to hear

/ from

from ~~Monsieur~~ M. Francois-Poncet how you consider that a political approach to the Gulf producers can best be made and how it can be harmonised with the decisions that the consumers are taking on their own behalf.

Yours sincerely

Margaret Thatcher.

SUBJECT.

PRIME MINISTER'S
PERSONAL MESSAGE
SERIAL No. T 240/80.

4

cc. Hunter 8th
DPS

00 Q92QQQZ
PARIS FROM LONDON
SECRET GOVERNMENTAL Q26
BT
MY DEAR PRESIDENT,

THANK YOU FOR YOUR MESSAGE OF 7 DECEMBER.

I ENTIRELY AGREE WITH YOU ABOUT THE CONSEQUENCES OF A FURTHER SUBSTANTIAL INCREASE IN THE PRICE OF OIL. INEVITABLY IT WOULD SERIOUSLY AFFECT THE OPERATIONS OF THE WORLD ECONOMY AND WOULD BE AGAINST THE INTERESTS OF ALL THE DEVELOPED COUNTRIES OF THE WEST, EVEN OF THOSE WHO ARE NOT SIGNIFICANTLY DEPENDENT ON IMPORTED OIL. CLEARLY WE MUST DO OUR UTMOST TO ARREST SUCH A DEVELOPMENT.

ONE ELEMENT IN OUR POLICY MUST BE ACTION BY THE CONSUMERS. I FEAR THAT THE MODERATES IN OPEC WILL BE UNABLE TO HOLD PRICES INDEFINITELY UNLESS WE OURSELVES HAVE SHOWN OUR WILLINGNESS TO ACT EFFECTIVELY. THE DISCUSSIONS AT THE ENERGY COUNCIL ON 27 NOVEMBER WERE A USEFUL STEP FORWARD. THE IEA MEETING TODAY WILL ALSO BE IMPORTANT.

THESE MEETINGS WILL PROVIDE THE BACKGROUND TO CONSIDERATION OF ANY HIGH-LEVEL POLITICAL APPROACH TO THE GULF OIL PRODUCERS. SINCE SUCH AN APPROACH WOULD HAVE TO BE MADE BEFORE THE MEETING OF OPEC OIL MINISTERS IN BALI ON 15 DECEMBER, OUR FOREIGN MINISTERS SHOULD CERTAINLY TAKE THE OPPORTUNITY OF THEIR MEETING TOMORROW TO REVIEW THE SITUATION. PETER CARRINGTON WILL BE INTERESTED TO HEAR FROM M. FRANCOIS-PONCET HOW YOU CONSIDER THAT A POLITICAL APPROACH TO THE GULF PRODUCERS CAN BEST BE MADE AND HOW IT CAN BE HARMONISED WITH THE DECISIONS THAT THE CONSUMERS ARE TAKING ON THEIR OWN BEHALF.

YOUR SINCERELY

MARGARET THATCHER.

BT

PRIME MINISTER

I attach a message I have just received from President Giscard about oil prices. He suggests that we should try to persuade the Gulf States to freeze prices for the first six months of 1981 and asks for your views on this. I have asked the Foreign and Commonwealth Office for urgent advice and a draft for your reply tomorrow. *

Gillian Baldwin
Duty Clerk

7 December 1980

* by 1800 hrs — FCO will consult with Energy over the reply.

ZZ LONDRES 070930Z
DE PARIS

Copy 1 of 3

SECRET GOUVERNEMENTAL N. 123

A MADAME M. THATCHER
PREMIER MINISTRE DU ROYAUME UNI
10 DOWNING STREET LONDRES

T236/80

DE M. VALERY GISCARD D'ESTAING
PRESIDENT DE LA REPUBLIQUE FRANCAISE

PARIS LE 7 DECEMBRE 1980

MON CHER PREMIER MINISTRE,

LA SITUATION ECONOMIQUE DE LA PLUPART DE NOS PAYS EST ACTUELLEMENT TRES DIFFICILE ET LES PERSPECTIVES POUR LES ETATS DE LA COMMUNAUTE EN 1981, QUE NOUS VENONS D'EXAMINER A LUXEMBOURG, SONT PREOCCUPANTES, DANS CES CIRCONSTANCES UNE NOUVELLE HAUSSE DES PRIX DU PETROLE AURAIT DES EFFETS CATASTROPHIQUES. LA DECISION DEPEND EN REALITE DES DIRIGEANTS SAOUDIENS ET DE CEUX DU KOWEIT ET DES EMIRATS DU GOLFE.

NOUS DISPOSONS LES UNS ET LES AUTRES DE MOYENS DE PERSUASION POUR LES INVITER A ADOPTER UNE ATTITUDE POLITIQUE QUI DEVRAIT ETRE, A MON AVIS, CELLE D'UN GEL DES PRIX DU PETROLE POUR LES SIX PREMIERS MOIS DE 1981. LA SITUATION D'INSECURITE INTERNATIONALE, ET LA CRISE ECONOMIQUE, LEUR DONNENT DES ARGUMENTS PUISSANTS ET SUFFISANTS A OPPOSER AUX DEMANDES DE CERTAINS ETATS.

JE CROIS QUE NOUS DEVRIONS NOUS EFFORCER D'OBTENIR CE GEL DES PRIX POUR UN SEMESTRE. SI VOUS AVIEZ CERTAINES REFLEXIONS A ME COMMUNIQUER A CE SUJET, JE SERAIS HEUREUX DE LES CONNAITRES.

LES MINISTRES DES AFFAIRES ETRANGERES DES QUATRE SE REUNISSENT POUR DINER MERCREDI PROCHAIN A BRUXELLES.

JE PENSE QUE CE SERAIT UNE BONNE CIRCONSTANCE POUR QUE NOUS LEUR DONNIONS LA DIRECTIVE D'ARRETER UNE STRATEGIE COMMUNE. CELLE-CI DEVRAIT SANS DOUTE COMPORTER DES INTERVENTIONS AU PLUS HAUT NIVEAU AUPRES DES DIRIGEANTS DE CERTAINS ETATS PRODUCTEURS.

IL S'AGIT D'UNE QUESTION QUI REVET POUR L'ENSEMBLE DE NOS PAYS UNE TRES GRANDE IMPORTANCE, C'EST POURQUOI JE SERAIS HEUREUX DE CONNAITRE VOTRE PENSEE.

JE VOUS PRIE DE CROIRE, MON CHER PREMIER MINISTRE, EN MES SENTIMENTS LES MEILLEURS.

VALERY GISCARD D'ESTAING

SECRET

3

Foreign and Commonwealth Office

London SW1A 2AH

9 December 1980

Dear Michael,

Oil Prices: President Giscard's Message

President Giscard proposed, in his message of 7 December to the Prime Minister, that the Four Foreign Ministers should, at their dinner in Brussels on 10 December, discuss a possible political appeal to the Gulf oil producers to freeze the oil price for the first half of next year.

Since they are not members the French have not taken part in the intensive discussions which have been taking place in the IEA, and which are expected to lead to decisions at tomorrow's Ministerial meeting. President Giscard's message doubtless reflects a real worry, as well as a desire to reinsert France into the decision making process.

While we naturally favour any move which might hold down oil prices we are mildly sceptical about the likely success of the French proposal. We have been urging the producers to hold down prices for years, with only limited results. Secondly, an approach to only a limited number of Gulf producers could produce adverse reactions from some of the others. Thirdly, the emphasis on Gulf states alone could cause us some embarrassment if the result of the OPEC meeting were to be moderation on the part of the Gulf states, and price rises nonetheless from the African producers. This would in turn put pressure on BNOC to increase North Sea oil prices, since they have always followed African prices.

However, despite such doubts there could still be some benefit in the move proposed by the French, even although we continue to believe that the main consumer country response to the oil situation should be handled through the IEA, and that discussions at the Quadripartite meeting should take account of the outcome of the IEA Ministerial meeting today . It is clearly right, moreover, that the Secretary of State should listen to what M. Francois-Poncet has to say on Wednesday, about the French proposal, and our response therefore might be sympathetic but cautious. I enclose a draft reply in this sense.

I am sending copies of this letter to Julian West (Energy), John Wiggins (Treasury) and David Wright (Cabinet Office).

Yours ever,

Paul

(P Lever)
Private Secretary

M O'D B Alexander Esq
10 Downing Street
LONDON

SECRET

DSR 11 (Revised)

DRAFT: minute/letter/teleletter/despatch/note

TYPE: Draft/Final 1+

FROM: Prime Minister

Reference

DEPARTMENT: TEL. NO:

SECURITY CLASSIFICATION

Top Secret
Secret
Confidential
Restricted
Unclassified

TO: President Giscard D'Estaing

Your Reference

Copies to:

PRIVACY MARKING

.....In Confidence

CAVEAT.....

Enclosures—flag(s).....

SUBJECT:

Thank you for your message of 7 December.

~~I agree~~ I agree with you that

A marked increase in the price of oil would seriously affect the operations of the world economy. It would be against the interests of all the developed countries of the West, even of those who are not significantly dependent on imported oil. ~~I agree~~ Clearly ~~that~~ we must do our utmost to arrest such a development.

The moderates in OPEC cannot be expected to hold prices indefinitely if effective action is not also taken by the consumers. I therefore believe that our first aim must be to reach collective decisions, in the international organisations to which we belong, about the measures which we ourselves can take. The Energy Council on 27 November was a useful step forward. The IEA Ministers are meeting today and expect to take important decisions.

It is in the light of these discussions and these decisions that we shall need to consider any high level political approach to the Gulf oil producers about a price freeze. Such an approach if it is to be effective would need to take place before the meeting of OPEC Oil Ministers in Bali on 15 December.

I agree that the meeting of our Foreign Ministers on 10 December will provide a good opportunity for a review. Peter Carrington will be interested to hear ~~how the French Government~~ from M Francois-Poncet how you considers that a political

SECRET

DSR 11 (Revised)

DRAFT: minute/letter/teleletter/despatch/note		**TYPE:** Draft/Final 1+
FROM: Prime Minister		Reference
DEPARTMENT:	TEL. NO:	
TO: President Giscard D'Estaing		Your Reference
		Copies to:

SECURITY CLASSIFICATION

Top Secret
Secret
Confidential
Restricted
Unclassified

PRIVACY MARKING

..................In Confidence

CAVEAT......................

Enclosures—flag(s)..........

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It is in the light of these discussions and these decisions that we shall need to consider any high level political approach to the Gulf oil producers about a price freeze. Such an approach if it is to be effective would need to take place before the meeting of OPEC Oil Ministers in Bali on 15 December.

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approach to the Gulf producers can best be made, and how it can best be harmonised with the decisions that the consumers are taking on their own behalf.

VLB

COVERING SECRET

FILE

2

8 December 1980

I enclose a copy of a message from President Giscard d'Estaing to the Prime Minister, which we have discussed on the telephone.

You have already set in hand the preparation of a reply.

I am sending copies of this letter and enclosure to Julian West (Department of Energy), John Wiggins (H.M. Treasury) and David Wright (Cabinet Office).

M A PATTISON

Paul Lever, Esq.,
Foreign and Commonwealth Office.

COVERING SECRET

MPAM

MINISTRY OF AGRICULTURE, FISHERIES AND FOOD
WHITEHALL PLACE, LONDON SW1A 2HH

Energy

From the Minister

CONFIDENTIAL

The Rt Hon David Howell MP
Secretary of State for Energy
Department of Energy
Thames House South
Millbank
LONDON
SW1P 4QJ

8 December 1980

INDUSTRIAL ENERGY PRICES

I have seen Keith Joseph's letter to you of 27 November and I am writing to express strong endorsement of his proposal that the duty on Heavy Fuel Oil should be wholly rebated for productive industries. As you know, our respective departments have received frequent and reasoned representations from the agriculture industry on the relative prices of energy here and in competitor countries, particularly in the European Community. Farming is locked in a squeeze between rising costs and falling incomes and the reduction of the cost of HFO to the level of economic pricing would afford marginal but welcome relief. It would also help some hard-pressed sectors of the food manufacturing industry.

I estimate that the cost of rebating the duty to agriculture would be something under £10 million a year.

I am copying this letter to the Prime Minister, the other members of E Committee, George Younger and Nicholas Edwards as well as to Sir Robert Armstrong and Robin Ibbs.

PETER WALKER

Copy 2 of 3 1

(Copy 3 to FCO)

SUBJECT

PRIME MINISTER'S
PERSONAL MESSAGE
SERIAL No. T236/80

ZZ LONDRES 07093NZ
DE PARIS

SECRET GOUVERNEMENTAL N. 123

cc. Master set
ops

A MADAME M. THATCHER
PREMIER MINISTRE DU ROYAUME UNI
10 DOWNING STREET LONDRES

DE M. VALERY GISCARD D'ESTAING
PRESIDENT DE LA REPUBLIQUE FRANCAISE

PARIS LE 7 DECEMBRE 1980

MON CHER PREMIER MINISTRE,

LA SITUATION ECONOMIQUE DE LA PLUPART DE NOS PAYS EST ACTUELLEMENT TRES DIFFICILE ET LES PERSPECTIVES POUR LES ETATS DE LA COMMUNAUTE EN 1981, QUE NOUS VENONS D'EXAMINER A LUXEMBOURG, SONT PREOCCUPANTES. DANS CES CIRCONSTANCES UNE NOUVELLE HAUSSE DES PRIX DU PETROLE AURAIT DES EFFETS CATASTROPHIQUES. LA DECISION DEPEND EN REALITE DES DIRIGEANTS SAOUDIENS ET DE CEUX DU KOWEIT ET DES EMIRATS DU GOLFE.

NOUS DISPOSONS LES UNS ET LES AUTRES DE MOYENS DE PERSUASION POUR LES INVITER A ADOPTER UNE ATTITUDE POLITIQUE QUI DEVRAIT ETRE, A MON AVIS, CELLE D'UN GEL DES PRIX DU PETROLE POUR LES SIX PREMIERS MOIS DE 1981. LA SITUATION D'INSECURITE INTERNATIONALE, ET LA CRISE ECONOMIQUE, LEUR DONNENT DES ARGUMENTS PUISSANTS ET SUFFISANTS A OPPOSER AUX DEMANDES DE CERTAINS ETATS.

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JE VOUS PRIE DE CROIRE, MON CHER PREMIER MINISTRE, EN MES SENTIMENTS LES MEILLEURS.

VALERY GISCARD D'ESTAING

FCS/80/165

SECRETARY OF STATE FOR ENERGY

UK Policy: Refinery and Disposal Strategy

1. I have seen a copy of your letter to Geoffrey Howe of 13 November, with which you enclosed the report by the Interdepartmental Committee on Refinery and Disposal Policy.

2. I can endorse the conclusions and recommendations of the report. I am alad that due weight has been given to the international and legal implications of the proposals to enhance UK security of supply; and I am content that work should continue along the lines envisaged by the report. The report also rightly warns of the dangers of important UK companies increasing their spot market activities. In the present state of the oil market, and given our international commitments to moderate spot market transactions, any other conclusion would have caused us severe difficulties with our partners.

3. I read with interest the section on the report which discusses the possible use of North Sea oil for wider industrial and economic benefit for the UK. This is an important area of policy which we have not so far had the opportunity to discuss. There have been a number of proposals recently for deals of this nature (eg the Greek and Romanian power station contracts) which have shown up the pitfalls inherent in "resource diplomacy" deals. I agree with the general line in the paper that each proposal for a deal of this kind needs

/to

to be considered on its merits. But I am concerned that the foreign policy issues (eg in relation to our export guidelines) should be given their full weight, and that recommendations on individual cases should be fully discussed at official level before submission to Ministers. I therefore welcome the proposal in John Nott's letter of 12 November to you that the general principles at stake should be discussed at the first meeting at EX Committee on 27 November; and I am inclined to think that thereafter individual cases might be discussed as appropriate in a new Cabinet Office official committee, EX(o).

4. I am sending a copy of this minute to the Chancellor of the Exchequor, Secretary of State for Trade, Secretary of State for Industry, Secretary of State for Employment, Secretary of State for Scotland, Sir Robert Armstrong and Mr Ibbs.

(CARRINGTON)

Foreign and Commonwealth Office
26 November 1980

CONFIDENTIAL

Energy

Treasury Chambers, Parliament Street, SW1P 3AG
01-233 3000

25 November 1980

The Rt Hon David Howell MP
Secretary of State for Energy
Department of Energy
Thames House South
Millbank
LONDON SW1

Dear David

GULF WAR AND THE INTERNATIONAL OIL MARKET

– in E folder for Weds.

Thank you for sending me a copy of your minute of 17 November to the Prime Minister.

I agree with your analysis. A rise in world oil prices would have a damaging effect on our economic interest and would cause difficulties for the implementation of our economic policy. In particular, an oil price rise, or even increasing disorder in the crude spot market, would put further upward pressure on sterling in a way which would certainly be unhelpful in present circumstances. So there is a considerable UK interest in the situation being gripped to the extent possible.

I do not dissent from the line you propose in paragraph 6 of your minute. It would not be appropriate for the UK, despite our economic interest, to argue for a tough international response if it looks as if our major partners would not be willing to follow our line; and all the indications are that they would not. But if it appeared that there was a growing international consensus for more vigorous international action to limit any rise in oil prices, I am sure that we should support it, always provided that there was a good prospect that it would be effective, our oil supplies were safeguarded and it did not require excessive Government intervention in the market by such schemes as rationing consumers.

Finally, I agree with the Foreign Secretary's comment in his minute of 19 November that officials ought to remain closely in touch about all these matters in the run up to the various international discussions over the

/next few weeks

next few weeks so that Ministers are able to react to what could be a quickly developing market and diplomatic scene.

I am sending copies of this minute to the Prime Minister, members of OD and Sir Robert Armstrong.

GEOFFREY HOWE

Ref: A03652

CONFIDENTIAL

PRIME MINISTER

Oil Prices and Supply
(E(80) 137: UKREP Brussels Telegrams 5152, 5153 and 5173)

BACKGROUND

Up to the outbreak of the Iraqi/Iran war oil supplies were above the then current level of world demand and spot prices were weak, despite the fact that Iranian output was well below pre-revolution levels, because of the substantial reductions in demand brought about by the world recession. The Gulf war has now reduced supplies below demand by virtually shutting off all exports from both Iran and Iraq. Increases of output from other suppliers, notably Saudi Arabia, have made good part of the shortfall, and world oil stocks are high. Nevertheless there is much nervousness among consumers, and spot oil prices have risen. The danger is that uncertainty, particularly about the duration of the Gulf war, could exert continuing upward pressure on prices and thus deepen the recession. There has already been considerable discussion in both the IEA and the EEC about the steps which consuming countries might take to reduce the risk of a further rise in the price of oil. Three key meetings are due in the next fortnight - the EEC Energy Council on 27th November (Mr. Howell attending for the United Kingdom); the European Council on 1st December; and the IEA Governing Board, at Ministerial level, on 9th December (again Mr. Howell attending).

2. A further increase in the price of oil would be a disaster. The question is what, if anything, can, or should, consuming countries do to prevent it happening? There are a range of possible options, namely:-

(a) To "trigger" the IEA's general oil-sharing mechanism. Unlikely to be widely advocated, because such action is generally seen as out of scale with the nature of the problem (which is really one of a marginal imbalance between demand and supply), as a new and inappropriate use of the mechanism (designed to cope with supply difficulties, not to influence price), and as risking the integrity of the system.

(b) To "trigger" the IEA sharing mechanism on a selective basis, for the benefit of the relatively few countries who face real and immediate supply difficulties, e.g. Turkey and Portugal. The IEA Secretariat (with whom formal responsibility rests) have fought shy of this solution perhaps because, as matters stand, it would largely require American oil companies (flush with oil from Saudi Arabia) to take the main action.

(c) To impose "import ceilings" on consuming countries. The Foreign and Commonwealth Secretary may suggest that we should go along with this course if, as appears likely, the Americans advocate it. But other countries are less happy. The negotiation of actual ceilings could be a time-consuming and difficult process; and once established the ceilings could provide OPEC with a ready-made production target to the disadvantage of the West.

(d) To run down stocks. These are high, and a rundown in stocks is a classical reaction to a short-term supply difficulty (indeed the stocks are held for just this purpose). The trouble here is not to agree that a stock rundown would be a sensible course of action - the IEA has already done so - but to give effect to the decision. Stocks are for the most part owned by the oil companies, and they can be expected to want to hang on to them, particularly if they see a price rise in the offing.

(e) To cut consumption. It would, in fact, be hard to secure worthwhile cuts, and to try and do so would be hard to sell to United Kingdom public opinion given the North Sea. But Mr. Howell advocates acceptance of a modest restraint of demand, without saying what he means. The danger is that one risks maximum problems for minimum gain.

(f) To minimise purchases on the spot market. This is sensible, but may be a counsel of perfection so long as individual companies, countries and consumers are hit differentially by the loss of supplies from the Gulf. Action by the "crude rich" United States

companies to ease local difficulties would enable the line to be held - though it must be uncertain whether the United States Government could deliver the companies in this way (they have not managed to do so thus far).

3. The flow of telegrams from Brussels preparatory to the Energy Council meeting on Thursday illustrates the forces at work. A day or two ago the Commission (Davignon) were preparing to recommend that the Council should favour oil import ceilings. They now appear to be going cold on this, and the present draft conclusions are largely a restatment of existing agreed aims.

4. The main issue is whether the approach set out in Mr. Howell's minute to you of 17th November (and subsequently repeated in his paper E(80) 137) represents an adequate response to the threat. E Committee should say whether they agree with Mr. Howell's preferred low profile and how far, if necessary, he can go. It will also be important to ensure that the EEC line (including the French) is not too much at odds with that which emerges from the IEA in December (when the French will not be present).

HANDLING

5. You might invite the Secretary of State for Energy to introduce his paper and to bring the Committee up to date on subsequent developments. The meeting can then be thrown open to general discussion.

CONCLUSIONS

6. These are particularly difficult to forecast because the perceptions of colleagues of the scope and need for action can vary widely. It will be particularly important however to recognise the linkage between the three meetings - Energy Council, European Council, IEA - and the overriding need for the Western countries to emerge from Paris with a united front. The presence of the French at the earlier meetings, and their absence from the IEA, means that the Energy Council and the European Council provide the opportunity to get the French on board. On the other hand, Mr. Howell will need to be careful not to accept commitments in Brussels which could create problems later with the Americans and the Japanese. This may not be easy to achieve,

given the uncertainties about what the Americans really want and the natural desire of the EEC countries to stick to their own line once they have agreed. But the effort must be made.

7. It might also be sensible to envisage calling a further meeting of E if this proves necessary, to look at the issues once again between Luxembourg and the Paris meeting of the IEA.

D. J. Wright

(Robert Armstrong)

(approved by Sir R Armstrong and signed on his behalf).

25th November 1980

CONFIDENTIAL

c.c. D/T
LPS
LPO
MOD
HMT
FCO
LCO
HO
CO

10 DOWNING STREET

From the Private Secretary

24 November, 1980.

The Prime Minister has seen the Secretary of State for Energy's minute to her of 17 November on the Gulf War and the International Oil Market. As you are already aware, she has decided that she would like to discuss the matter further at a meeting of E.

The Prime Minister's initial reaction to Mr. Howell's paper was that we seem to have little choice but to go for Option 4, i.e., a reduction in stocks and modest restraint of demand.

I am sending copies of this letter to the Private Secretaries to the Members of OD, and to David Wright (Cabinet Office).

M. O'D. B. ALEXANDER

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

CONFIDENTIAL

Ref: A03613

CONFIDENTIAL

MR. ALEXANDER

The Gulf War and the International Oil Market

In his minute of 17th November to the Prime Minister Mr. Howell seeks clearance for the line to be taken at international discussions (in the IEA and the EEC) over the next few weeks on various possible international responses to the shortage of oil supplies resulting from the Gulf war. The paper attached to his minute is a good analysis of the problem and of the pros and cons of the various options available. His basic proposal is that we should "try and edge things towards" a solution comprising a reduction in stocks and modest restraint of demand (option (iv)).

2. He may well be right in his assessment (though as Appendix 1 to Annex C of the paper by officials shows, demand restraint measures tend to be of limited effectiveness and generally of a pettifogging nature). However, the rather grudging approach to the conclusion in paragraph 6 of his covering minute may not adequately reflect realities.

3. The avoidance of a further major increase in oil prices is a critical objective both for the United Kingdom and the rest of the developed world. The damage such an increase would inflict to the present depressed world economy - and to the sterling exchange rate, which has been moving down lately - means that we cannot afford to risk an inadequate response. Equally, however, the United Kingdom cannot risk a visible failure to agree among the Western countries and this argues against action going beyond that which has an already agreed legal base unless and until new measures have been agreed in advance and in private. Thus, any measure, e.g. import ceilings, which requires further work or negotiation should be put on the back burner so far as Ministers, acting internationally, are concerned until the necessary groundwork has been done.

4. So it would be in the United Kingdom's interest to support action to reduce the agreed international minimum oil stock levels. But pressure on the companies will be needed if stocks are actually to be reduced (if they see

an oil price increase coming they will want to hang on to their stocks). And both France and the United States may be reluctant to reduce stocks. The United States, in particular, would seem to be averse to the idea of de-stocking and less inclined to assist countries in real difficulty on the basis of IEA arrangements, than through informal action. The option of letting, or encouraging, the pulling of the "selective trigger" in favour of countries in real difficulty, e.g. Turkey and Portugal, has much to commend it. The mechanism is agreed, and complicated new negotiations are not required.

5. But the tactical situation is changing rapidly. Commissioner Davignon has just returned from discussions with the United States in Washington, and has circulated draft conclusions for the Energy Council on 27th November. There will be contacts at official level with our Community and IEA partners in the next few days. It may be best not to decide our final position at the Energy Council until next week. Officials agreed yesterday to recommend a meeting of Ministers on 26th November to settle our line on the basis of a paper to be circulated by Mr. Howell early next week. This would normally be taken in OD(E) but if the Prime Minister herself wishes to chair discussion of this subject, it could be taken at the meeting of E already arranged for the afternoon of Wednesday, 26th November.

RA

(Robert Armstrong)

20th November 1980

PRIME MINISTER

THE GULF WAR AND THE INTERNATIONAL OIL MARKET

1 The war between Iran and Iraq has stopped exports of oil from both countries. Although the oil supply situation is manageable there are worrying signs that we may be in for another big increase in oil prices. How to handle this serious situation will be discussed at the Energy Council of the European Community on 27 November, at the European Council on 1/2 December and at the IEA Ministerial on 9 December. This minute seeks your agreement to the way in which I propose to approach these talks. I will put my final proposals to OD shortly before the IEA Ministerial.

2 The issues are examined in the attached paper by my officials. Treasury and FCO officials have been consulted, but it is not an agreed document.

3 We face a difficult choice and a problem of political saleability. There is no scarcity of oil. The problem is to prevent another massive price increase. It will not be easy to persuade UK consumers to accept for this purpose even minor restraints on their use of oil when North Sea production is in total sufficient to cover our needs. If anything more than very minor levels of restraint were called for this could only be secured by persuading or instructing the oil companies to reduce supplies, involving rough and ready justice between consumers. As the paper points out, there are doubts about how effective international action would prove to be in practice. And there are also doubts about whether it would be honestly and consistently applied by all our partners (I have the French particularly in mind).

4 Against this the UK, with its open economy, is especially vulnerable to the damaging effect of oil price rises on the world economy. The further loss of production in the short run which would result from another substantial price rise would limit even further our economic policy options and defer the time when our policies will start to produce results. The impact on United Kingdom

industry already under severe pressure would be serious. The disruptive internal impact, as the economy shifts still faster out of energy intensive industry, would be considerable. There is a limit to the speed with which the economy can cope with this process and we are close to that limit. The political consequences of all this need to be weighed against the political difficulties of persuading consumers to accept a limited reduction in their supplies of oil.

5 There is no question of our agreeing to international action unless all major industrial countries agree to take part and there are effective monitoring arrangements to ensure that that agreement is observed. It may be that the US will be unable to agree to substantive decisions on 9 December or that the French will be hamstrung by their forthcoming election. In that case only cosmetic decisions will be possible. But if our partners are prepared to agree on action - which is unlikely to involve drastic restraint of demand - the UK in my view cannot affort to stand out against the general wish; indeed it would be contrary to our wider interests to do so. It follows that we should handle the preliminary discussions in such a way that responsibility for any failure to agree will rest with those concerned and not the UK.

6 I therefore propose that our line in the preliminary official discussions and (subject to developments) at the Energy Council on 27 November should be:-

(a) to let it be understood that we are willing to participate in international action only provided that it is unanimously supported by our partners and that satisfactory and effective monitoring arrangements are set up;

(b) to let others take the lead in making specific proposals, but to give non-committal support to ideas which look sensible and which are consistent with UK interests;

(c) to ensure that any arrangements proposed are satisfactory to the UK and that they give us a reasonable advantage as

an oil producer; we should be able to get our partners to understand and accept the political need for the latter points;

(d) to keep open our position on the form which any action might take until what is proposed is clear; but if the prospect of a concerted international effort emerges, to try and edge things towards Option (iv) in the enclosed paper (a reduction in stocks and modest restraint of demand).

7 I should be glad to know if you and our colleagues concerned are content that we should proceed in this way.

8 I am sending copies of this minute and enclosures to the members of OD and Sir Robert Armstrong.

DA

Secretary of State for Energy
17 November 1980

Encs

THE GULF WAR AND THE INTERNATIONAL OIL MARKET
NOTE BY OFFICIALS

1. The war between Iran and Iraq has stopped exports of oil from both countries. This serious situation will be discussed at the Energy Council of the European Community on 27 November, at the European Council on 1 and 2 December and at a Ministerial meeting of the Governing Board of the International Energy Agency (IEA) on 9 December.

OIL SUPPLY DEMAND AND PRICES

2. Before the war world oil demand was running at over 2 million bpd below supply. Stocks in OECD countries on 30 September were at a record level of 490 million tonnes - about 100 days consumption. The loss of Iranian and Iraqi exports has reduced supply by about 4 million bpd. To offset this other OPEC countries, particularly Saudi Arabia, have increased production by what is now about 1 mbd, although this is some 400,000 bd less than the original increase. Stocks in OECD countries are now expected to fall during the two winter quarters by 1 to 1½ million bpd more than the normal seasonal reduction, giving estimated total stocks at the end of March of 410 million tonnes - 80/85 days consumption. (This would however still be higher than stocks at the end of March 1979).

3. The reduction in supplies has fallen unevenly on different countries and companies. Countries particularly hard hit are Turkey, Portugal and to a lesser extent Italy in the IEA and France, Brazil and India outside the IEA. Shell and BP who both had inadequate supplies of oil before the war have lost about 250,000 bpd. The main US companies are virtually unaffected.

4. In theory the OECD as a whole could scrape through the winter without further action. But there is a real risk that uneven distribution of supplies and growing uneasiness in the market will lead to another big increase in oil prices. Crude oil prices rose sharply during the first week of the war, the increase then slowed slightly but has recently been resumed. Spot market prices for crude oil now stand at about $39/40 a barrel - between $2 and $8 a barrel more than

the comparable term prices. OPEC countries which before the war had been finding it increasingly difficult to obtain premia on their term supplies are now beginning to reimpose them. The difference between spot and term prices is still much less than a year ago (in December 1979 it was about $14 a barrel). But we could be at the start of another high jump in oil prices. (Annex A gives the details of the outlook for supply, demand and price).

ACTION SO FAR TAKEN

5. On 1 October the IEA Governing Board agreed that Member Governments would urge the oil companies and others to reduce stocks and avoid abnormal purchases on the spot market (decision at Annex B). These measures have not worked. There has been a certain amount of redistribution of supply achieved principally by OPEC members, but very little as the result of destocking by those companies unaffected by the war. And the local imbalances largely remain. So the decision is now under pressure. If price rises are thought to be likely oil companies and consumers will have a strong commercial incentive to hang on to their stocks. Japan and France have both taken action to safeguard their own stocks: and the USA is still increasing its strategic petroleum reserve although with oil from the naval reserve which cannot legally be produced for any other purpose.

THE UK POSITION

6. There are conflicting considerations. UK supplies are adequate for the immediate future. If our aim is to maintain supply to UK consumers except in a full-scale crisis further international action is to be avoided. There are real political difficulties about asking UK consumers to accept even a marginal shortfall in oil supplies when North Sea production is sufficient overall to meet our needs and there is no abvious world supply crisis. An increase in price of oil would increase oil revenues and therefore benefit the PSBR.

7. But the UK with its open economy cannot insulate itself from the effects of a further oil price increase on the already depressed world economy. If as in 1979 oil prices were to rise by $18 a barrel, GDP in the short run in the OECD countries is expected to fall by 3-3½% and

(3)

prices generally to increase by about 7% after the first year and as much as 11% after 3 years. Because higher oil prices would probably increase the value of sterling the loss of output in the UK would be rather higher than this - the inflationary effect would be less. The reduction in the general level of economic activity would substantially offset the PSBR gains from higher oil prices.

POSSIBLE MEASURES

8. The options for international action are examined in Annex C. They are:-

i. Rest on the IEA decision of 1 October.

ii. Introduce the IEA and Community allocation schemes by agreement even though the shortfall of 7% in oil supplies which would trigger them automatically has not been reached. Whether this would involve measures to restrain demand would depend on the terms of the agreement: but given that supply is only marginally below demand any reduction need not be large. The IEA Secretariat are considering a simplified system which would be designed to cope primarily with the imbalances which are the main source of pressure on the market.

iii. Agree to impose rigorous ceilings on oil imports either for a full year or as an interim measure for three months. Whether this would involve restraint of demand would depend on the level of the ceilings.

iv. Agree on more specific action to reduce stocks (including a relaxation of the international requirement to hold minimum strategic stocks) and to impose limited measures of demand restraint.

Action would need to be taken in both the IEA and the Community - the latter to make sure that France was fully involved and her participation monitored.

9. Option (i) would be appropriate if we were to decide that further action is unnecessary or unlikely to be effective Option (ii) would seem premature. Option (iii) would mean implementing contingency plans prepared in the IEA last year mainly under pressure from the Carter Administration. Rigorous import ceilings would be an effective means of influencing stocks: and for the UK this option would have the advantage that we would get the benefit of any increase in our oil production above the level assumed in setting the ceilings. But the individual country ceilings would be very difficult to negotiate and there is no existing machinery to monitor their achievement. Option (iv) would aim directly at the problems created by the Iran/Iraq war; it would probably be seen as a useful step by the moderate members of OPEC; and it should suffice to hold the situation for a few more weeks. If it fails there would be the option of falling back on Option (ii).

THE ATTITUDE OF OTHERS

10. So far we know nothing of the likely attitude of the Reagan Administration to these issues. It may be that the US will be unable to participate in any decisions on 9 December. In that case nothing can be done. But it would be wrong to exclude at this stage the possibility that a US delegation including members of the Reagan liaison team will be able to agree substantive decisions.

11. Preliminary indications are that the European Commission and most Community countries are likely to favour some form of Option (iv) if further action is agreed. There is a general recognition that the Community cannot handle this situation on its own and that US and Japanese participation in any international action will be essential. The Commission seem likely to suggest that the Energy Council on 27 November should agree to put in hand detailed preparatory work on the practical problems of reducing stocks and restraining demand and on the real possibilities for helping countries in difficulty either in the Community or the IEA framework: and that the European Council at the beginning of December should endorse what the Energy Council has decided. This would effectively leave substantive decisions to the IEA Ministerial on 9 December.

ANNEX A

THE OIL MARKET

Oil Supplies

1 When the war started OPEC oil production was running 2 mbd above demand. The loss of supply from Iran and Iraq amounts to some 4 mbd, which was originally offset by some 1-1½ mbd extra OPEC production, mainly from Saudi Arabia and Kuwait. Our latest information suggests that the shortfall in supply might remain at about 1½ mbd throughout the winter; but this assumes that the winter will not be exceptionally severe, and that the recent trend towards lower demand continues.

2 There are, however, two differences. Firstly, the loss of Iranian and Iraqi oil has hit certain countries and companies more severely than others causing severe local supply disruptions. A 10% general cut back would have been evenly distributed. Secondly, market perceptions when supplies are reduced as the result of a war are more likely to be prone to panic than if the reductions came about as an orderly response by producers to continued over-supply.

3 The local imbalances have been very marked. 60% of Iran/Iraq oil was, in any case, destined for countries outside the IEA, many of them ldcs. Within IEA Turkey and Portugal have been particularly badly hit as have France, Brazil and India amongst non-IEA countries. Spain, Greece, Ireland, Austria, Italy and Japan together with a number of ldcs have also been significantly affected. Amongst companies some, notably the Aramco partners, have not suffered at all. Others, including some national oil companies as well as BP and Shell (already crude-short) have lost a great deal.

4 The IEAs best assessment for the future is that, given that no oil from Iran or Iraq is now likely to be available until the beginning of Q2 1981 at the earliest, stock levels in the IEA will fall from 460 million tonnes at the end of September 1980 to 429 million tonnes at the end of December (a level similar to that

of January 1 1980). By the end of the first quarter 1981 stocks would have fallen further to 389 million tonnes. Estimates for the full year 1981 depend on when the war ends and how soon production can be resumed, but if the situation remained unchanged throughout the year the IEA estimates that stocks would fall to around 320 million tonnes by the end of 1981.

Prices

5 The crude oil spot market, on which only small volumes of oil are traded, has naturally reacted to the Gulf war. In the early part of the year spot prices were stable, (between $34 and $33/b depending on quality) but with falling demand dropped rapidly during the summer, to around $31/b. Within the first week of the year prices recovered to the spring level. Since then there has been a steady upward movement largely as a result of speculative inter-trader dealings and purchases by India, France and Japan. A number of purchases by Shell and independent US refiners have also come to light. The market has now reached about $39/$40/b, which is some $2/b above term prices for the best crudes but still some $2 or so below the record level of December 1979 (when term prices were over $10/b lower than they are now). So far the market has generally reacted cautiously and term prices have not yet began to move upward and there is little sign of new premia. A decision by Saudi Arabia to sell incremental volumes at $32/b has done no more than provide Iraqi customers with oil at the same price as the lost supplies whilst the $5.50/b Kuwait premium is described as a continuation of existing premia (since April 1980) on incremental volumes. For the moment, the market appears to see the current disruption of supplies as temporary and the price explosion of 1979 need not be repeated, although the risks are clearly there. Given the restraint seen so far, term prices may not increase till 1 January but a rise then must be expected, not only because of the pressures on the market induced by the war but because prices have not generally increased since the summer and the real value of revenues has dropped.

6 There is of course, a major difference between the present situation and that of 1979. In the latter case the Iranian revolution had brought about a real and possibly permanent change in the oil scene. Today Iran and Iraq can be expected to resume oil exports as soon as they can. Moreover there is a continuing downward trend in oil demand. If we manage to get through the winter that could, in the spring, again become the determining factor for market perceptions. But, the spot market is very susceptible to rapid changes of perceptions; undue nervousness could trigger a scramble by crude short customers, many of whom may be outside the IEA, thus driving up prices. If last year's patterns were repeated, term prices would rise too. The price spiral which followed the Iranian revolution increased the nominal dollar price of oil by some 140% in eighteen months (a real increase of some 100% in international trading terms) although a rising pound and high internal inflation reduced the real impact for the UK to about 70%.

CONFIDENTIAL

ANNEX B

IEA GOVERNING BOARD, 1 OCTOBER - AGREED MEASURES

1 The text of "Measures agreed by IEA Member Countries" is as follows:-

1 Member Governments of the International Energy Agency have reviewed the current situation in the oil market as a result of developments in the Middle East and have concluded at this stage that:-

(i) Oil Consumption within IEA countries is low compared to recent years;

(ii) Oil Stocks in IEA countries as a group are at high levels;

(iii) Utilisation of spare production capacity could contribute to a better World Energy Balance.

Consequently, they are convinced that overall supply of IEA countries and other countries can be managed so as to meet demand over the next few months.

2 IEA Member Countries for their part agreed to take the following measures to prevent pressures on the Oil Market:-

(i) Urging and guiding both private and public market participants to refrain from any abnormal purchases on the Spot Market;

(ii) In accordance with the decision taken by ministers in May 1980 on stock policies, immediate consultations by Member countries with Oil Companies to carry out the policy that in the fourth quarter there will be a group stock draw sufficient to balance supply and demand taking into account whatever additional production is available to the group;

(iii) To this end, active consultation between Governments of the IEA to ensure consistent and fair implementation of these measures taking account of market structures in individual countries, and to adjust for imbalances which might occur in particular situations;

(iv) Reinforcement of conservation and fuel substitution measures which are already contributing to lower demand for oil.

3 Member Governments have agreed to moniter the implementations of these measures closely and to meet again on short notice to review progress.

4 IEA Member Countries hope that available production capacity will be utilised to make up for some of the losses of oil supply. This together with these measures, will contribute to market situation stability and thus benefit the World Economy as a whole.

2 A confidential annex was also agreed. The text is as follows:-
"Recognising that supply disruptions in the short term may affect IEA countries in different degrees, disproportionate reductions in stocks resulting from these measures will be taken into account in assessing individual Member Countries' positions if additional IEA actions should become necessary."

ANNEX C

THE SCOPE OF POSSIBLE MEASURES

The Problem

1. The shortfall with which we have to contend amounts to about 1½ mbd, or 3% of the free world's requirements. Some could certainly be made up by de-stocking so the scale of any demand restraint is bound to be small. Drastic measures leading to strongly interventionist moves involving rationing or allocation do not arise. Given the continued low level of demand there is no reason to anticipate a really serious supply shortage. What is needed is the redress of localised supply imbalances and the restoration of market confidence which would relieve the upward pressure on prices that an unnecessary scramble for supplies would generate. In order effectively to involve France whatever action might be agreed should be taken in both the IEA and the European Community.

2. There is little scope in the UK even for limited demand restraint measures short of applying constraints by denial of supply. The CEGB currently has some capacity for fuel switching and persuasion might achieve some small saving. An increase in taxation on petroleum products generally would also be a power available to us, if the economic consequences were considered acceptable. A separate note on this is attached as Appendix 1.

The Options

3. The options open to the IEA countries include:-

i. Rest on the 1 October decision, perhaps in a more precise form, but initiating no other measures;

ii. Activate the IEA trigger;

iii. Impose Import ceilings, possibly as a strictly short-term measure for three months; and

iv. Reduce the minimum level of stocks to, say 80 days; put strong pressure on the oil companies to come down to that level; and impose a range of measures to meet an internationally agreed level of demand restraint.

ANNEX C

i. Resting on 1 October decision

Advantages

4. If no further measures are initiated the UK can look to the understandings reached with the oil companies to protect supplies to this country short of a full crisis situation. Shell and BP would have flexibility to seek alternatives supplies as and where their commercial judgements indicated and, by conveying a sense of calm, it might avoid creating alarm which would have an adverse effect on prices.

Disadvantages

5. On the other hand our reliance on our understandings with the oil companies might excite criticism abroad, particularly in the EC. If, on 9 December the war is still going on and IEA Ministers do not agree to additional measures OPEC countries might feel that that contrasted sharply with their own attempts to increase production and it could play into the hands of the price hawks.

6. It is also the case that the 1 October decision is not operating in the spirit in which it was conceived. The IEA Secretariat considers that there are no signs of re-direction of supplies to correct specific country difficulties and a number of countries have been acting inconsistently with the decision. Not least of the inconsistencies has been the decision of the US Government to continue to add to its strategic petroleum reserve. Recent moves by both France and Japan to add to domestic stock-piles are not helpful either.

ii. Activate the IEA Trigger

The IEA and Community schemes are described in Appendix 2. In brief:-

a. The IEA scheme is triggered if supplies to the group fall short by 7% or more of consumption in a base period (the last period of four quarters for which statistics are available). Member countries are then assumed to restrain demand by 7% or 10% base period consumption depending on the level of the shortfall; to draw down emergency reserves under an agreed formula. The formula for drawing down reserves gives an advantage to oil producing Member

countries; and any stocks in excess of the basic minimum can be drawn down as an alternative to demand restraint. The decision to pull the trigger is taken by the Executive Director and can only be overriden by a special majority (effectively three quarters) of the Governing Board. In practice the Executive Director can be expected to consult extensively with all major countries before taking his decision.

b. The Community has no comprehensive allocation scheme. The Commission can direct Member countries to reduce demand by up to 10% but this direction can be overruled by the Council acting by qualified majority. If the crisis runs for more than two months the Commission can propose to the Council the introduction of a limited scheme under which countries with a high capacity to substitute oil by other fuels in power stations help those without that capacity. The Commission's proposal has to be confirmed by a qualified majority of the Council of Ministers and any Member Government could block confirmation by invoking the Luxembourg compromise.

A Modified Option

8. The IEA Secretariat are considering a non-limited version of the allocation system, falling well short of the full scheme, but designed to cope with the local imbalances which are causing most of the difficulties in the market at present. This may well be the option which the Secretariat will be pressing on Ministers when they meet on 9 December. It is difficult to evaluate it until we have more details.

The UK Position

9. If the General trigger were pulled in the first quarter of 1981, and a demand restraint level of 5% assumed, the UK would have a supply right of about 80 m tonnes for the year as a whole. (We would be likely to have an allocation obligation to other countries but this would make no difference to our supply right). This compares with estimated consumption for 1980 of 82.5 m tonnes. Even if a severe winter caused consumption to increase, stock draw down, coupled if necessary with limited demand restraint measures, should be sufficient to meet the shortfall.

ANNEX C

10. Administration of the allocation scheme from the UK end might require about 12 staff. This number would, however, increase dramatically if allocation to final consumers became necessary.

11. As the IEP Agreement is a legally binding obligation, the Government would take powers by means of an Order in Council made under Section 3(a) of the Energy Act 1976, to exercise statutory demand restraint to compel companies to draw down stocks.

Advantages

12. It is a fully worked out system, contains safeguards against cheating and is, therefore, more likely to command the confidence of member nations once the political decision to invoke it has been taken. Furthermore experience of the AST 3 test, which is still going on, suggests that the scheme works. Beyond that it would go a long way towards dealing with the problem of persuading the Aramco partners to disgorge some of their oil. It might also discourage countries prone to panic over supplies (such as Japan) from paying very high prices.

13. Several countries are already in, or close to, a position in which they could pull the selective trigger. Several selective triggers might be administratively hard to handle and it might be easier in those circumstances to pull the general trigger.

Effect on OPEC

14. If the trigger was pulled it would represent a tough measure and would be seen as such by the OPEC moderates and, no doubt, welcomed by them as complementing their efforts to increase supply. It would be less likely than, say, the imposition of tough import ceilings, to provide OPEC with a reduced demand level to which to tie future production.

Disadvantages

15. It is an elaborate system, utterly dependent on political will for its effectiveness. Such political will may not be there at all - or may not survive for long once the trigger is pulled. The scheme was not designed as a mechanism for price control nor for a situation in

which high stocks are combined with falling demand and in which the primary threat is to price levels not to supply. Indeed a major weakness of the scheme in the present situation is that it does not deal with the problem of price at all. There is a special problem about the position of France. She is not a member of the IEA, and, since there is no EC allocation scheme the effectiveness of the system would be reduced if France was able to acquire oil at will. The introduction of the allocation system could seriously alarm the market and the impact of its introduction on prices could have exactly the effect we want to avoid. Finally, once introduced, it might be difficult to terminate.

(iii) Import Ceilings

Implications for the UK

16. Clearly this would depend entirely on the import ceiling accepted by us during the negotiations. With estimates of 1981 production at 85 m tonnes and of consumption in the range 81-87 m tonnes, an import ceiling of 2 m tonnes for the year as a whole should allow unrestrained consumption. But, as producers and with falling consumption, we would be under pressure in the negotiations and we might be asked to accept a tougher target.

17. To meet a tight ceiling the introduction of import licensing might be necessary, (a moderate ceiling would probably not call for Government action). Powers exist under the Import, Export and Customs Powers (Defence) Act 1939. The translation of these import controls into an effective scheme of allocation would have to be left to the companies since the powers which would be available to the Government if the trigger was pulled would not apply in this case (unless the Community were to adopt a legally binding directive).

A Modified Option

18. It might be possible to agree to a short-term version of import ceilings, whereby member nations undertook, initially for three months only, to restrict imports in the first quarter of 1981 to an agreed percentage of their imports in the first quarter of 1980. This would avoid the necessity of a complex and detailed negotiation and might tide us over until the new US administration was better able to face

difficult decisions. If necessary it could be renewed for a further period.

Advantages

19. In favour of import ceilings (full scale or modified option) it may be said that they are logical, more closely tailored than the trigger to the present situation, and are what Ministers agreed, at the IEA Ministerial Meeting in May, to consider if market conditions warranted it. They would enable the UK to benefit if we could marginally increase UKCS production and France could more readily (and probably much more willingly) be involved through the Community.

Disadvantages

20. The full-scale system is not fully worked out. The modified option would be less of a problem in this regard. No arrangements exist to enforce the ceilings once negotiated. Fears that some countries might cheat could undermine their effectiveness. The imposition of import ceilings would not help to redistribute Aramco oil and the practical problems of dividing the ceilings between companies would be considerable.

Effect on OPEC

21. OPEC would, no doubt, welcome the imposition of import ceilings. But they would provide OPEC with a target of their own, namely a level of requirements with which the consumers had shown they could live and towards which any future OPEC production programme could be directed.

(iv) Reduce Stocks and Introduce Demand Restraint

The Proposal

22. As an interim measure, to tide IEA member Governments - and particularly the UK - over the first months of Q 1 1981, a package allowing Companies to run down emergency stocks by say 10 days (to 80 days) combined with such measures as are feasible to meet an internationally agreed level of demand restraint could be considered. There would be problems about how precise the international

ANNEX C

[redacted] agreements might be, and we would need to strike a balance between effectiveness and the need to leave Governments with some flexibility about the nature of the measures taken. The EC is moving in the direction of this option. The support of the companies in running down stocks would be necessary, as would the whole-hearted participation of member Governments in demand restraint. It might be necessary to bring a good deal of pressure to bear on companies to co-operate. The effectiveness of demand restraint measures - even if internationally agreed - in the absence of statutory powers available to HMG, would depend on the levels of restraint sought. A very limited amount might be done by persuasion.

Advantages

23. This is the option which may, in the end, receive most support internationally. It would tide us over the difficult period before Reagan's inauguration, would be unlikely to panic the market and, from the UK point of view would be attractive since it would leave us with some room for manovere, and, of course, the continued protection of our arrangements with the oil companies.

Disadvantages

24. There must be some doubts whether it would be rigorous enough, whether the support from companies and consumers on which it would depend would be forthcoming and whether it would be honestly and consistently applied. Unless it were generally accepted by the public that there was an oil crisis, it would be difficult for Ministers to win acceptance of demand restraint measures.

25. OPEC countries would no doubt be mollified by the reduction of stocks, but might regard the package as being a little short on firm measures. Their attitude would be coloured by its effect on the market. If it worked - and if demand restraint was both real and visible - they might well regard it as adequate.

ANNEX C
Appendix 1

LOW KEY DEMAND RESTRAINT MEASURES

A MEASURES

The scope for the UK to restrain demand - or in many cases to constrain supply - without resorting to Government-imposed allocation and rationing is limited. But the following measures could be considered.

1. Fuel Switching by the CEGB; we estimate that at currently expected levels of electricity demand about 100,000 tonnes of heavy fuel oil per month could be saved during the winter. The cost might be up to £10 million.

2. Increased Taxation: A 10% rise in the price of petrol could be expected to reduce demand by about 1%. Price increases on other oil products would have much less effect on consumption.

3. Lower speed limits: An achieved reduction in actual speeds (rather than speed limits) of 5-10 mph outside built-up areas would be needed to realise motor fuel savings of about 1%. Enforcement of lower limits would involve additional police effort.

4. Restricted hours at filling stations: Full weekend closure (ie 1800 Friday - 0800 Monday) might give petrol savings of up to 5%; closure for lesser periods would have a much smaller effect. Public acceptance of this measure (which would require statutory backing) would depend on the general perception of the shortages.

5. Persuasion: we estimate that an oil-saving campaign could at best produce savings of up to 1%.

6. Voluntary Allocation by companies: If the companies are short of supplies they can, by declaring force majeure, reduce their deliveries to consumers. If they are not short of supplies, they are unlikely, for fear of the legal consequences of breaking their contracts, to be persuaded by the Government to impose effective allocation. We could only direct allocation if use of powers under the Energy Act were open to us.

ANNEX C

Appendix 1

7. The following measures are amongst those which have also been examined recently:-

Cuts in motorway/road/street lighting
"Car-less" days
Reducing TV time
Restrictions of display/advertising lighting
Adjustment of summertime
Ban on night sport.

This kind of measure is largely cosmetic and it would be difficult to identify the degree of saving any of them are likely to achieve.

8. Action has recently been taken to:-

Reduce the legal maximum for heating levels in non-residential buildings:
Relax laws inhibiting car pooling.

9. Increased use of Natural gas: There is limited scope for increased use of gas in place of oil. In the first place, gas demand currently outstrips the ability of BGC to supply during the peak winter months. Secondly, it would take time to connect new customers (normally 6-12 months for a major new conversion). If Ministers were prepared to exercise powers under the Energy Act, it would be possible for those who could burn both oil and gas to burn only gas, but their increased gas burn during the winter months would need to be met by savings from other customers. The CEGB has no capacity to switch directly from oil to gas, although there might be some scope to switch from coal to gas which could, if necessary, release coal for substitution for oil.

B POWERS

The introduction of restricted hours at filling stations and Government-directed allocation by the companies (3,4 and 6 above) would require the use of powers under Section 3 of the Energy Act, 1976. These powers are available only:-

a. if they are required for the implementation of UK obligations under EC or IEA agreements;

b. if "there exists or is imminent in the UK an emergency affecting fuel or electricity supplies".

In effect we can take these powers in present circumstances only if the international obligation we enter into is legally binding. Any IEA measure short of a trigger (eg import ceilings) would not be so binding. Any EC action (under Council Decision 77/706) formally to require Member States to reduce consumption would enable Energy Act powers to be used.

ANNEX C
Appendix 2

THE IEA ALLOCATION SCHEME

The IEA oil sharing scheme may be triggered when available oil supplies to one or more member countries fall to less than 93% of consumption during the base periods. If the group as a whole is affected the IEA Secretariat may make a 'finding' to activate the General Trigger. Unless the Governing Board recommends by special majority against activation (within 6 days) the scheme automatically comes into operation (A Special Majority in this case effectively means that at least $\frac{3}{4}$ of the members would have to agree to the action, and also, in practice, that the USA would have to support it).

2. If an individual country's supplies fell to less than 93% of its base period consumption it could request activation of the Selective Trigger. If the Secretariat made a 'finding' to activate the Selective Trigger its decision could only be reversed if 18 countries voted against it.

3. If the General Trigger were pulled each country would be expected to implement demand restraint of 7% (where supplies fell to between 93% and 88% of normal consumption). A calculation would then be made to give each country a Supply Right. Where a country's available supplies exceeded its Supply Right it would have an obligation to allocate to excess to the Group - where its supplies were less than its Supply Right it would receive an allocation of the difference from the Group.

4. If the Selective Trigger was pulled only the country affected would impose demand restraint (of 7%) and then would receive oil from the Group to make up any further shortfalls.

5. If supplies from Iran, Iraq and Kuwait ceased altogether and the IEA General Trigger was pulled, taking the latest available figure, the IEA formaula would give the UK an Allocation Right to receive about 1 million tonnes of oil a month.

6. The formula assumes that we should impose demand restraint of 10% and draw down stocks at a rate of 55,000 tonnes a month. However, because of the current low level of demand it should not in practice be necessary either to impose demand restraint or draw down stocks.

EC Scheme

7. Cessation of supplies from Iran, Iraq and Kuwait could also trigger the EC oil sharing scheme. This provides that each member state would restraint demand of all petroleum products by a maximum of 10% for a period of up to 2 months. Thereafter each member state would reduce its consumption of fuel used in electricity generation on a variable basis, according to the total amount of energy consumed by that State for electricity generation, coupled with its practical capacity for fuel switiching in power station; demand restraint of other petroleum products would continue on a uniform basis. Under this scheme the UK would currently have a potential obligation to allocate oil to the Community at a level of about 39,000 tonnes a month. We could probably avoid demand restraint by using excess oil stocks.

ANNEX C
Appendix 2

EC Scheme

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MFJ

Energy Bl

Energy

CONFIDENTIAL

3 October 1980

Thank you for your letter of 2 October, about the choice of commercial process for highly radioactive waste.

The Prime Minister has noted the background to the decision mentioned to her at Harwell. She has commented that, if anything goes wrong radioactivety can be isolated in a batch process in a way that is not possible in a continual process like the French one.

I am sending a copy of this letter to Jeff Jacobs (Department of the Environment).

MAP

G.S. Dart, Esq.,
Department of Energy.

CONFIDENTIAL

cc.

cc Duguid

01 211 6402

J R Ibbs Esq
CPRS
Cabinet Office
Whitehall
London SW1

2 October 1980

PWR INQUIRY

Thank you for your letter of 19 September. As I said in my letter of 4 July to Michael Heseltine, to which you refer, I believe that the forthcoming report of the Select Committee on Energy, the Government's reply to it, and a Parliamentary debate on that reply will be an important element in providing the PWR inquiry with a settled background.

I note that you think we should avoid a second Windscale. As you know, the CEGB announced on 1 October their choice of Sizewell as the site for the first PWR station. I believe that this announcement will serve to focus public attention, and particularly that of the interested pressure groups, on the form and scope of the public inquiry. The Select Committee on Energy questioned me about this when I appeared before them on 30 July; their report may well contain comments or recommendations on the subject. In the light of the public debate, and in particular of the Select Committee's report, we will need to move towards decisions over the next few months. My officials will keep in touch with yours.

I am copying this letter to the recipients of yours.

Yours sincerely

D A R HOWELL

CONFIDENTIAL

2

SECRETARY OF STATE FOR ENERGY
THAMES HOUSE SOUTH
MILLBANK LONDON SW1P 4QJ
01 211 6402

Prime Minister
The story here seems good. We have decided to use a French-developed process, which we have acquired for little or no cost, and which offers a substantial saving (see P.3). We are asked to keep quiet about the saving for the present.
MAP 2/x

If anything goes wrong, radioactivity can be isolated in a batch process in a way that is not possible in a continuous (French) process.

M Pattison Esq
Private Secretary
10 Downing St
London SW1

2 October 1980

Dear Mike,

CHOICE OF COMMERCIAL PROCESS FOR HIGHLY RADIOACTIVE WASTES

During the Prime Minister's recent visit to Harwell, Sir John Hill mentioned that BNFL have recently chosen the French AVM, rather than the UKAEA's HARVEST process, for their commercial glassification plant at Windscale. You may wish to know the background.

Environment Ministers are responsible for radioactive waste management policy, which includes the decision on this process. They will be considering the full implications of BNFL's choice for that policy when their officials have obtained all the necessary technical and other information from the Company. In the meantime, the Prime Minister will wish to know BNFL's reasons for preferring the AVM process.

Background

HARVEST has its origins in research carried out at Harwell in the late 1950's and early 1960's into a batch process for manufacturing glass from highly active liquid reprocessing wastes. The research culminated in a small number of glass blocks being made from the Windscale reprocessing liquor in 1966. In 1972, it was decided to modify the process to manufacture large blocks capable of solidifying the expected arisings of liquor in the 1980's. Engineering studies were undertaken, mainly by BNFL, while the UKAEA concentrated on process development and glass technology. In the light

of decisions at the time, this work was given a relatively low priority and no "active" plant has been constructed.

Meanwhile the French had been developing a continuous casting process for glass manufacture which became known as AVM. The Thermal Reprocessing Technology Exchange Agreement of 1973 between BNFL and the French CEA gave BNFL (but not UKAEA or government departments) access to the French glassification information until 1975.

By 1978 the French had completed construction of an industrial scale fully active plant (AVM) and in 1979 the BNFL - CEA Agreement was reactivated. This allowed BNFL to make a detailed comparison of the HARVEST and AVM processes before proceeding to a capital-intensive development programme. The BNFL review has concluded that AVM is the preferable process, and the Company is seeking to negotiate a contractual arrangement with SGN (a subsidiary of COGEMA, the French reprocessing organisation) for use of the process.

Reasons for the Selection of AVM

BNFL consider that AVM offers significant advantages over HARVEST in several key areas. Particularly, AVM is proven and has operated successfully for more than two years, whereas HARVEST is still at the research stage. AVM could be commissioned earlier, would involve a smaller R & D programme and fewer uncertainties. The process is also more flexible and has greater potential for development (See Annex A). However, development work is required to adapt AVM for UK wastes and UK product specifications. Disadvantages of AVM compared with HARVEST (melter lifetime and activity containment within the plant can, in BNFL's view, be overcome).

The work which the UKAEA did in the development of HARVEST will not be wasted. Much of that experience is directly relevant to the use of AVM technology. The product specification is unlikely to be changed. All the glass technology work done by the AEA will be applicable to the AVM commercial process. Much of the engineering experience in handling mixtures of highly active waste and glass making materials at high temperatures will also be relevant, although it may be prudent for the actual engineering of the plant to be carried out in co-operation with SGN. Above all, the confidence which BNFL can now place in the glassification process would not have been possible had it not been for the parallel development which the AEA undertook on HARVEST.

BNFL will not have to pay the CEA for the use of the AVM process. Under their 1973 Agreement each had access to the other's technology. BNFL will have to negotiate with SGN for engineering design and other services for the construction of the plant. The choice of AVM, however, offers the possibility of overall financial savings to BNFL of the order of £120 - £180m. (It is important that this large saving to BNFL is not made public since the French might use this as an excuse to seek payment for the use of their technology.) This saving would result mainly from the earlier commissioning of an AVM plant which would reduce the number of new storage tanks for highly active wastes. BNFL also expect unit costs of vitrification to be no higher for a process based on HARVEST and possibly lower. They say that the CEGB, who will be contributing to the financing of the plant, are aware of the Company's choice and are content with it.

DOE have responsibility for radioactive waste management policy and contribute financially to the HARVEST R & D programme. They have been assured by BNFL that waste management aspects will be unaffected by the choice of AVM but officials wish to examine this matter in detail and have requested full information, which will be submitted to Ministers when available. This is dependant on BNFL releasing to Government Departments details of AVM technology obtained under the Reprocessing Agreement.

Apart from the DOE's consideration of the waste management aspects of BNFL's choice the proposed plant will require a nuclear site licence before it can be operated. While BNFL are confident that the NII's site licensing criteria can be met, the Inspectorate will need to be fully satisfied that such a plant can be safely built and operated and the glassified product safely stored and transported before a licence will be issued.

I am copying this letter to the Private Secretary to the Secretary of State for the Environment.

Yours sincerely,

G S DART
Private Secretary

Geoff Dart

ANNEX A

REASONS FOR THE SELECTION OF AVM

1 Detailed comparison of the two processes shows that the AVM process promises significant advantages over HARVEST in several key areas:

Throughput

a) A single AVM line has a capacity equivalent to 1500t pa of Magnox fuel or 600t pa of oxide fuel and is equivalent to two twin furnace or three single furnace HARVEST lines.

Off-Gases

b) The bulk of the material entrained in the off-gases from the AVM plant is soluble and development for AVM has shown that it is possible to reduce ruthenium volatility.

Potential for Development

c) The potential for the further development of HARVEST is limited although there are various parameters such as the use of dry feeds which remain to be explored. In the case of AVM, the calciner can be improved and longer life-time, higher throughput melters are under development. Design studies by the French for a vitrification plant for Cap de la Hague have indicated that the line throughput could be doubled.

Flexibility

d) The separation of the calcination from the melting and pouring stages provides more scope for the optimisation of the various process parameters. The size of the ultimate glass product containers for AVM can be varied without any major impact on the basic glass making process.

Product Quality Assurance

e) It would be easier to sample glass from AVM if this were necessary.

Process Stability

f) Automatic process control should be more readily applied to AVM as it is a continuous process.

Volume of Product

g) The AVM process gives better utilisation of ultimate glass product container volume.

2 Against these advantages of AVM there needs to be set those areas where HARVEST has advantages:-

Melter lifetime

a) The AVM melter has a nominal life of only 1500h and two melter vessels have failed prematurely in service; the HARVEST vessel is protected against failure by the use of a new vessel in each run which becomes the ultimate glass product container and by the use of a lower process temperature.

Activity Containment

b) Any over-pressurisation in the AVM calciner may result in activity being blown past the seals.

Expertise

c) At present the UK expertise is related to the HARVEST process. However, the product of the two plants is similar and existing glass technology is immediately transferable to the AVM Commercial process. ~~AVM~~. Engineering design studies have been largely related to plant concepts rather than detail and much of this experience will be relevant to either process. The only area of expertise which is not immediately applicable is that obtained from operating the Harwell large scale pilot plant.

CONCLUSION

3 The advantages of AVM are outlined at paragraph 2. BNFL have carefully considered the two potential weaknesses identified at 2(a) and (b) and concluded that these can be eliminated at the design stage. The French Company have also carried out a final run using simulated Windscale Magnox wastes. BNFL consider that both calcination and vitrification were successfully accomplished.

4 Accordingly BNFL judge the overall balance of advantage to lie with the AVM process. They have therfore entered into negotiations with SGN, the majority owned engineering design subsidiary of COGEMA for the design and engineering work for a production plant for Windscale to be done by a combined BNFL - SGN team.

September 1980

Prime Minister

Tel: 211 6402

The Rt Hon Lord Carrington KCMG MC
Foreign and Commonwealth Secretary
Foreign and Commonwealth Office
Downing Street
London SW1

30 September 1980

Dear Peter

See IRAQ: Iraq/Iran - Part 1

As I mentioned at the Chequers meeting on Sunday the Americans have been working up proposals for a coordinated approach to the handling of stocks by IEA countries as part of their response to the cut off of Iranian and Iraqi exports. Under US pressure the IEA Secretariat today put to the Agency's Standing Group on the Oil Market (SOM) proposals for a decision to be adopted formally by the Governing Board at a meeting at the level of Ambassadors to OECD at noon tomorrow, Wednesday, 1 October. The reason for this sudden rush is that President Carter may be making a statement tomorrow night and would like to refer to an IEA decision: and there is a wish in the IEA to anticipate a statement which the French Cabinet may make tomorrow afternoon.

I enclose the latest draft of the decision. It may be further amended in detail. In brief it asks IEA member Governments to urge private and public concerns to refrain from abnormal purchases on the spot market; to consult with their oil companies with a view to meeting any imbalance between supply and demand by a reduction in the present high level of stocks and to reinforce measures to save energy and to substitute other fuels for oil. There is provision for consultation between Governments to ensure that the decision is implemented in a fair way and for monitoring its implementation.

Most members of the SOM indicated general agreement with the draft. (The UK representative made it clear that the position of Ministers was reserved). The only exceptions were the Swiss who with some support from the Swedes wanted to do nothing and the Canadians who were hesitant for internal political reasons. Italy, Spain and Turkey emphasised that they were hard hit by the loss of Iraqis supplies and might well need help. Their position is covered by the annex to the draft decision.

Implementing this decision should not cause us difficulty. Stocks except for gasoline are well above the minimum of 75 days consumption which the Government requires the companies to hold as a strategic reserve. In asking the UK companies to meet a shortfall in supply by

/reducing

reducing stocks we shall in most cases be pushing at an open door. That is the sensible and pragmatic course which I would expect the companies to follow.

The monitoring procedure provided for in the decision should enable us to ensure that we do not run down our stocks merely to the benefit of others who fail to play their part. The IEA monitoring will of course not cover France: but we should be able to watch them through parallel procedures in the Community.

The decision makes no specific provision for Governments to refrain from adding to their strategic stockpiles. The US Administration has said that for political and strategic reasons it must continue to carry out the Congressional decision to build up the strategic reserve at a rate of 100,000 barrels per day. This is quite unacceptable and we should make that abundantly clear if we accept the decision. We can then build on the reference in paragraph 2(iii) to consultation between Governments "to ensure consistent and fair implementation of this programme" to press the US both bilaterally and in the monitoring process to refrain from building up the strategic reserve.

The questions are therefore: (a) do we accept a decision on the lines of the enclosure in the IEA Governing Board tomorrow; (b) if so, do we acquiesce in the omission of a direct reference to Governments refraining from adding to their strategic stockpiles, but make it abundantly clear that it is unsatisfactory that strategic stockpiling should continue in the US and that we will be pursuing this point vigorously in the monitoring process.

I have some doubts about how effective the decision will prove in practice. But its adoption should not harm UK interests: and to reject it or insist on a reference to strategic stockpiles which we know is unacceptable to the US Administration would involve us in an unnecessary international row. We could well get blamed for blocking a measure to which the alternative is a further rise in oil prices with all the damage that would do to the world economy. If this is also your view no doubt your Department will send appropriate instruction to H M Ambassador to OECD.

I am sending copies of this letter and enclosure to the Prime Minister, Geoffrey Howe, John Nott and Sir Robert Armstrong.

Yours ever

D A R HOWELL

David

DRAFT DECISION BY IEA MEMBER COUNTRIES

1 Member countries of the International Energy Agency have reviewed the current situation in the oil market as a result of developments in the Middle East and have concluded at this stage that:

i) Oil consumption within IEA countries is low compared to recent years.

ii) Oil stocks in IEA countries as a group are at high levels.

iii) Some producer countries have indicated readiness to produce at levels which would contribute to a better world energy balance.

Consequently, they are convinced that the overall supply can be managed for IEA and non IEA countries so as to meet demand over the next few months.

2 As their part in achieving this result, IEA member countries agreed to take the following measures to prevent pressures on the oil market:

i) Urging and guiding both private and public market participants to refrain from any abnormal purchases on the spot market.

ii) In further implementation of the decision taken by Ministers in May 1980 on stock policies, immediate consultations by member countries with oil companies to put into effect a policy that within the fourth quarter there will be a group stock draw sufficient to balance supply and demand taking into account whatever additional production is available to the group.

iii) To this end, active consultation between Governments of the IEA to ensure consistent and fair implementation of this decision taking account of market structures in individual countries, and to adjust for imbalance which might occur in particular situations.

iv) Reinforcement of conservation and fuel substition measures which are already contributing to lower demand for oil.

3. Member Governments have agreed to monitor the implementation of this decision closely and to meet again at short notice to review progress.

4. IEA member countries recognise the announcements by some producer countries of their readiness to make up for some of the losses of oil supply. This, together with the measures of this Decision, will contribute to market stability and thus benefit the world economy as a whole.

Annex to draft Decision

Recognising that supply distruptions in the short-term may affect IEA countries in different degrees disproportionate reductions in stocks resulting from measures taken to carry out the decision will be taken into account in assessing individual member countries' positions if additional IEA actions should become necessary.

NO

Energy 2

cc A. Duguid -

01 211 6402

Prime Minister

To note choice of Sizewell for first PWR - subject to 26 September 1980 public enquiry of course.

To be announced next Wednesday.

D Edmunds Esq
Private Secretary to the
Secretary of State for
the Environment
2 Marsham Street
LONDON
SW1

cc The Lord Chancellor

MS

Dear David,

The CEGB have told the Department that they intend to announce on 1 October that they have chosen Sizewell in Suffolk as the site for the first PWR nuclear power station in this country. They are doing this in order to enable them to carry out open consultations with local people in advance of making their formal application for consent for the station. (This is expected to come at the beginning of the new year).

PL 2419

The Board's announcement may be expected to generate much interest, and in particular to raise questions about the public inquiry which my Secretary of State intends to hold into the proposal. It will be important to have the report of the Select Committee on Energy following the inquiry into the nuclear programme earlier this year before decisions are taken about the form and scope of the inquiry.

The Government is thus not yet in a position to take final decisions about the inquiry, much less to announce them immediately. I attach for your information material on which our Press Office will draw in answer to questions.

I am copying this letter to the Private Secretaries to the Prime Minister, the Lord Chancellor, the Secretaries of State for Scotland and Wales, and to those of Sir Robert Armstrong and Mr Ibbs.

Yours sincerely,

Geoff Dart

G S DART
Private Secretary

GENERAL LINE

1 We note the announcement made by the Generating Board today about their choice of Sizewell, Suffolk, as the proposed site for the first British PWR nuclear power station, and that formal application for the consent of the Secretary of State for Energy under the Electricity Acts is expected to be made early next year.

2 The Secretary of State has made it clear that it is his intention to hold a full and thorough public inquiry into any proposal to build a PWR nuclear power station in this country, and that the intention to do is subject to all necessary consents and safety clearances.

3 The Government is giving careful consideration to all matters relevant to the holding of the inquiry. Depending on the timing of the application and progress with subsequent work by the parties it is hoped that the inquiry may be able to begin in mid 1982.

4 Decisions will be announced in due course.

QUESTIONS AND ANSWERS

1 Q WILL THE INQUIRY HAVE ONE STAGE OR MORE?

A The form of the inquiry will be announced in due course. No formal application has yet been received. But, as the Secretary of State told the Select Committee in July, the inquiry will take place under the Electricity Acts.

2 Q WHY HAS NO DECISION BEEN TAKEN YET?

A No formal application has been received, and it would be premature to make firm decisions now about an event which appears to be at least 18 months off.

3 Q IS THE GOVERNMENT CONSIDERING INTRODUCING SPECIAL PROCEDURES FOR THIS INQUIRY?

A There are no plans to do so. The inquiry will take place under the Electricity Acts.

4 Q WHAT SUBJECT MATTER WILL BE COVERED BY THE INQUIRY? WILL IT BE SITE SPECIFIC OR GENERIC?

A The Secretary of State for Energy has made it clear that the inquiry is to full and thorough.

5 Q WILL THE VIEWS OF THE LOCAL AUTHORITIES/LOCAL PEOPLE BE TAKEN INTO ACCOUNT?

A Yes, certainly.

Q 6 WILL THE GOVERNMENT HOLD A REFERENDUM ON THE INTRODUCTION OF THE PWR?

A No.

7 Q WILL THE GOVERNMENT PROVIDE FUNDS FOR OBJECTORS AT THE INQUIRY?

A There are no plans to do so.

8 Q WILL NOT THE INQUIRY BE A CHARADE? THE GOVERNMENT HAS ALREADY MADE UP ITS MIND.

A The Secretary of State has made it amply clear that the Government's policy of furthering the development of nuclear power does not commit it to agreeing to any particular project in any particular location, and that great weight will be attached to the report of the Inspector at the Inquiry.

9 Q HAS THE GOVERNMENT EVER DECIDED AGAINST A NUCLEAR POWER STATION FOLLOWING A PUBLIC INQUIRY?

A Yes, in respect of an application for an AGR station in Connah's Quay. The inquiry took place in 1971.

10 Q WILL NOT THE SECRETARY OF STATE BE JUDGE AND JURY IN HIS OWN CAUSE?

A The Secretary of State is not the promoter of the development. He will attach great weight to the report of the Inspector, and will consult the Secretary of State for the Environment.

11 Q WHY IS AN ISSUE OF SUCH FUNDAMENTAL IMPORTANCE BEING CONSIDERED AT AN INQUIRY UNDER THE ELECTRICITY ACTS?

A The application will be for consent to build a power station. Statutorily, this means that Electricity Act procedures apply. The form of the inquiry is being considered.

12 Q WHY WILL THE INQUIRY NOT BE HELD /UNDER THE TOWN AND COUNTRY PLANNING ACTS/ /BY THE SECRETARY OF STATE FOR THE ENVIRONMENT/?

A The application is made under the Electricity Acts to the Secretary of State for Energy. Any consent carries deemed planning permission with it. There will of course be full consultation with DOE.

13 Q WHAT WILL BE THE ROLE OF THE NUCLEAR INSTALLATIONS INSPECTORATE?

A The Secretary of State has made clear his view that safety is of paramount importance. The principal safety documentation relevant to the initial licensing is a separate procedure under the Nuclear Installations Act 1965.

14 Q WHERE WILL THE INQUIRY BE HELD?

A No decision has been taken. In the past such inquiries have been held at a convenient place in the vicinity of the proposed site.

Energy

CABINET OFFICE
Central Policy Review Staff
70 Whitehall, London SW1A 2AS Telephone 01-233 7765

From: J. R. Ibbs

Qa 05135

19 September 1980

Dear Secretary of State,

PWR Inquiry

Thank you for sending me copies of your recent corrrespondence with the Secretary of State for the Environment on the form and timing of the PWR Inquiry for which responsibility will fall to you under the Electricity Acts. There is clearly some difference of opinion over the CPRS view on one-stage versus two-stage inquiries.

The CPRS report to which you refer was in fact concerned with Planning Inquiries held under the Town and Country Planning Acts. For such inquiries we recommended:

(i) that all inquiries should be single-stage only, provided that pre-inquiry procedural meetings are held in cases where there is likely to be a large public interest;

(ii) that, where a proposed development involves an important but unsettled issue of policy, the policy issue should if practicable be resolved outside the statutory planning procedures and before the local planning inquiry is held.

We believe that statutory provisions for two-stage inquiries are recipes for delay. Our view on this would hold whether the developments fall under the Town and Country Planning Acts or under the Electricity Acts. For the first PWR we should like to see a single-stage local inquiry taking place against as settled a factual and energy policy background as possible. This means that arrangements would need to be made for such policy matters to be aired and resolved before the local inquiry took place. We should not wish to see a repetition of the Windscale inquiry.

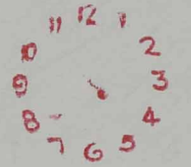
The Rt Hon David Howell MP
Department of Energy
Thames House South
S W 1

CONFIDENTIAL

I am sending a copy of this letter to the Secretary of State for the Environment and to the other recipients of your letter of 4 July.

Yours sincerely,

J R Ibbs



Energy

CABINET OFFICE
Central Policy Review Staff
70 Whitehall, London SW1A 2AS Telephone 01-233 7765

12
12/9

From: J. R. Ibbs

CONFIDENTIAL

Qa 05119 11 September 1980

Dear Secretary of State,

Economic Case for Torness Agr

Thank you for sending me a copy of the paper your officials have prepared on the economic justification for proceeding with the construction of Torness.

I am reassured to see that, of the options examined, pressing ahead with a twin reactor AGR station at Torness looks clearly the most economic.

The paper provides a useful reminder of the difficulty of making out a robust economic case for the immediate ordering of any nuclear power stations. The calculations depend on assumptions on construction performances and on fuel prices stretching well into the next century which are inevitably speculative. Because of such fundamental uncertainties I see no purpose in pursuing other questions which could be raised about the basis of the assessment.

I am sending a copy of this letter to the Chief Secretary, to other members of E Committee, and to Sir Robert Armstrong.

Yours sincerely,

J R IBBS

The Rt Hon George Younger TD MP
Secretary of State for Scotland
Scottish Office
Dover House
Whitehall SW1

CONFIDENTIAL

CONFIDENTIAL

Energy

V MS

Treasury Chambers, Parliament Street, SW1P 3AG
01-233 3000

12 August 1980

The Rt. Hon. David Howell, MP
Secretary of State for Energy

Dear David

DEPLETION POLICY

Thank you for your letter of 4 August. I realise, of course, that agreement to remove reference to upward profile variations from your announcement about depletion policy did not necessarily imply your agreement that this element of the policy should be reversed. Nonetheless, I was grateful to you for making the adjustment.

I am certainly quite ready for E Committee to look again at the question of depletion measures if we do seriously disagree about how our policy should be implemented. But I think that we can leave the decision on whether there should be such a discussion until the early autumn. I suggest this timetable because by then we should have received BP's application for an upward profile variation, if as is now expected the company are going to make one. This would be the first, and by far the largest, application for an upward profile variation since your statement.

I hardly need say that I would want such an application to receive a favourable response. If we could not agree on the Forties application the matter could then be considered by E Committee. If there was any question of a decision having to be taken before Forties on any other application, that too would need to be considered by E Committee if we disagreed.

On the other matters raised in your letter, I am grateful for the constructive part your officials are playing in the current review of the North Sea fiscal regime, and

/for your

CONFIDENTIAL

for your readiness to consider the possibility of further revenues from the North Sea, particularly in the next year or more. Again, we may be a bit clearer on the position in the autumn. There is of course no urgent need to come to any conclusions about possible production cutbacks, which will certainly at some point need to come back to our colleagues. But whilst you are right in saying that the worst problems for the PSBR are likely to occur in 1981-82 and possibly 1982-83, I think we should be wary of assuming that budgetary constraints will be removed in later years. We can only make progress towards our twin aims of reducing the burden of taxation and the rate of monetary growth provided we stick to the policies set out in the MTFS. This involves a steady reduction in the ratio of the PSBR to GDP and in this context it will remain essential both to keep a firm grip on public expenditure and not to lose potential sources of revenue.

I am sending copies of this letter to the Prime Minister, the Foreign and Commonwealth Secretary, Sir Robert Armstrong and Robin Ibbs.

GEOFFREY HOWE

Treasury Chambers, Parliament Street, SW1P 3AG
01-233 3000

PRIME MINISTER

FUTURE PRICE OF OIL

Difficult though it is to predict the future course of world oil prices, we need to make assumptions about them for a wide range of public sector decisions. Officials from the Department of Energy, the FCO, the CPRS, the Bank of England, and the Treasury, under Treasury chairmanship, have therefore completed an assessment of the future world energy market, in the light of the prospects for world economic growth and energy supply. On the basis of this work, set out in the attached report, they have suggested a central working assumption for the world oil price and possible alternatives, which they think should be used for testing major projects or policies involving energy creation, use or conservation.

2. A note by the Chairman of the Group is annexed to this minute. Its conclusion that oil and energy more generally will remain a problem in the longer term, reminds us of the need to economise in its use and to undertake adequate investment in alternative fuels and to get the highest returns from our resources in the North Sea. It offers, in the form of its analysis and the price projections which follow from this analysis, a useful, if limited, tool which can help us to achieve those objectives. The report itself seeks to disclaim "any appearance of specious accuracy" and describes the central price projection as an "intelligent guess".

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PRIME MINISTER

The conclusion of all this is that we should assume for planning purposes that the real price of oil might well double by the end of the century. The Report itself is more sophisticated than this simple guess, and is worth a glance

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3. I do not think we need to discuss the report collectively. Its conclusions are inevitably subject to many qualifications. On that basis, and unless colleagues wish to raise any objections, this work should now be regarded as a useful contribution to thinking and planning for the more distant future.

4. Copies go to Members of E, Norman Fowler, and Sir Robert Armstrong.

(G.H.)
11 August 1980

[Signed on behalf of the Chancellor of the Exchequer, who has approved the draft]

PROSPECTS FOR OIL PRICES TO THE YEAR 2000: A BASIS FOR PLANNING

NOTE BY MR IAN BYATT

Chairman of the Interdepartmental Working Group of Officials

1. Making any assessment of the longer term trends in the world oil price is fraught with difficulty, and any particular projection is bound to be subject to a wide margin of uncertainty. Nevertheless, those concerned with decision-making in many areas of the public sector need to have some estimate of future oil prices, often for as much as twenty years ahead or more. Energy investment projects have long lead times; for example, it may take up to ten years from the initial planning stage before a nuclear power station begins to operate. Energy prices are critical to transport investment, both surface and air, which requires a long forward look. The conservation of energy at home and at work is best promoted by appropriate price signals. But what is appropriate depends on the longer term outlook for energy supply and demand. How rapidly we run down our reserves of North Sea Oil and gas depends partly on how we see the prospects for the oil price. For consistent decision-making, it is best to have agreed views about the most likely movements in world oil prices in the future. These issues are analysed in detail in the attached Report.

2. During the last 10 years, the whole energy position has turned round. For 20 years, prior to 1973, the real price of oil fell, production rose, and oil was increasingly substituted for other fuels. The 1973-74 price increase can now be seen as a turning point. In the

following years, prices did not fall back to anything like the extent predicted by some economists, and in 1979-80 they have doubled again. All the indications are that the next two decades will see further substantial increases in the world price of oil in real terms. This reflects a continuation of a tight energy situation, where alternative energy sources do not do enough to offset the problems caused by the changed oil supply picture.

3. Three major factors lie behind these predictions. First, despite the prospects for slower world economic growth than in the '50s and '60s, the supply and demand position for energy is likely to tighten further. World energy demand will continue to grow at, say, 2-3% a year. It is no longer sensible to reckon on increases in OPEC oil production. Economic growth in the future will have to depend on increased supply of other fuels. Much of the potential for an expansion of gas production is in the OPEC countries where it is likely to be developed only slowly. The prospects for realising a large nuclear programme look dim compared with the hopes of a few years ago. Renewable sources of energy, mainly hydro electric power, have long lead times and the best sites have gone. The prospects for a major expansion of coal production look quite good, but reserves are concentrated in a few countries, notably the United States. Production of oil from shale, tar sands and oil from coal is likely to increase, but the process will be slow, because of the cost, opposition on environmental grounds and the time needed both to prove the technology and apply it on a large scale. Supply and demand considerations will, therefore, put upward pressure on oil prices. Secondly, proposals in OPEC to keep prices moving upwards at least in line with industrialised countries' growth

seem quite likely to be attained. Thirdly, the risk that at some time over a period of a decade or more political disturbances will significantly reduce Middle Eastern oil supplies and impart a sharp upward shock to the price, is high. As 45% of free world oil production comes from the Middle East, political factors could easily produce significant reductions in world oil supply.

4. It is very difficult to quantify such factors with any great reliability, and we should not rely on any one price path. We consider, however, that our assessment points clearly to further increases in the world oil price sooner or later. We think that those concerned with long term decisions should plan on the basis that the real price of oil, in 1980 US $, adjusted for general inflation, will broadly double between now and the end of the century. Although we do not expect this increase to take place smoothly, it means a real increase averaging 4% a year. (Paragraph 88 of the Report).

5. A smooth progression in the price is, however, not very likely. In the short run, both demand and supply are highly inelastic, and small variations in either can lead to substantial price changes. Even if the Saudis achieve their objectives for a steadily rising real oil price, which, given the basic supply and demand position seems quite likely, they will find it hard to keep the other OPEC members in line when there is a surge of demand or a reduction in supply. Repetitions of substantial price rises, possibly on the 1979-80 scale are, therefore, quite likely. However, predicting the timing of price surges is impossible. That is why, for the most part, our work assumes a steady rate of price

increase, though we have developed a number of possible price paths which are marked by large jumps in the price.

6. Because of the uncertainty involved, we think policies and projects should be tested against a lower price path, where the world oil price rises at 3% a year compared with our central projection of an increase of 4% a year, and also against two kinds of upside risk: first, where there is a further substantial rise in price during the first half of the '80s; and second, where a large part of such a price increase is delayed until early in the '90s. (Paragraph 89 of the Report).

HM Treasury
6 August, 1980

INTRODUCTION

1. The importance of oil for the world economy is clear. It currently meets around half of the non-Communist world's energy requirements, and that proportion is unlikely to fall below about 40% over the next ten or twenty years. But forecasting its price is such a hazardous business that it is tempting not to make the effort. The doubling of the price in 1979 and early 1980 could scarcely have been predicted.

2. But to acknowledge the great uncertainties is not to deny the case for making decisions on the basis of explicit energy price projections, whatever their faults. There is a continuing need for the government and industry to make working assumptions about the future price of oil in the medium and long term. These assumptions are necessary inputs to a variety of decisions, notably in the energy and transport fields, which will have their main effects more than ten or twenty years hence. These decisions fall into four main categories:

(a) Energy investment. Oil is the world's main marginal source of energy and the only fuel that is currently traded on a significant scale internationally. Its price affects the price of energy generally. This will almost certainly remain the case until the end of the century and probably beyond. Projections of the future price of oil therefore have to be made in deciding the scale and timing of new energy projects. In many cases, lead times are long. It may take up to 10 years from the initial planning stage before a nuclear power station begins to operate. A new coal field can take up to 5 years to develop in major producing countries where coal is readily accessible, and in traditional deep-mining areas, such as the UK, it can take up to a decade.

(b) Transport investment. Assumptions about the future course of oil prices need to be made in planning the road and rail investment programmes and also in estimating airline fleet and airport capacity requirements.

(c) Conservation measures. As far as possible, the government tries (mainly through the price mechanism) to promote an appropriate degree of energy conservation. What is "appropriate" depends largely on what view is taken of the outlook for energy prices. Within that view the outlook for the price of oil is particularly important.

(d) North Sea depletion policy. How rapidly we choose to run down our reserves of North Sea oil and gas depends partly on how we see the prospects for the oil price.

3. In addition, an assessment of the possible evolution of world energy balances and oil prices is helpful background for international discussions, such as those in the IEA, about conservation measures, import targetry, relations with OPEC, etc.

PREVIOUS WORK AND RECENT DEVELOPMENTS

4. Since the oil crisis of 1973, there have been three inter-departmental studies of the prospects for energy supply and demand and for oil prices. The last study produced a report in November 1977. The report highlighted two important developments since the earlier assessments. First, contrary to some expectations, OPEC had survived the mid-70s recession intact. Second, projections for energy supplies other than OPEC oil had become much more pessimistic. In the light of these and other considerations, the report concluded that the real price of oil[(1)] would at least double or treble by the end of the century, the balance of probabilities being towards the upper end of the range. This conclusion was reflected in the 1979 edition of the Department of Energy's published Energy Projections.

5. Of course, the real price of oil has already nearly doubled, and this is probably the single most important development since the 1977 report. It has obvious implications for world growth and for energy supply and demand. But it also underlines the great uncertainty in which this new assessment of future trends in energy prices must be carried out. For the doubling of the price took place in a period when world economic activity had still not reached a cyclical peak and while there was only a temporary imbalance between energy supply and demand. Such surges in price would appear all too easily repeatable.

6. Several factors contributed to the surge in prices in 1979-80. Two of them are notable as important developments since the 1977 report. First,

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(1) The oil price in this Report, refers to the price of Saudi Arabian light 34° API crude oil (fob Ras Tanura) or equivalent thereof. In 1980, prices of individual crude oils have not been in line with one another, and we have taken the average price of crude oils of the same quality and type as Saudi light. To arrive at the real oil price, the nominal price in US dollars is deflated by the UN index of OECD dollar export prices of manufactures.

political uncertainties and tensions have intensified in the Middle East, from which the free world obtains three fifths of its oil supplies - one fifth from a single country, Saudi Arabia. The future security of these supplies is now more in question following the Soviet invasion of Afghanistan, the Iranian revolution, and the upsurge of Islamic fundamentalism. Continuing failure to resolve the Palestinian question is a further source of instability in the area.

7. Second, the proportion of crude oil supplied to the major oil companies under term contracts has declined significantly, from around 75% of all crude oil traded internationally (excluding intra-OECD trade) before the 1973 crisis to about 40% at the end of 1979. This has been the result of deliberate policy on the part of some OPEC producers seeking to fragment the market for their oil and to control its destination and also the consequence of efforts by some consumer governments to increase their security of supply by making direct deals with the producers instead of depending entirely on the companies. Some of the oil majors have therefore been short of crude, and the competition for available OPEC supplies has sharpened. These developments have, in the short term at least, meant that a given degree of tightness in the market has been associated with a stronger upward pressure on prices.

8. Two other major influences on future energy balances have emerged since the last report. On the demand side, there has been growing evidence of a long term slow down in the growth of the world economy. There are differences of view as to how far this slowing down dates from and can be attributed to the 1973-4 increases in oil prices. Some would argue that the change in growth trends occurred earlier, in the 1960s. In any case, the important point is that world economic growth averaged only 3% in the 1970s, compared with 5% in the 1960s and 4% in the 1950s. In the light of this evidence, projections for future growth have been revised downwards in this report from those contained in the 1977 study. And, as the rate of growth is of course a key determinant of energy demand, this means that the projections for energy demand have come down as well.

9. But it also appears that the supply of energy is unlikely to grow as much as was thought in 1977. This applies both to oil and other fuels, notably nuclear. In 1977, OPEC capacity was expected to increase and, with it, production. Now, it is much more doubtful if OPEC will be prepared to

increase production. The prospects for growth of nuclear capacity have also diminished, partly because of environmental opposition. The projections for oil supply are down by one third compared with those in the 1977 report. Coal is down 25%, nuclear power by more than half, and renewable sources, notably hydro-electric power, by nearly half. In general, the experience of the last few years has been to lower expectations regarding future energy supplies.

10. This report has been written with all of these developments in mind, but perhaps uppermost has been awareness of increased uncertainty. Allied to this uncertainty is the knowledge that the way we think about our energy prospects is strongly influenced by recent events. Quite a different report might have been written towards the end of 1978, following a period when real oil prices had fallen by around 20%.

THE ANALYTIC APPROACH

11. Our projections for oil prices have been derived by estimating the likely trends in supply and demand in the world oil market on a number of hypotheses. The factors we have considered are the likely growth in the world economy and hence in the demand for energy, the availability of other fuels, notably gas, coal and nuclear electricity, and the politico-economic factors lying behind the supply of Middle Eastern oil.

12. There are great uncertainties about all of these factors; we have attempted both to explore these uncertainties and to consider ways in which they interact with each other. This has enabled us to construct several scenarios and to consider the balance of supply and demand in the oil market in the case of each of them.

13. These supply and demand balances, which have been constructed on the basis of projections and working assumptions, are best described as ex ante balances. They show what pressures there could be on world oil markets, and suggest the scale of those pressures. They are not forecasts; we do not suppose that demand for oil and its supply can in the event be very far out of line. They indicate the direction and strength of the forces which will change prices but not their consequences. Before considering how these ex ante balances might be translated into price changes, we also need to examine ways in which big imbalances could themselves affect the

underlying supply and demand positions, eg whether very high oil prices would inhibit economic growth. We also need to look at the position and the power of OPEC. Thereafter, a judgement has to be made on the range of prices which could emerge from the various forces at work.

14. Projections inevitably become more uncertain as they stretch into the future. For many purposes, notably when planning investment in alternative energy sources, estimates of prices as far ahead as 2000, and even beyond, are required. In this report we have sought to extend our analysis to 2000, by making estimates of supply and demand for 1985, 1990 and 2000, recognising that reaching out as far as the end of the century is particularly difficult. Beyond 2000, the uncertainties are so great that we feel able to make only a rough qualitative assessment.

15. The construction of these ex ante balances requires a working assumption for the oil price, because supply and demand will depend on the price of energy. For this purpose, we have assumed a rise in real terms from $30 a barrel in 1980 to $45 in 2000 ie about 2% per annum. ($45 a barrel of 1980 prices and exchange rates is broadly equal to the central projection contained in the 1977 report),[2]

16. In this analysis, oil is treated as the marginal fuel, balancing the world supply of and demand for energy. Two considerations justify this approach. First, oil will continue to have a role, albeit a diminishing one, as a general purpose fuel for heating and power throughout the rest of the century. Secondly, the supply to the consumer of fuels other than oil can usually only adjust slowly to sudden fluctuations in demand.

17. In subsequent sections, we build up our view of these ex ante supply and demand balances. First we consider the forward trends in the non-Communist world demand for energy. Next the likely supply of free world oil is set out. Then its supply of non-oil energy, notably coal, gas, nuclear and renewables (principally hydro-electricity) is considered. The energy position of the Communist economies is assessed separately.; these projections have necessarily been based on incomplete information and are very tentative, especially for the later years. The resulting net export or import position for energy in the Communist economies has then been

[2] The projections of real oil prices in this Report are all expressed in 1980 prices and exchange rates. Since oil prices are denominated in US dollars, this means that we are assuming no change in the real value of the dollar compared with other currencies. If the dollar were to appreciate or depreciate in real terms, our analysis would produce lower or higher dollar prices than are indicated in the Report.

incorporated into the overall free world supply of energy.

PROJECTIONS OF SUPPLY AND DEMAND

Non-Communist World Energy Demand

18. The growth in demand for energy is primarily determined by the growth of the world economy. Our initial projections of the prospects for the world economy assume that economic growth is not constrained by future developments in energy supply, demand and prices. The extent to which energy will actually constrain growth is very difficult to assess, and it is a question which we have not been able to answer fully. Our work, however, shows that it is a real problem and that, in some circumstances and on some assumptions, energy could indeed be a critical constraint on growth. Where appropriate, we have made reductions in our growth projections to take account of oil price rises over and above our 2% a year working assumption, where such increases appear necessary to eliminate an ex ante excess of demand over supply.

19. The energy situation is, of course, only one reason for uncertainty about world economic growth. It now seems abundantly clear that, for a number of reasons which are easier to list than to quantify, the boom period of the '50s and '60s is now over and that, for some time at least, the world economy will continue to enjoy only moderate growth. World economic activity has been subject to long cycles in the past, and the '70s may well have ushered in a long period when growth will be significantly below that of the earlier post-war period. The main issue is whether this slow growth will persist, leaving the '50s and '60s as an exceptional period, or whether the world will be able slowly to revert to something approaching the fast growth of that period, growth accelerating gently during the 1980s, with the 1990s as another boom period.

20. We have considered two possible growth scenarios. Even in the high growth one, we do not envisage a quick recovery in the rate of output or productivity. Growth in the next few years will be constrained by the need to adjust to the 1979-80 oil price increases and the persistence of inflationary pressures. We think that, during the years from 1979 to 1985, world output might grow at the same rate as the '70s, namely about 3% (2½% for OECD; 5% for LDCs). By the 1990s, we think that, barring the emergence of new constraints (an even tighter energy position could be such

a constraint), world growth might have recovered to about 4½%, the level of the '50s and '60s (4% for OECD; 6% for LDCs. In the low growth scenario, we think the rates of productivity growth observed in the '70s could persist in the US and the UK, while productivity growth slows down elsewhere. This yields an average world growth rate of about 2½% a year from 1979 to the end of the century (2% in OECD; 3¾% in LDCs). Although this growth rate would, for industrialised countries, be less than half that achieved in the '50s and '60s, it is broadly the same as that achieved in the inter-war period.

21. Energy demand has been directly derived from these growth scenarios, with an adjustment to take account of the impact of price changes which have already occurred and of the 2% a year real increases which we have taken as our working assumption for price developments over the next 20 years (paragraph 15 above). We have assumed that, in the absence of price changes, energy demand would rise by less than one:one with economic activity in the OECD countries, and by more than one:one in the case of LDCs. The adjustment to take account of higher prices is more speculative. Final energy prices consist of primary energy costs, distribution costs, and taxes. Analysis of events since 1973 suggests that the full effects of price changes will take up to 20 years or more to come through. For OECD countries and final energy prices, we have used different long-run elasticities of demand for different sectors, ranging from -0.3 for the industrial sector to -0.7 for transport, with the commercial and domestic sectors within that range. For LDCs, we have used a long-run elasticity of about -0.35. These elasticities are in line with the results of other studies, and, on average, they imply an elasticity of around -0.2 with respect to primary energy costs (which account for only half to two thirds of final prices).

22. Our working assumption of an increase in the world oil price to $45 by 2000 yields a free world demand for energy of:

Demand for Energy

mbd*

	Actual	Projected	
		Low Economic Growth	High Economic Growth
1978	92.2		
1985		100	104
1990		106	117
2000		129	162

*Supply and demand projections in this Report are generally in millions of barrels of oil a day (mbd) equivalent.

Non-Communist World Energy Supply

(i) Oil

23. Oil production is very unlikely to grow by as much as was thought only a few years ago. We do not expect a significant increase on current levels: our main estimate of conventional oil production for 2000 is virtually the same as output in 1978. But as a substantial part of that output comes from the Middle East (nearly a fifth from Saudi Arabia alone) the margin of error on any estimate is very large.

24. Non-Communist world proven oil reserves stand at about 25 years production at current levels. Since the peak of discoveries in the late '60s, the discovery rate has fallen to around 40 mbd; current production is around 50 mbd. The return of discoveries to 1960s levels looks unlikely. Production from oil shales, tar sands and synthetic oil from coal is likely to be only modest before the end of the century, for three main reasons. First, investment costs are likely to be substantial. Second, there may well be opposition to these developments on environmental grounds. Third, it will take time to prove the technology and apply it on a large scale.

25. As far as OPEC is concerned, only the Gulf states have the potential to increase production rapidly from their own reserves. Currently they have over 60% of the non-Communist world's proven reserves, but only 40% of production. However, given pressure for conservation and the prospect of continuing, large current account surpluses if the real oil price rises, production in these countries is unlikely to increase significantly above present levels. Production in the other OPEC countries will be constrained by relatively low reserves.

26. In the table in paragraph 30 below, we have assumed that total OPEC production remains fairly steady at 29 mbd through 2000. However, there is downside risk, particularly in the Gulf states,[3] which are responsible for about two thirds of OPEC production. Their output is at present substantially above that required to meet their financial needs. These needs may well grow more slowly in future, if they opt for slower economic growth so as to avoid the social problems associated with rapid development. Moreover, within these countries the case for extending the life of their oil reserves is being strongly urged. Political developments will tend to reinforce these pressures. Even if political changes occur relatively smoothly, future leaders could be less ready than today's to take Western interests into account in determining oil policy. And the growth of Islamic consciousness is likely to add to pressures for slower development and depletion policies.

27. There is also the risk (again strongest in the Middle East) that political disruption could lead to lower oil production. Supplies could be disrupted as a result of political instability, external subversion, hostilities between countries or interference in shipments from the Gulf. If the Arab-Israel dispute should flare up, this would probably be accompanied by a major supply disruption. Temporary losses of production as a result of such crises seem quite likely. A total shutdown of production for more than a few days is improbable but major reductions in one or more of these countries could well last for, say, several months. Past experience suggests that temporary supply interruptions of this kind can trigger off large real oil price increases and lead to slower rates of depletion.

28. Oil-importing countries are likely to make greater efforts than oil-exporters to increase production, but the size of their remaining reserves will be a limiting factor. The US has every incentive to keep production to 2000 as near current levels as possible; this will be achieved in the long-term only with the development of oil shales and synthetic oil from coal. US conventional oil production is falling: the main hope for large discoveries is offshore, but so far drilling results in the Gulf of Alaska and off the Eastern Seaboard have been poor. Conventional oil production is falling also in Canada: the decline there may be contained with the development of tar

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[3] Saudi Arabia, Iran, Iraq, Kuwait, United Arab Emirates.

sands. Although production in other OECD countries is still rising, it is from a low base. In sum, OECD conventional oil production is approaching a plateau, which could last through the 1980s.

29. Most non-OPEC developing countries since 1973 have expanded domestic energy production, including oil if available. These efforts will probably intensify, although some countries' production is set to fall, given lower reserves. However, increased oil production eg in Mexico and Egypt will yield a net increase in oil production from this group of countries.

30. Our projections are as follows:

Non-Communist World Oil Production

mbd

	Actual	Projected				
	1978	1985	1990		2000	
			Low economic growth	High economic growth	Low economic growth	High economic growth
OECD	13.6	15	15	15	15	15
Non-OPEC LDCs	4.5	8	8	9	9	10
Total non-OPEC	18.1	23	23	24	24	25
OPEC	30.2	29	29	29	29	29
	48.3	52	52	53	53	54

Note: This table includes production from oil shales, tar sands, and of synthetic oil from coal. We assume this to reach about 5 mbd in 2000.

(ii) Nuclear Electricity

31. At current world prices, nuclear energy is generally less costly than oil fuelled electricity. And uranium resources do not seem likely to be a binding constraint at least to 2000. But the rate of economic growth will affect the demand for electricity and hence the scale of nuclear investment. There are also supply side constraints in nuclear investment stemming from environmental and land use planning factors, and the investment costs of nuclear electricity are high.

32. One of the most attractive opportunities to reduce dependence on imported oil appeared in 1973-74 to be to replace oil used in electricity generation by alternative energy forms, including nuclear power. However, the failure to resolve a number of issues in the nuclear fuel cycle, together with the more recent emphasis on safety considerations, particularly following the Three Mile Island incident, have in some countries led to questions about the overall benefit of the nuclear option. Coinciding with this, and in part related to it, other options, including coal-fired electricity, have become more attractive. Nuclear plans have continued to slip and, in many countries, nuclear electricity has become a serious political issue.

33. Because of long investment lead-times (a decade from initial investment to full production), the range of nuclear electricity is relatively small in the near future. But for a longer period it is considerable. In this report, we set out four nuclear scenarios:

Supply of Nuclear Electricity — mbd

	Actual	Projected			
		Low Economic Growth		High Economic Growth	
		Low Supply	High Supply	Low Supply	High Supply
1978	2.6				
1985		5	5	5	5
1990		7	8	7	8
2000		11	14	12	16

34. The high supply cases attempt to give a broad indication of nuclear capacity if national governments overcome factors delaying nuclear development: they presuppose new government initiatives on country programmes and international co-operation on reprocessing and waste management. Ordering of 0.8 mbd of plant per year on average (equivalent to Western Europe's nuclear generation in 1978, or about three times the current ordering rate) will be required in the 1980s if 16 mbd of nuclear electricity is to be achieved by 2000.

35. The low supply cases indicate what might happen if there is little improvement on the current trend; it does not take account of other risks, including shutdowns of plant and very low investment. Thus completion of those plants now under construction or ordered would provide the equivalent of only about 7 or 8 mbd. Nuclear slippages are likely to have serious consequences for oil consumption in the 1980s.

(ii) Coal

36. The 1979 increase in the price of oil has significantly improved the prospects for coal. World coal reserves are very considerable, and a large amount of them could be commercially exploited at today's prices. A considerable expansion of supply is, therefore, possible, especially in the United States, which dominates the world's potential hard coal supply.

37. We think that the supply of coal is fairly elastic and that actual expansion will depend critically on demand. Because coal costs more to transport and use, both in power stations and industry, it needs a price differential in its favour over oil. Up to 1973, the costs of coal and oil per therm were roughly equal; from 1973-78, the price of coal was about two thirds of the oil price in Europe and about half the oil price in North America. The absolute differentials were, however, small. The latest oil price increase has established a significant differential between the oil price and the cost of coal, especially in North America. On our working assumption for the world oil price, even where allowance has been made for rising coal extraction and transportation costs, the differential is likely to widen. The world coal market is likely to be fairly competitive, and so increased production is likely at prices near costs. But there is some risk of coal exporters and others capturing economic rents due to rising real oil prices and of local communities in the western United States, from which much of the increase in coal production will have to come, resisting coal mining in their areas. If sufficient coal exports from the US are not available, significant problems for energy supply in Western Europe and Japan look inevitable, even with coal imports from Australia and South Africa.

38. In 1978, 66% of OECD coal was used in power stations. In most major developed countries it is already competing with nuclear rather than oil for new plant. It is more difficult to estimate the scope for a switch to coal in industry, although we expect some to take place; it depends on the size of the coal:oil price differential, the rate of growth of output and the extent of normal replacement of existing plant.

39. Our estimates of coal use are as follows:

Demand and Supply of Coal

mbd

	Actual	Projected	
		Low Economic Growth	High Economic Growth
1978	16.7		
1985		18	19
1990		21	24
2000		31 (34)	37 (40)

Note: Figures in parentheses include coal production expected to be used in conversion to oil.

40. This represents a very large increase in coal production. Much of it would be in North America, where the projections imply output up to three times present levels and exports at 5-10 times current levels. There must, therefore, be a significant risk of large shortfalls in production and exports. Substantial increases are also projected in Australia and South Africa, but there is less risk of a shortfall in these countries.

(iv) Gas

41. We expect some increase in the supply of gas, and this is likely to take place in the next ten years or so, with some levelling off or even a small decline after 1990. Within this overall picture, the main trends should be a fall in US (and total OECD) production and a rise in output by several OPEC states and by Mexico.

42. Proven gas reserves would easily permit the levels of output in the table below. The rising price of energy generally and the rates of economic growth we have assumed in our work also provide some pointers to increased gas production. But the relationship between gas supplies and these general economic factors is not very clear. For example, the high risks and costs involved in pipeline projects and liquefied natural gas projects may well constrain international trade in gas, as might consumer fears about the security of gas from OPEC states. It is doubtful whether some of the OPEC producers will either need the extra revenues or want to make the political decisions to export gas on a significant scale. Thus Iran, which has one fifth of the world's proven reserves, might be capable of producing 5 mbd, but it seems wiser to assume a much more modest increase. Some gas projects might be slowed down at the planning stage, given the boost to OPEC

incomes from the 1979-80 oil price increases. Finally, OPEC has declared its support for the full linking of gas prices to those of oil.

43. On the other hand, there are reasons to expect some increase in supplies from OPEC countries. There will be a general desire to minimise the flaring of gas associated with oil production and to use it, in the main, for domestic consumption or as a basis for petrochemical exports. In the case of Algeria, Nigeria and Indonesia, additional revenues may be needed to finance development expenditures.

Supply of Gas

mbd

	Actual	Projected*
1978	16.5	
1985		19
1990		21
2000		21

*The projections are consistent with OPEC oil production of 29 mbd.

(v) Renewables

44. The main renewable energy resource is hydro-electric power, the demand for which, like nuclear, depends on the demand for electricity. In the OECD countries, most of the attractive hydro sites have already been developed; difficulties due to environmental and land-use considerations have also been encountered. Elsewhere, where the unused potential is greater, hydroelectricity may double from current levels (1.3 mbd) by 2000. In total, hydroelectric power may provide about 10 mbd in 2000. This implies bringing capacity onstream at an average rate of 0.2 mbd per year. In view of the lead times, most hydro-electric projects which will be onstream in 1990 are already under construction or at an advanced planning stage.

45. Forecasts of production and costs of the other renewable resources (geothermal, solar, sea, and wind) are more speculative than those for the established energy sources. Thirty years is not a long time to establish new energy sources: in some instances, the various technologies have not yet reached the pilot stage. Current views of their economics and their location in relation to energy demand suggest that these sources will only play a small role up to 2000. For example, take-up of solar energy will probably be

inhibited by the high initial cost and by the slow turnover of the housing stock. Energy-saving measures such as home insulation or industrial waste-heat recovery seem more cost-effective generally.

Supply of Renewable Energy

mbd

		Projected	
	Actual	Low Economic Growth	High Economic Growth
1978	6.3		
1985		7	7
1990		8	8
2000		12	14

The Communist World

46. With an output of 12 mbd, the USSR is the world's largest oil producer. But, following shortfalls in production, targets are being revised downwards and there seems to be little prospect of a significant increase in production in the next 5 year plan period. The reserve base is likely to hold production below 12 mbd from 1985 to 2000. Trends in the relative supply and demand position are changing. Since the 1950s, production has outpaced consumption, leaving a growing surplus, mainly oil, for export. In the future, however, oil consumption is expected to rise, and it seems likely that the peak of oil exports is already over.

47. The Soviet Union currently supplies most of the oil requirements of the Eastern European countries. Their own oil production, outside Rumania, is negligible and Rumanian oil production is falling. Soviet oil exports to her Eastern bloc partners are now being pegged at 1.6 mbd between 1980-85. Eastern Europe will need to import an increasing quantity of oil on world markets, but her ability to do so will depend on the availability of foreign exchange.

48. China is self-sufficient in energy and likely to remain so for the rest of the century. Both oil and coal resources are extensive, and production is likely to expand, perhaps quite rapidly. Consumption is, however, likely to rise in parallel. The volume of oil exports will depend on the rate of offshore oil production, expected to increase towards the end of this decade, and on the growth of domestic consumption throughout that period, as China

implements her modernisation plans. But oil exports are likely to make only a small contribution to the world oil market.

49. We have projected a net energy position for the Communist world, showing a growing excess of imports over exports:

Net Exports (+) and Imports (-) of Communist Energy

mbd

	Actual	Projected
1978	+2	
1985		+1
1990		-1
2000		-2

Total Supply Position

50. These supply projections are brought together in the table below:

Non Communist World Energy Supply

mbd

	Actual	Projected		
	1978	1985	1990	2000
Oil	48.3	52	52-53	53-54
Nuclear	2.6	5	7-8	11-16
Coal	16.7	18-19	21-24	31-37
Gas	16.5	19	21	21
Renewables	6.3	7	8	12-14
Imports from Communist world	2.0	1	-1	-2
	92.4	102-3	108-113	126-140

Comparison with other studies

51. We have compared our projections with those contained in several other studies, including those by Exxon, Shell, BP and those in the World Coal Study. These studies were completed before the 1979-80 round of oil price rises had ended, so that they were carried out on a different basis from our own work. But they share our view that the prospects are for lower energy supply and demand over the next 20 years than was thought likely a few years ago. The table below compares the supply projections in this Report with those in some other studies:

Non-Communist World Energy Supplies in 2000

mbd

	Exxon	Shell	BP	Working Group	
				Low economic growth	High economic growth
Oil	65	50-63	54	53	54
Nuclear	17	12-20	15	11	12-16
Coal	39	32-38	44	31	37
Gas	28	24	28	21	21
Renewables	14	20	15	12	14
Total	163	138-165	156	128	138-142

THE RESULTING WORLD OIL BALANCES ON VARIOUS ASSUMPTIONS

52. These estimates make it possible to draw up ex ante oil balances for the world economy for 1985, 1990 and 2000 on several scenarios, where different assumptions are made concerning economic growth, nuclear power production, and OPEC (more especially Gulf) oil supplies. There are, of course, a wide range of possibilities. While these scenarios cover the main areas of uncertainty, they do not of course encompass all the uncertainties in the situation. In particular, they do not deal adequately with uncertainties in supply, which difference between our estimates and those made less than 5 years ago dramatically illustrate. Some of these supply uncertainties can, however, be handled in interpreting the results shown by the different scenarios.

53. Some combinations of scenario are relatively difficult to envisage. A combination of low economic growth and a high nuclear programme is unlikely. High growth and a big cutback in OPEC oil production is also difficult to envisage, at least in the short run. Thus we have used the following cases:

Case A - low growth, low nuclear, normal oil production

Case B - low growth, low nuclear,low oil production

Case C - high growth, high nuclear, normal oil production

Case D - high growth, low nuclear, normal oil production

The following table shows ex ante energy balances for the non-Communist world for each of these combinations:

Ex ante Oil Balances; Surpluses (+) and Deficits (-)

mbd

Case	1978 Actual	1985	1990	2000
A		+2	+2	-4
B	+0.2	-5	-5	-11
C		-1	-4	-24
D		-1	-5	-27

Note: Case B involves a cut of 7 mbd in OPEC production

54. The table shows that there is a big variation in the ex ante balances shown for the different cases. But it does not set out all the possible uncertainties. On the demand side, there is uncertainty about the response to higher energy prices and the ability to switch from oil to coal, as well as about the rate of economic growth. On the supply side, in addition to the uncertainties of oil and nuclear which are reflected in the scenarios, the estimates of coal supply are subject to a fairly wide margin of error. If these and other uncertainties were taken into account, the range of possible ex ante balances would be much greater.

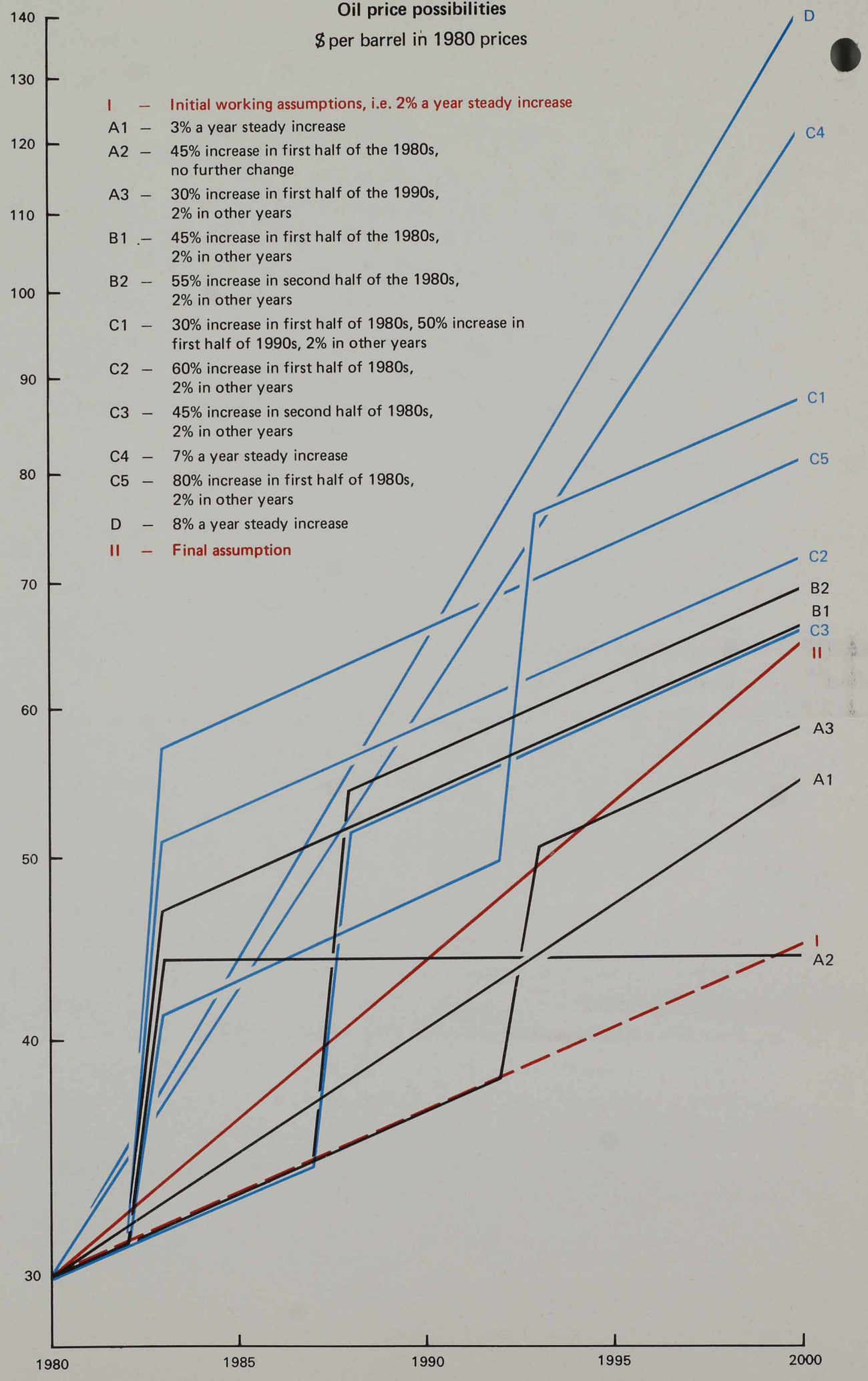
55. Nevertheless, the sign and size of these balances provide an indicator of the pressures which are likely to be placed on the oil price and thus the direction and extent to which it is likely to diverge from our working assumption of a 2% a year increase in real terms. But the size of some of the imbalances suggests that more than prices will change. For example, the large ex ante deficits in the two high economic growth cases, C and D, suggest that energy shortages or high energy prices may impede growth. Moreover, these balances are only ex ante; the price (and other) changes which may result will themselves eliminate the surpluses and deficits. And the reaction of OPEC to these different scenarios requires further consideration.

56. But the following main conclusions emerge from the balances:

i) Each of the cases set out in the table shows a tightening position over the period. This suggests that the working assumption of a 2% increase in the real oil price is an under-estimate of the trend increase likely to take place over the period as a whole;

Oil price possibilities

$ per barrel in 1980 prices



(ii) Energy is likely to constrain the resumption of world economic growth on the scale of the '50s and '60s, unless supplies increase by more than we have assumed, or unless vigorous policies are introduced to reduce demand for energy at a given level of GDP.

(iii) Cases B, C, and D show oil shortages in 1985 and 1990. If the events of 1979 are any guide, relatively small deficits can bring about a large jump in prices. The possibility of this happening in the 1980s is increased when the political risks affecting production in the Middle East are also taken into account.

(iv) The rapidly rising imbalances in the 1990s shown in Cases C and D will not, of course, emerge. Upward pressures on the oil price would prevent either sequence of events from taking place.

57. We have explored the possible price consequences of these ex ante balances by constructing a number of plausible price paths (shown in the graph opposite), all broadly designed to close the ex ante supply gaps by the end of the century. We have chosen price paths which close the balances in 2000 but we have also taken account of the implications for the intervening years. Where, for example, there is a large shortfall in the early years we have suggested that this is likely to be associated with a sharp price increase rather than a steady one. We have not assumed price increases which we think so large that they would be likely to be substantially reversed, though that it is not to say that such increases could not happen. These price paths are deliberately stylised. To do otherwise would be to pretend a precision which is unattainable. They should, therefore, be seen as possibilities, not forecasts.

58. For Case A (low growth, low nuclear, normal oil) we show three price paths consistent with achieving supply and demand balance by the end of the century. A1 is a smooth rise in the real oil price of 3% a year, ie 1% a year above our initial working assumption. A2 is an increase of nearly 50% in the first half of the '80s, such as could result from a temporary supply cutback, and a constant real price thereafter. A3 is a 2% a year increase, with a 30% price jump delayed to the first half of the '90s. In A1 the ex ante surpluses in the '80s would rise a little. In A2 substantial surpluses would appear in the earlier years, particularly at the end of the 1980s. This suggests that if there were a sudden surge in prices in the first part of the '80s, it could only be maintained by OPEC production cutbacks. If this were not to happen, and prices fell back, pressures would build up again for price increases later on.

A3 shows that if the world managed to get through the '80s with a smooth 2% a year price increase, a jump would be "required" in the first half of the '90s.

59. Case B (low growth, low nuclear, low oil), with its large and sustained fall in OPEC production, implies a sharp and early increase in oil prices. We have illustrated the consequences of two such increases - B1 where a near-50% increase in the first half of the '80s is followed by a 2% a year increase; and B2 where the oil price rises by rather more than 50% but not until after a production cutback in the secnd half of the '80s. Neither increase is sufficient to avoid a large oil deficit emerging at an early stage, but the recession, which would follow a big cutback in OPEC production, might deal with the immediate problem. In time the oil deficit would fall away as price affected demand.

60. The high economic growth envisaged in Case C poses problems even when combined with a continuation of OPEC oil production at present levels and high nuclear investment. An ex ante deficit emerges quickly, pointing to price increases above our 2% working assumption at an early stage. In fact, it would require an oil price increase of 7% a year, yielding a real oil price of $120 a barrel by the end of the century, to close the supply and demand gap (C4). In this situation, a smooth evolution of the price is very unlikely but this scale of price increase, combined with the scale of the consequential OPEC surplus, would probably constrain economic growth. In our high growth scenario, we postulated gradual acceleration of the growth rate so that the high growth of the 1950s and '60s is re-attained in the 1990s. But the energy situation may well prevent this.

61. Taking this possibility into account, we also constructed a price path which involved a cutback in the economic growth rate by ½% a year from the early '90s. On this basis, an oil price path (C1) with a 30% jump in the first half of the '80s, followed by a 50% jump in the early '90s, and 2% growth in all other years, would be just sufficient to balance the oil market throughout the period.

62. A 60% increase in prices in the first half of the '80s, followed by a 2% a year increase, would be an alternative way of balancing supply and demand by the end of the century (C2). But it would produce a large oil surplus by the end of the 1980s, and so "require" a very large cutback in OPEC

production if prices were not to fall. But if a major price increase were postponed until the second half of the '80s (C3), with a consequential delay in the favourable effects on demand, it would need to be associated with a reduction in the rate of economic growth throughout the period to balance supply and demand by the end of the century.

63. An OPEC production cutback against a background of high economic growth would push up prices very sharply and slow down that growth, even if OECD responded with high nuclear investment (C5). It would require an 80% increase in the price in the early '80s and ½% a year reduction in the economic growth rate for the rest of the decade to close the supply and demand gap by the end of the century at a price of $80 a barrel.

64. Case D illustrates the extreme difficulty of achieving high growth with low nuclear investment (and normal oil production). The position of the '90s looks unmanageable. Unless energy demand is drastically reduced, the oil price could rise to levels which we think would undoubtedly restrain growth. Any cutback in OPEC supplies would make a difficult position impossible.

65. Another way of looking at the possible evolution of the oil price is to examine the objectives of OPEC collectively and of some of its individual members.

The OPEC Position

i) Collective Action

66. The proposals for oil pricing in the OPEC Long Term Strategy Committee's Report earlier this year have not been fully agreed, but they appear to have the support of most OPEC countries, including Saudi Arabia, though not of Iran, Algeria and Libya. In order to achieve continuous progress towards the goal of bringing oil prices up to the cost of substitutes (eg synthetic oil from coal), the proposals aim to guarantee during periods of slack demand, an increase in the real oil price at least in line with OECD economic growth. The formula would in effect operate to guarantee continuing minimum real increases, though the Committee expects that, in practice, the supply/demand balance will often be tight and permit price increases above this minimum rate of increase. We have taken our projections of world economic growth (paragraph 20 above) and postulated increases in the world oil price in line with the Committee's

recommendations. This yields the following prices:

$ per barrel (1980 prices)

	Actual	Low Economic Growth for OECD area	High Economic Growth for OECD area
1980	30		
1985		33	35
1990		37½	40
2000		45	60

These are minimum figures, on the assumption that oil prices are not pushed higher from time to time by tight markets. In practice, OPEC would probably try to impose their formula on top of each new higher level of prices.

67. Will OPEC be able to enforce this? It is not a tight cartel. It may not last; cartels tend to break down from time to time. But it has been relatively successful in keeping the oil price up during the '70s. Moreover, its weaknesses as a cartel are currently leading to higher rather than lower prices; the hawks pushing up their prices, while the Saudis try to stabilise the price structure. This may not continue if demand slackens and ex ante surpluses begin to emerge. The Gulf producers, notably the Saudis and the Iraqis, can reduce production; their balance of payments position makes this easy for them. Given their importance in the market, they can and probably will adjust total OPEC supply in pursuit of their price objectives. So in periods of high demand, the smaller producers may push up prices, while the Gulf producers are in the best position to vary production to put a floor under the price in periods of slack demand.

68. But the Gulf producers are less likely to ensure a smooth upward progression of the price. Low short run elasticities of supply and demand for oil, combined with high demand near the peak of the business cycle, and changes in supply resulting from political disturbances, all tend to make the market unstable in the short run and heighten the risk of sharp, upward movements in the real price.

69. It is not easy to predict the future cohesive strength of OPEC. If the present political position continues, it is quite likely that it will become a more efficient cartel. Political changes could alter this, but as they would probably be accompanied by reductions rather than increases in the supply of

oil they are unlikely to lead to a sustained fall in the real oil price.

ii) Balance of Payments Outlook

70. The import requirements of individual OPEC countries will affect their actions on oil prices and oil supply. At the moment, they are in healthy surplus on current account (and indeed after taking account of capital outflows). But up to 2000, most producers will have little scope or desire to increase production in order to finance steadily increasing import needs. This means that, sooner or later, every producer moves into deficit - unless terms of trade improve (ie the real oil price increases).

71. To assess when and in what countries this pressure will emerge, we have tried to examine OPEC's future balance of payments position, using our estimates of oil and gas production and an assessment of import requirements. The latter attempts to take account of likely development needs, scope for industrialisation, population make-up and so on. These inevitably rough and ready projections yield an average rate of import growth for OPEC as a whole of some 8½% pa in the 1980s and 5½% in the 1990s. We have then considered whether our working assumption of a 2% annual increase in the real oil price would provide adequate revenue.

72. Latest forecasts suggest that OPEC will have a current account surplus of around $135 bn in 1980, only partly offset by capital account outflows of about $20 bn. On our working assumptions, the overall balance of payments surplus would be smaller but still substantial in 1985; by 1990 OPEC as a whole would be broadly in balance. By the end of the century, however, on the basis of almost static energy production, OPEC would have a significant deficit. The world oil price in 2000 would have to be more than 50% higher than our working assumptions suggest, ie around $70 a barrel instead of $45, to eliminate that deficit.

73. But these aggregate OPEC figures conceal wide variations in member countries' individual positions. Three broad groups can be identified, which could be expected to react differently.

74. The traditional low absorbers, Saudi Arabia, Kuwait, the UAE and Qatar, would, on the basis of our projections of import requirements, still be in a comfortable surplus position in 1990 on our working assumption of a 2% annual oil price increase. By 2000, the position would be less favourable; at

the levels of production we are assuming, they would require a price of $60. At that price even the Saudis would be barely in balance.

75. A second group of OPEC countries, Iran, Iraq, Algeria and Libya, are rather similarly placed because of their ability to expand revenue by increasing energy (especially gas) production. On our import and price assumptions, their balance of payments position in 1990 would be a small surplus. But by the end of the century they would require a price of about $65 a barrel to cover projected revenue needs.

76. The remaining OPEC producers, Nigeria/Gabon, Indonesia, Venezuela and Ecuador, all have static or declining oil production but are committed to ambitious development plans. As high absorbers, they will be the first to come under pressure. On our import requirement projections, their present comfortable balance of payments position will have disappeared by 1985. By 1990 they would "require" a real oil price approaching $55 a barrel, and by the end of the century one of nearly $95 to meet those import needs. Pressure for further increases in oil and gas prices may, therefore, be strongest from this group. But they will not be in a position to cut production to achieve them, with domestic consumption rising and the need to maintain the momentum of development.

77. These figures cannot be regarded as being more than illustrative, since they are based on calculations and assumptions with a wide margin of error. Nevertheless they provide some grounds for tentatively concluding that the revenue needs of OPEC as a whole may not as a whole exert strong upward pressure on the real oil price (in addition to our 2% working assumption) much before 1990, but could do so thereafter.

78. Whether OPEC will operate in this way is uncertain. The low absorbers in the Gulf will not need revenue additional to that provided by our 2% working assumption before the early 1990s. This suggests that in the early 1980s especially they could act to moderate price increases by keeping up production. But other OPEC producers will want higher prices in the later 1980s. The Gulf producers, especially the Saudis, may therefore face a difficult dilemma whether to help the rest of OPEC secure larger price increases or to maintain production policies favourable to the West. In ay event, the import needs of the Gulf countries indicate that they themselves would want larger price increases during the 90s.

79. If the Gulf producers decided to limit production to levels which would achieve a broad balance on current account, this would imply a price path well above our 2% a year working assumption. To take account of the possibility of large production cutbacks by surplus producers, our Case B postulates an average shortfall of OPEC production of 7 mbd during 1980-2000.

CONCLUSIONS ON THE FUTURE OIL PRICE

80. It is now time to draw the threads together and to apply the analysis to the purposes set out at the beginning of the report. The supply and demand position, the objectives of OPEC, and the risks of upheaval in the Middle East all point in the direction of a more rapid rise in real oil prices over the next 20 years than our initial working assumption of 2% a year. There may be periods when the price falls in real terms, but we think that they would be short lived and that they are not relevant to the decisions with long term consequences which we are concerned with in this report. Our analysis does not, of course, provide a detailed guide for every issue which turns on likely levels of oil prices in the next few years.

81. As we explained, the graph facing page 19, showing a set of price paths which could follow from our analysis, does not encompass all the possible prices that could emerge. In any particular year, prices may fall outside the range illustrated. The top and bottom of the band do not necessarily show consistent sequences of prices; in particular, a large early increase would create the conditions required to avoid a very high price at the end of the century.

82. The price paths which would yield prices in the lower part of this band could only emerge from a particular combination of circumstances. They involve low OECD economic growth, OPEC achieving only their minimum objective of prices rising in line with OECD growth and an absence of major political disturbances. This combination does not seem very likely. We therefore feel reasonably confident in saying that these prices represent the lower limits of the range from which we think price paths should be chosen for medium to longer term planning purposes.

83. The price paths in the upper part of the band show the upside risks which could result from two mutually exclusive possibilities. Some of the

price paths show sharp increases in prices in the '80s, resulting from political disturbances, production cutbacks, demand pressure on markets in small deficits, etc. If such increases took place, it would greatly increase the incentives for conservation and also slow down growth. The likelihood of higher prices later on would be reduced. Alternatively, moderate price increases in the '80s would involve acute shortages of energy in the '90s, when we think longer term energy production will be insufficient to support more rapid economic growth without a marked increase in energy conservation. Conservation on this scale would indeed require large price increases which the energy shortages would bring about.

84. The paths which lead to prices at the end of the century in the centre part of the range can be generated by a rather wider range of possibilities. Fairly rapid economic growth with an early jump in prices, perhaps because of supply disruptions, is one - C2. Others are: a more moderate rate of economic growth accompanied by a later and smaller jump in prices - C3; slow growth accompanied by cutbacks in OPEC production (B1 and B2); and slow economic growth combined with moderate price increases in the '80s, and a sharp price increase in the early '90s (A3).

85. Throughout this report, we have stressed the uncertainty of all our forward estimates and have illustrated this uncertainty by setting out several scenarios and postulating a number of possible price paths. In consequence, the price possibilities which we have set out for different points of time cover a wide range. They cover, however, the range of prices which we think should be used for the purposes set out in paragraph 2 of this report.

86. Testing projects and policies across several price paths will illuminate some major issues for decision. For example, investment projects creating or conserving energy, which were viable on price paths in the lower part of this price range, would be regarded as very robust, at least as far as oil prices are concerned. Lower price paths would also be useful as a guide to the minimum levels of energy prices needed to give consumers the right signals towards energy conservation. The price paths at the upper end of the range represent the most which it would be reasonable to pay to insure against future increased dependence on imported oil as well as the maximum value which might be placed on future UK oil production.

87. It is also necessary to have a central projection for the future. There are three main reasons:

(a) When appraising policies and projects, it is desirable to have an oil price assumption which will show the most likely expected return and would minimise the chances of the assessment being badly wrong.

(b) For a number of purposes, the Government needs to provide, among other assumptions, working guidelines to nationalised industries and other bodies on future trends in oil prices.

(c) For a number of purposes, where relatively small sums are at stake, or where oil prices are a minor ingredient in the decision, it would be inefficient to engage in elaborate testing and to resolve arguments concerning the likelihood of particular prices.

88. Given the uncertainty involved, any such central figure can only be an intelligent guess. In order to avoid any appearance of spurious accuracy or elaboration, we have opted for a simple solution. Our judgement is that, for this purpose, decision-makers should assume that world oil prices will reach about $65 a barrel by the end of the century (this is equivalent to roughly 4% per annum). This is double the rate of growth of price increase we took as our initial working assumption.

89. Because of the broad nature of such a judgement, we consider that appraisals of projects or policies involving substantial sums of money or resources, or where energy prices are an important element in the decision, should include testing against at least three of the price paths set out in the graph. One should be a low price case; we suggest the 3% a year steady price increase case set out in the graph as A.1. At the upper end, at least two price paths should be used for testing, reflecting the two kinds of upside risk which we have identified. One, shown as C.5 in the graph, illustrates the price path which could arise out of a substantial price increase relatively early in the 1980s. The other, shown as C.1 in the graph, shows the path which could arise if price increases were moderate in the 1980s and if prices rose sharply in response to energy shortages in the 1990s.

90. In some cases, it might be desirable to test policies and projects against some of the other price paths set out in the graph. Those doing this work should make sure that they choose price paths which are consistent

with the other underlying assumptions (eg on economic growth) used for the appraisal. Where matters of critical national importance are at stake, such as North Sea oil depletion policy, it may be necessary to test the options against a wider range of possibilities.

91. This report has been primarily concerned with prospects for oil prices to the year 2000. However, for some purposes, a view of post-2000 is required. Beyond 2000, uncertainties become much greater. But it looks as though conventional oil production will tend to fall and that this may not be fully offset by increased supplies from tar sands, oil shales and synthetics. Natural gas will probably be in decline, except in some OPEC countries. Coal production has some scope for further increases after 2000, but the fairly rapid expansion we are expecting for the 1990s is unlikely to be sustained. Solar energy is likely to become more important, and nuclear-generated electricity could grow quickly.

92. Therefore, non-oil fuels, particularly nuclear, should be able to meet a larger part of our energy requirements after 2000. But energy demand should still be rising, and the overall energy position could still be quite finely balanced in the early decades of the next century. A good deal will depend on how much investment in nuclear power takes place in the 1990s. The price of oil could still be rising after 2000, and we think it would be prudent to assume an increase in the price of 2% a year in real terms, at least for the early years of the next century

93. Finally, in the appendix to this Report, we make some tentative suggestions concerning the prospects for oil product prices and also for international coal prices.

APPENDIX

PROSPECTS FOR OIL PRODUCT AND INTERNATIONAL COAL PRICES

A. Oil Product Prices

Many policy analyses need to make assumptions not only about the price of crude oil but also about individual oil products. In the short to medium term, the relationship of oil product prices to each other and to the price of crude is determined by market conditions, but in the long run the ex refinery prices of the various products will reflect the costs of converting the heavier to the lighter products. These costs will vary with the level of crude prices, with the mix of crude oils, with the mix of product output, and over time, but the following table provides a rough guide to the level of product prices which might result from a given crude oil price assumption:-

Crude Oil f.o.b. (Persian Gulf) in 1980 $ per barrel		30	45	55	65	75	85
Premium Gasoline	1980 $ per tonne	340	475	575	660	725	850
Gas Oil/Derv		285	380	520	595	655	770
Heavy Fuel Oil		205	325	415	485	540	645

Notes

(i) The UK is assumed still to be an exporter of gas oil; an importer of gasoline; and in balance, though this depends on the weather, on fuel oil.

(ii) Fuel oil becomes more valuable than crude in the long run because it gives a better yield of premium products than crude oil itself.

2. Those requiring more precise estimates or estimates for more minor oil products should seek the advice of Economics and Statistics Division (Branch C) in the Department of Energy. It should be borne in mind that these prices are not necessarily those which will rule at any particular moment but reflect the underlying level around which actual prices will fluctuate in the long run.

B. International Coal Prices

3. As a by-product of our analysis of world energy markets, it is possible to reach some tentative conclusions about the future path of Rotterdam coal prices in relation to the various oil price cases.

4. The major expansion in OECD coal production will take place in the USA, which is also likely to provide the largest share of coal imports into Western Europe (although Australia and South Africa will also be important exporters). The importance of USA coal implies that its price will largely determine the Rotterdam price which will be equal to the US domestic price plus overland transport costs to USA ports and shipping costs to Europe. This additional transport cost is put at $9 a barrel oil equivalent (boe) by 2000 to take account of possible substantial real increases in US rail freight rates.

5. The level of coal prices by 2000 depends critically on the balance of supply and demand in the market. Despite the assumed trebling of US coal output, there will remain sufficient potential for expanding coal supply in the Low Economic Growth case for coal prices to remain cost-related. Thus coal prices at Rotterdam will be equal to the marginal cost of USA output plus transport costs. In the high economic growth case, coal supplies could be much tighter, and coal prices will be influenced more by the maximum prices consumers are prepared to pay. Economic rents could, therefore, accrue to coal producers.

6. Turning to the particular oil price paths, the coal price in the low price case (3% pa increase in oil prices leading to $55 a barrel in 2000) is most likely to be determined by USA mining costs, plus transport costs. To take account of the increase in USA coal production, mining costs have been estimated to rise by 5% pa to $20 boe in 2000. Adding transport costs produces a Rotterdam coal price of $29 boe (125/tonne) which represents a real rate of increase over 1980 prices of 4¼% pa.

7. In the high oil price paths (cases C1 and C5) where oil rises to as much as $85 a barrel by 2000 and which are associated with high economic growth, pressure on coal supplies will lead to prices which are much higher than the likely level of costs, although the extent of the excess is very uncertain. A possible floor to the coal price would be the price of coal at which it would be more profitable to convert US coal to oil (syncrude) rather than to export it to Europe. We estimate that European customers must be prepared to pay at least $42 boe to secure exports from the USA. Together with the coal transport cost mark-up, this would set a minimum Rotterdam coal price (f.o.b.) of $51 boe. This price would allow rents to USA coal producers or distributors of about $22 boe.

8. However, it is possible that in a situation of coal shortage in Europe industrial and electricity utilities would pay a much higher price than this. Coal prices could rise to, say, 80% of the fuel oil price in these markets (ie $68 boe), and still remain very competitive with oil as a boiler fuel. A $60 boe ($260/tonne) Rotterdam coal price in 2000 seems to us a reasonable central point within this range. This implies an increase of 8% pa in real terms over the current level of prices.

9. The coal price associated with an oil price of $65 a barrel in 2000 will depend on the economic growth rate. In the low growth case, the Rotterdam coal price will remain cost-related at $29 boe. In the high growth scenario, the coal price in the USA could perhaps be related to the price at which syncrude is just economic. With oil at $65 a barrel, the maximum coal price which syncrude producers would pay would be about $27 boe, which together with coal transport costs of $9 boe gives a Rotterdam price of $36 boe. Taking the mid-point of this range gives a coal price of $32.5 boe ($140/tonne) for 2000. This represents a real rate of increase of 4¾% pa over current Rotterdam coal prices, compared with the 4% pa increase in crude oil prices.

10. We therefore assume coal prices to grow faster than crude oil prices. This can be justified on the grounds that coal prices tend to be related to the price of fuel oil rather than crude oil prices. The fuel oil price is currently well below its normal level in relation to the price of crude.

11. The current embryonic nature of world trade in coal means that these projections are necessarily very speculative. Further work is indicated to establish the possible future course of world coal prices.

PMG NOTE 61/80

ENERGY AND THE REAL WORLD

The World background

1. We live in a world of soaring energy costs. Steeply rising petrol prices, the queues and shortages which we have all experienced, and the stories in our newspapers of instability in the Middle East have brought home to us that this is more than just a cliche.

British energy reserves

2. In the UK we are fortunate to have our own supplies of oil, gas and coal. They are not only an important source of national wealth but also reduce our dependence on energy imports.

3. But it is vital that we do not fall into the trap of imagining that our energy supplies can insulate us from the world's energy problems.

- First, they cannot shield us from the effects of rising energy prices. Costs of energy production are rising. So is the real value of the limited resources we are using up; this will continue as prices rise throughout the world.

- Second, they cannot provide a full or permanent insurance against the risk of shortages. As a trading nation, our prosperity depends almost as much on our trading partners' security of energy supply as on our own. And the quicker we use up our gas and oil reserves the sooner will our dependence on imports begin to increase again. That process may start well within the lifetime of most people living today.

4. High and rising energy prices are a fact of life in the 1980's. All countries have to pay them. If we sold our own energy to ourselves at less than its true value, we should not only be encouraging people to waste a precious national asset, but would also stand to lose valuable revenues from our North Sea gas and oil fields. These provide a large and growing income to the Exchequer which helps to reduce the pressure on taxation and on public borrowing. It is through this means, not through artificially low prices, that the nation as a whole can best benefit from our national self-sufficiency in energy.

Prices and conservation

5. So prices must be realistic. It is a surprising fact that for us in Britain domestic fuel prices generally rose only slightly faster than inflation, and more slowly than incomes, in the 1970's. In particular, domestic gas prices fell by about a third in real terms while demand more than doubled. At the end of the decade the average wage-earner needed to work only half as many hours to buy a given quantity of gas as he did in 1970. But now all that

has changed. Crude oil prices increased by over 100% during 1979. There is no escape from realistic prices for all fuels reflecting the rising trend of world energy costs. The Government must help people to understand the new energy situation. So we are greatly increasing what we spend on telling people how they can cope with higher prices by using energy more efficiently. The move to realistic energy prices is now well under way and will continue in the years ahead. The one sure way of limiting fuel bill increases is to break away from the wasteful habits of the past and make the most of the energy we use. This message is at the heart of the Government's energy conservation information campaign.

Individual fuels

6. But why are the various fuels going up in price? Looking at each fuel in turn:

7. Gas. First, the gas from the North Sea which we will be consuming in the 1980's costs BGC up to six times more than the gas we consumed in the 1970's. It comes from deeper waters, much further out to sea. Increasingly too, we have to buy gas in international competition with others who are willing to pay much higher prices than in the past, prices that will rise as world oil prices rise.

Second, demand for gas far exceeds supply. If prices were held back, rationing and controls would be needed to allocate supplies.

Third, domestic gas sales have been barely breaking even, and so made no contribution to any of the cost of investment in future supplies.

These are some of the factors underlying the demanding financial target which the Government set the gas industry in January this year. We expect domestic gas prices to increase by 10% a year over the next three years over and above whatever is necessary to keep pace with inflation. At the end of that time real gas prices will be just about back to where they were ten years ago.

8. We have large reserves of coal but it is expensive to produce. The price must reflect this. North Sea oil is a small part of an internationally traded commodity, whose price is effectively determined by world forces. World prices have increased 20-fold in the last decade in dollar terms and last year alone they doubled.

9. Electricity is produced mainly from other fuels. So its price must reflect the rising cost of coal and oil. We cannot make cheap electricity out of expensive coal and oil, because fuel costs account for over half the final price of electricity. If we ignored this fact, the electricity industry would soon start making losses and the taxpayer would have to meet the bill.

10. Investment. So energy in the 1980's will not come cheaply. This is also seen in the scale and cost of new investment. New

projects such as Selby coalfield; Magnus oilfield; the proposed new gas-gathering pipeline; and Heysham B power station; are for instance each estimated to cost over £1,000m. These enormous investments will have to be paid for.

Efficiency

11. All this makes it all the more important that prices should not rise even higher because of any waste or inefficiency in the supply industries.

12. So the Government has set tight financial disciplines for the coal, gas and electricity industries and is pressing them hard to seek further economies. We have also recently announced that the Central Electricity Generating Board's efficiency and costs are to be investigated by the Monopolies and Mergers Commission.

13. But again there must be no illusions. Increased efficiency by the energy industries cannot offset the whole burden of rising energy costs.

Poorer consumers

14. The Government recognises its responsibility towards those in the greatest need.

15. That is why we announced in April a package of measures substantially more generous than any provided in previous years. The help the Government will be giving with heating costs next winter will be worth over £200m. Over 2m people will benefit.

16. But the Government cannot shield the whole population from the direct effect of energy price increases. We have to recognise that dear energy is here to stay. There is only one way we can maintain and increase our standard of living in this country and that is by pushing up productivity and becoming more competitive. Chasing higher money wages without achieving these aims will only add to unemployment and make matters worse.

Summing up

17. There is no escape from the real energy world of the 1980's, a world in which energy prices will go on rising. The Government cannot change these realities, but it has alerted people to them so that they can take decisions about energy consumption and conservation in the light of the facts.

18. The process of adjustment to higher energy prices must be accepted if we are to make proper use of our energy resources. The Government has aimed to soften the impact on those in greatest need. But for most of us, it would be an illusion to look for automatic protection. The more we try to compensate ourselves for rising prices - whether energy prices in particular or price levels in general - by unearned wage increases, the higher unemployment will be and the longer it will take to bring inflation down.

Paymaster General's Office
68 Whitehall SW1

6 August 1980

Depletion Policy
Energy PRT PRS

CONFIDENTIAL

01 211 6402

The Rt Hon Sir Geoffrey Howe QC MP
Chancellor of the Exchequer
HM Treasury
Parliament Street
SW1P 3HE

12578

4 August 1980

Dear Geoffrey

Thank you for your letter of 15 July. I have also seen your Private Secretary's letter to mine commenting on the draft statement.

In the interests of making the announcement, as was essential, before the Recess I was prepared to accept your textual amendment as contained in your Private Secretary's letter of 17 July and in particular to omit specific reference to upward profile variations.

I should, however, make it clear that in doing so I do not regard our collective decision on upward profile variations as being in any way affected. If you wish to reopen this I think the right course would be for you to put a paper to E Committee.

As far as BP are concerned, my officials have already made clear to the company that Ministers would only agree to an upward profile variation if BP was able to make out a case that it was in the national interest to do so. Your officials were represented at that meeting and at the prior briefing meeting. They have also been present at the subsequent meeting with BP where it was made clear to the company that we shall need to conside any application for Forties on its merits. It is common ground that our policy is to be implemented flexibly and on a case by case basis. I cannot, therefore, accept your argument that what we decide in one case will predetermine our decisions elsewhere.

As far as production cutbacks are concerned I am sure that it would be wrong to try to take decisions in advance of the work our officials will have to undertake before the matter can be considered collectively in E. In addition to the strategic and security of supply considerations, to which I think our colleagues generally attach importance, I recognise that you will be particularly concerned with finding revenues from the North Sea to meet your PSBR problems in 1981 and in 1982 the year in which first production cutbacks could be introduced. I note that you feel it might be easier for you to agree to such production cutbacks depending on whether further revenues can be found from PRT or some alternative tax on North Sea hydrocarbons. I would certainly be prepared to look at this in the shorter term. But the main hump in the exportable surplus (up to 35m. tonnes in 1984) is likely to come in the period 1983/85 - by which time I am sure we all believe that our economic strategy will be working and that the short term PSBR considerations set out in your letter should not be so pressing - certainly not so pressing as to rule out any question of

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production cutbacks.

In considering depletion policy I really do think it is important to remember that we are committed to a 10 year economic strategy and that in the late 1980's the Chancellor of the day could well be faced with a substantial reduction in oil revenues in real terms coupled with a growing balance of payment problem. Quite apart from the security of supply and strategic considerations it will reduce the impact of the adjustment process in the late 1980's if we can roll more of the probable exportable surplus into that period.

Concerning the other points in your letter I have put in hand the preparation of a paper on the Clyde field. I also of course confirm that my officials will cooperate fully with yours in considering the various taxation issues which you raised.

I am sending copies of this letter to the Prime Minister, Foreign and Commonwealth Secretary, Sir Robert Armstrong and Mr R Ibbs.

Yours ever

David

D A R Howell

SCOTTISH OFFICE
WHITEHALL, LONDON SW1A 2AU

CONFIDENTIAL

The Rt Hon John Biffen MP
Chief Secretary
HM Treasury
Treasury Chambers
Parliament Street
LONDON SW1

7/8

7 August 1980

Dear Chief Secretary,

ECONOMIC CASE FOR TORNESS AGR

My officials undertook during our review of the AGR programme earlier this year to circulate a paper about the economic jusitification for proceeding with the construction of Torness.

I now attach a note which sets out briefly the relative costs of building new coal-fired and nuclear capacity in Scotland and the case for building Torness on SSEB's present timetable. This seeks to apply the same general methodology as was used by the Department of Energy in preparing its economic evaluation of Heysham.

I am copying this letter and the enclosure to the other members of E Committee, to Sir Robert Armstrong and to Mr Ibbs.

Yours sincerely,

Approved by the Secretary of State and signed in his absence

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ECONOMIC EVALUATION OF TORNESS
NOTE BY THE SCOTTISH OFFICE

1. The decision to invest in new nuclear generating capacity has to be made in the context of a wide range of considerations, not all of which are necessarily directly related to the economics of electricity generation. This paper deals solely with the economic case for investing in Torness in terms of the cost of electricity generation. The cost of any new power station relates either to the cost of adding to generating capacity, if the new station is needed to provide extra capacity, or, if extra capacity is not needed, to the savings resulting from substituting the output of new plant for that from existing plant. In the first instance, because the requirement for additional generating capacity is determined in the UK by a judgement that security of supply should be maintained over time at a specified minimum level, the investment decision involves selecting plant which adds to capacity at the least cost (capital and operating costs) and timing its introduction to the system so that, in the context of increasing demand, security of supply is maintained. In the second instance economic evaluation involves a continuing review of the cost savings likely to result from replacing some of the output of existing plant with that from new plant in order to ascertain whether, over time, any fuel and other operating savings (ie, through the use of a cheaper fuel or improved efficiency) will be large enough to compensate for the additional capital expenditure involved.

2. The paper deals firstly with the economic case for having a nuclear power station as the next major addition to the Scottish system as compared to the obvious alternative of a new coal-fired plant. It then deals with the economic case for commissioning the Torness AGR in 1986/87 according to SSEB's current timetable, as compared with delaying it until it is required to provide additional capacity, which, on SSEB's present forecasts, would not be until 1992/93.

COMPARATIVE COSTS OF NEW COAL AND NUCLEAR PLANT

3. Table 1 shows the net effective cost of adding nuclear (an AGR) and coal-fired plant to the Scottish generating system with commissioning in 1986/87. The net effective cost reflects the total cost to the system and comprises two main items. The first is the capital cost of the new station, in this case expressed as an annual sum over its life, assuming a real interest rate of 5%, in terms of £/kw/year. In the case of the nuclear station allowance must also be made for the cost of decommissioning at the end of the station's life and this is shown as a separate item on the same basis as capital cost. The second main item is the savings, mainly fuel cost, made on the

generating system as a result of running a new lower cost plant which reduces or even eliminates generation by older equipment with higher fuel cost. This is referred to as system savings, again expressed as an annual sum over the life of the plant. Other operating costs have also to be included and these are shown separately in Table 1. The capital costs less systems savings give the net effective cost of the new station. The station with the lowest net effective cost is the best investment for expanding capacity. If the system savings are greater than the capital cost the net effective cost is negative and the implication would be that there would be a net benefit in investing to replace the output of existing plant with output from the new station.

TABLE 1: NET EFFECTIVE COST OF NUCLEAR AND COAL

	Nuclear	£/kw/year	Coal
Capital charges	81		40
Decommissioning	2		-
Other operating costs	11		10
System savings	-115		-30
Net effective cost	- 21		+20

4. These estimates, made by SSEB, show that the nuclear plant has a considerable running cost advantage over a coal-fired plant and this more than offsets its higher capital costs. In addition the net effective cost of nuclear plant is negative which implies that there would be benefit in building it so that it could substitute for the output of existing plant. These conclusions do, however, rest on a number of assumptions concerning construction costs, plant performance and fuel prices which are listed in the Annex to this paper. It is therefore possible that these assumptions will turn out to be wrong in time, in ways which raise or lower the advantage of nuclear over coal-fired plant. An indication of the extent of the changes which would have to be made to a particular assumption in order for the advantage of nuclear stations over coal-fired stations to be eliminated is given in Table 2.

TABLE 2: SENSITIVITY OF NUCLEAR OVER COAL FIRED PLANT

	Change Required to Eliminate Cost Advantages of Nuclear over a new coal fired plant
Increased cost of construction of nuclear plant	51%
Timing of commissioning of nuclear plant	7 year delay
Output of nuclear plant	36% reduction over life
Coal/oil prices	Around 50% lower than projected over the lives of the stations

5. None of these examples allows for any adverse changes which might affect the coal fired plant, such as commissioning delays, and higher than expected coal prices. Because in each case, a very large change would have to occur in the basic assumption made, it can be concluded that the case in terms of generating costs for a nuclear station, that is for Torness, as the next electricity generating plant to be built in Scotland is robust. This does not preclude the possibility that a combination of adver circumstances might have to be faced, for example, construction delays and higher than anticipated construction costs, but there is some scope for this kind of outcome in the wide range of variation possible for individual assumptions.

CASE FOR COMMISSIONING TORNESS IN 1986/87 INSTEAD OF 1992/93

6. The Scottish Electricity Boards, in common with the CEGB, aim to maintain a target planning margin, measured as the amount of installed plant capacity above projected maximum demand required in order to provide security of supply over time. This plannin margin is now 28%, and makes allowance for short term difficulties which might be caused by exceptionally cold weather and the non-availability of plant at times of maximum demand. Until recently the Scottish Boards' demand projections implied that, following the commissioning of the oil/gas fired station at Peterhead, which will now take place over the next two years, this 28% planning margin would be reached by the end of the 1980's, implying the need for a new station to be fully available by that time. As a result of revisions to their demand forecasts the Boards now consider that the need for a new station for capacity reasons could be put back for 6 years. The economic case for building Torness now depends therefore on whether, in the circumstances of lower forecast demand, the increased capital cost of introducing it earlier than is required for capacity reasons is offset by systems savings, and, given the uncertainties in cost and performance projections already referred to, on the scale of any offset. Table 3 shows the capital cost of bringing Torness forward from 1992/93 to 1986/87, taking account of the need for replacing it 6 years earlier at the end of its life, and the systems savings attributable to earlier rather than later commissioning. As in the case of Table 1 these sums have been annuitised at a real interest rate of 5%, but in this case over 6 years and in terms of total costs rather than cost per unit of output.

TABLE 3: COST OF ADVANCING TORNESS FROM 1992/93 TO 1986/87

	Net Cost £m/Year)
Net additional capital charges	98.9
Decommissioning allowance	2.4
Other operating costs	14
System savings	-134
	- 18.7

7. The result of this analysis suggests that the systems savings would exceed the additional capital costs, the cumulative value over the period 1986 to 1992 of the net savings being £112.2 million which is equivalent to a present value in 1980, at a 5% discount rate, of £74.4 million. The decision to undertake earlier commissioning is not without risks nor, on the other hand, can it be solely related to generating economics but should also take into account other considerations such as the desirability of widening fuel mix, given the uncertainties about the availability and cost of fossil fuels in the future, and maintaining a capacity to build nuclear generating stations. On the one hand technology might improve in the intervening period as a result, for example, of further experience with existing AGRs leading to further design improvements which could not be incorporated if construction begins now, or the adoption of alternative reactor systems which might have lower capital costs and the same or superior operating characteristics as the AGR. On the other, discontinuities in ordering would make it extremely difficult to establish settled production programmes for the nuclear industry, and might make it much more expensive to proceed with Torness or any nuclear alternative if there is further delay.

8. For the purposes of this paper it is assumed that no real increase in capital costs occurs over time. SSEB believes however on the basis of recent experience that it would be prudent to assume an annual real increase of 4% in the capital cost of construction. This and a more pessimistic view on fossil fuel prices leads the Board to quote a figure of £400 million as the benefit of advancing the station to 1986. This significantly improves the case for earlier commissioning. As far as other factors are concerned Table 4 looks at the magnitude of (a) improved performance due to additional experience with the AGR and (b) improved technology which would be necessary to eliminate the benefits of advancing Torness.

TABLE 4: SENSITIVITY OF BENEFITS OF ADVANCING TORNESS

	Decrease required to eliminate the benefits
(a) Decrease in availability during the first 6 years 1986-1992	-14%
(b) Reduced capital cost of the 1992 plant	-10%

9. The Scottish Office's conclusion is that there are direct economic benefits to be gained from commissioning Torness on the present timetable, aside from any consideration relating to the case for maintaining a UK capability for constructing AGRs and for widening the possibility of fuelling options available to the Scottish Boards. These benefits are substantial, although fairly modest in relation to the

total capital cost of the project.

10. If demand for electricity remained unchanged from its expected 1980/81 level it is still probable that Torness would be fully utilised over the initial years of its life, and therefore the savings due to building the station earlier than is required for capacity reasons would remain unaffected. If demand grew more rapidly than projected by SSEB, the result would be that Torness would be needed on capacity grounds before 1992.

30 July 1980

ANNEX

ECONOMIC EVALUATION OF TORNESS: ASSUMPTIONS

Capital Costs AGR (Torness)

Capital cost including interest during construction and initial fuel £1,394m (£1,143/kw sent out)

Availability: Rising over the first four years after commissioning to annual average of 68%; lifetime availability of 63% over 25 years.

New Coal Station

Capital cost including interest during construction	£748 m
Average availability	66%

Existing Thermal Stations

Average availability	62%

Fuel Prices - March 1980

Coal - £34.5/tonne increasing at 2% pa till 2000, and at 5% pa thereafter in real terms.
Fuel Oil - £97.9/tonne increasing at 3.5% pa in real terms.
Distillate - £174/tonne increasing at 3.5% pa in real terms.
AGR fuel - £4.58/MWH increasing at 1% pa from 1996 onwards in real terms.

Load/Sales Growth

Maximum Demand 1980 6085 MW
Growth averages 2.4% pa to the year 2000

Cost of Capital

Annuities and net present values estimates using an interest rate of 5%.

Derivation of £/kw/year for Torness in Table 1

This figure is derived by annuitising the cost and benefits of the additional plant over the plant life, and dividing then by the capacity, in kilowatts, of the plant. For example, the capital cost of Torness is estimated to be £1394m which, annuitised over 25 years of life at a 5% interest rate, gives an annual capital charge of £98.9m. The sent out capacity of Torness is 1,220,000 KW which gives an annual charge per kilowatt/year of £81.

Published Papers

The following published paper(s) enclosed on this file have been removed and destroyed. Copies may be found elsewhere in The National Archives.

House of Commons Hansard.
23 July 1980, columns 226-227
"Written Answers: Oil Replation Policy"

Signed A Wayland Date 1 July 2010

PREM Records Team

NJS to see
PPS to see too
MJS
NAP 18/vii

01 211 6402

John Wiggins Esq
Private Secretary to
Chancellor of the Exchequer
HM Treasury
Parliament Street
LONDON SW1 3HE

18 July 1980

Dear John,

DEPLETION POLICY STATEMENT

I wrote to Martin Hall on 16 July enclosing a copy of the statement on depletion policy which my Secretary of State was to make on 21 July, since when there has been further correspondence, resting with your letter to me of yesterday.

On 21 July there is a Supply Day Debate which will be opened by my Secretary of State and wound up for the Opposition by Dr Owen. In view of this, my Secretary of State feels that it would not be wise to give a written Answer on depletion on the same day. It has therefore been decided that the Answer should be given on Wednesday 23 July.

I am copying this to the recipients of my earlier letter, and to the Private Secretary to the Secretary of State for Scotland.

Yours ever,

Julian

J D WEST
PRIVATE SECRETARY

c/A. Dugmid

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Energy

Foreign and Commonwealth Office

London SW1A 2AH

17 July 1980

2 pp 19/7

Dear Julian,

Depletion Policy Statement

Thank you for sending me a copy of your letter to Martin Hall of 16 July enclosing the statement on depletion policy which your Secretary of State plans to make on 21 July.

My Secretary of State has seen and approved the draft statement.

As you point out in your letter, it will be important to send instructions to our Posts abroad as soon as possible if they are to be able to give our partners advance explanation of our policy. Officials have now agreed appropriate guidance: this should issue by Thursday evening at the latest. I understand that the Treasury may have difficulty over some aspects of the proposed statement. Unless these difficulties can be resolved in time to enable us to meet this deadline, my Secretary of State sees no alternative but to request delaying the proposed statement until later next week.

I am sending copies of this letter to the recipients of yours.

Yours ever

Paul

(P Lever)
Private Secretary

J D West Esq
Private Secretary
Department of Energy
Thames House South
Millbank
London SW1

CONFIDENTIAL

d/c A Dugmid

Treasury Chambers, Parliament Street, SW1P 3AG
01-233 3000

17 July 1980

J.D. West Esq.
Principal Private Secretary
Department of Energy

PL 17/7

Dear Julian,

DEPLETION POLICY STATEMENT

I have shown the Chancellor of the Exchequer your letter of 16 July in which you seek comments on the statement on depletion policy, which your Secretary of State plans to make on 21 July. The Chancellor would like the following changes made to the statement.

i. The second inset on the second page beginning "maintain close supervision ..." does not represent a new decision nor is a depletion control measure. It could therefore be misconstrued if it is included in the list of measures on that page. It should be dropped from the second page and included as a new sentence after the second sentence of the fourth paragraph in the following terms:

> "We shall continue close supervision over reservoir performance at existing fields and scrutinise new applications for field developments to ensure good oil field practice consistent with optimum oil and gas recovery in the national interest."

The next sentence would begin "We shall also continue to take decisions on a case by case basis ..."

ii. The third inset on page 2, which refers to upward profile variations, should be omitted for the reasons set out in the Chancellor of the Exchequer's letter to your Secretary of State of 15 July.

/iii.

iii. The Chancellor would much prefer the last sentence on the second page, which refers to production cutbacks, to be omitted from the statement itself. The point can be made in answer to supplementary questions, if that is necessary. In any event the sentence should be amended to read:

> "The Government has taken no decisions on whether to have production cutbacks which under the assurances given by the previous Administration cannot be made before 1982."

Finally, the Chancellor wonders whether your Secretary of State needs to make an oral statement about this matter rather than making the announcement through a written answer to an inspired Parliamentary Question.

I am sending copies of this letter to the recipients of yours.

Yours ever

John Wiggins

A.J. WIGGINS
Principal Private Secretary

cc A Duguid

cc Mr Ingham

Prime Minister (Energy)

The draft statement attached embodies the conclusions of E, and the content has been discussed with the oil industry.

Content? *

SECRETARY OF STATE FOR ENERGY
THAMES HOUSE SOUTH
MILLBANK LONDON SW1P 4QJ
211 6402

Martin Hall Esq
Private Secretary to
Chancellor of the Exchequer
HM Treasury
Parliament Street
London SW1 3HE

[We are planning this statement and telecomms monopoly on Monday – to get them out of the way before the unemployment figures break on Tuesday]

16 July 1980

TL 16/7

Dear Martin,

MJS 16/7

* The Chancellor has now minuted (Flag A) that he is unhappy with one point in the draft. If Mr Howell resists, it will have to come back to E. TL

DEPLETION POLICY STATEMENT

I enclose a copy of the statement on depletion policy, which my Secretary of State plans to make on 21 July.

We circulated a slightly different version to Treasury, FCO, Scottish Office and CPRS officials at the end of last week for comments. The present text incorporates the main points made by officials, although Treasury officials specifically reserved the position of the Chancellor. I should be grateful if you and other recipients of this letter could let me have any comments which the Chancellor and other Ministers might wish to make on the text by lunchtime on Thursday. This timetable is necessary to enable the Foreign and Commonwealth Office to instruct our posts abroad to give our IEA and EEC partners advance explanation of our policy as agreed by E. I should add that my Secretary of State is anxious to keep the statement short.

I am sending copies of this letter to Private Secretaries to the Prime Minister, and other Members of E, Angus Maude, Norman St John Stevas, Sir Robert Armstrong and Mr Ibbs.

Yours ever,

Julian

Julian West
Private Secretary

Noted MT

Spoken to Energy and Treasury that if they can resolve their differences with the Treasury, the PM is content. TL 17/7

With permission, Mr Speaker, I should like to make a statement about the Government's review of oil depletion policy.

We expect that from later this year UK oil production will regularly reach a level equal to UK consumption. Thereafter on present forecasts production would rise to a peak in the mid-1980's giving a significant surplus over UK consumption in the 1980's as a whole. We are likely to become net importers of oil again about 1990.

Recent events underline the fragilities of the world energy scene. The Government believe that on strategic and security of supply grounds it is in the national interest to prolong high levels of UKCS production to the end of the century. This requires action to increase exploration, which we have already taken, and to defer some oil production from the 1980's. Such action accords fully with the recommendations of the International Energy Agency and the Venice Summit to maximise indigenous hydrocarbon production on a long term basis and with our other international commitments including net exports of 5 million tonnes in 1985.

There are, of course, major uncertainties about future levels of North Sea production and UK consumption. There can therefore be no rigid plan. We shall continue to take decisions on case-by-case basis, but giving greater emphasis to the need to limit the sharpness of the peak in production. We shall, of course, honour the assurances given by the Right Honourable Member for Chesterfield

on December 1974 on the basis of which heavy investment has been undertaken by the oil companies.

In particular the Government will:

- consider delaying the development of fields discovered after the end of 1975, which are not covered by the assurances given by the Right Honourable Member for Chesterfield.

- maintain close supervision over reservoir performance at existing fields and scrutinise new applications for field developments to ensure good oil field practice consistent with optimum oil and gas recovery in the national interest.

The Chancellor wants this omitted since he wants the revenue from possible extra production. (See letter at Flag A)

[- in general resist requests for permission to produce oil at levels above those in approved production programmes.]

- continue to tighten control on gas flaring.

The Government has taken no decisions on production cutbacks which under the assurances given by the previous Administration cannot be made before 1982.

I believe that this flexible approach is the right one and takes account of both the needs of those involved in the difficult business of oil production and, more important, the long term national interest.

15 July 1980

CONFIDENTIAL

Treasury Chambers, Parliament Street, SW1P 3AG
01-233 3000

15 July 1980

The Rt Hon David Howell MP
Secretary of State for Energy
Department of Energy

Dear David

DEPLETION POLICY

Thank you for letter of 3 July setting out the revenue implications of implementing in full the three depletion measures: gas flaring restrictions, refusal of upward profile variations and development delays.

As you will know from our recent discussions on the economy, the prospect for the PSBR has deteriorated since we discussed the three depletion measures in E Committee in March. The PSBR prospect for 1981-82 is particularly worrying. As paragraph 4 of the note makes clear, this deterioration is in part due to the prospect of lower tax revenues from the North Sea. Paragraph 8 of the note goes on to make clear that the implementation of gas flaring restrictions would produce an even greater reduction in the PSBR.

Clearly this is most unwelcome to me, but because of the importance of the gas conservation policy, I am nevertheless prepared to agree that the gas flaring restrictions should be implemented with the effects on Government take indicated in paragraph 8. I am also prepared to see the implementation of the development delays, which, of course, help the PSBR.

This leaves upward profile variations which, according to the note, reduce Government takes by between £5-£30 million in 1978-79 prices (considerably more in outturn prices). The reduction would be much greater if BP made an application for Forties which was subsequently refused.

Despite our conclusion in E Committee in March, I would like you to omit all reference to upward profile variations from your announcement. I say this because it is essential in my view to avoid any action which

/might prejudice our

might prejudice our consideration of BP's application if it comes forward. Such are the pressures on the PSBR I am sure that, if at all possible, we ought to give our consent to an upward profile variation if it is sought. It would be highly invidious to refuse Mobil's application for their Beryl field if we accepted one from BP. (Incidentally, I see from paragraph 13 of the note that the refusal of an upward profile variation for the Beryl field would incur a small net loss to the economy of the order of £5 million in 1979 prices. This indicates that the micro-economic case for refusing this consent is weak.)

I am sorry to have to raise this point at this stage, but as you say in your letter, until recently the indications were that BP would not put in a request for an upward profile variation, but it now looks as if they could well do so. I know that you want to get ahead and I think the easiest way of getting agreement for an earlier announcement would, as I suggest above, be to omit all reference to profile variations from the statement. If you cannot agree to this, I think that we will have to discuss the matter in E Committee.

Could I also refer to some other matters which arise on your letter.

Paragraph 10 of the note attached to your letter refers to the possibility of delaying the development of BNOC's Clyde field. As we mentioned at E Committee on 9 July, it would be helpful if decisions on this could be taken quickly and certainly by mid-September at the latest. If it was decided to delay development, this would produce useful savings in BNOC's external financing requirements, and therefore in public expenditure, which could be taken account of in the current public expenditure exercise and the nationalised industries Investment and Financing Review.

More generally I have noted your view that on both strategic and economic grounds it is essential to try to roll forward some of the large net exportable surplus into the late 1980's and 1990's to reduce our dependence on OPEC oil which is likely to be even less secure then than now. You go on to indicate in this context that we will need to consider production cutbacks very carefully next year.

/I ought to point out

CONFIDENTIAL

I ought to point out now that whatever the strategic case for the production cutbacks, their substantial and immediate reduction in Government tax take is bound to cause me very great difficulty because of the effect on the PSBR and our financial strategy. Indeed, looking at the PSBR prospects now, I could not see how I could agree to such cutbacks. However, the work of the current interdepartmental review of PRT, in which your department participates, could be relevant here if it can demonstrate that it is possible to raise additional revenue from the North Sea. I have asked that as part of this review, our departments should prepare an economic assessment of the taxable capacity of North Sea companies, many of whom are foreign, in order to check that the Exchequer is getting the right share of the revenue. The review should also consider the possibilities of raising additional revenue in 1981-82 from the North Sea, should this prove to be necessary, as well as considering a broad range of questions, including for example a "barrelage" tax.

I am sending a copy of this letter to the Prime Minister, the Foreign and Commonwealth Secretary, Sir Robert Armstrong and Mr Ibbs.

GEOFFREY HOWE

CONFIDENTIAL

Energy

SECRETARY OF STATE FOR ENERGY
THAMES HOUSE SOUTH
MILLBANK LONDON SW1P 4QJ
01 211 6402

The Rt Hon Michael Heseltine MP
Secretary of State for the Environment
2 Marsham Street
LONDON SW1

4 July 1980

Dear Michael

PWR INQUIRY

Thank you for your letter of 2 June. I have been giving further thought to this inquiry, responsibility for which will of course fall to me under the Electricity Acts.

The PWR option is part of the nuclear policy we agreed on last October. It is apparent from my discussions with the CEGB, the National Nuclear Corporation and the Nuclear Installations Inspectorate that the inquiry is a critical part of the PWR timetable and that, in order to enable the parties to begin making the appropriate preparations as soon as possible, some fairly early decisions about the inquiry are becoming necessary. It is also apparent that we face great difficulties in maintaining the timetable. When I announced our policy to the House in December the aim was to start construction late in 1982; on present form, however, even on a very tight timetable, the inquiry could begin in mid 1982. If there is slippage in the programme leading up to the inquiry, or if the inquiry and the subsequent decision process are unduly protracted, the whole of the Government's nuclear programme could be seriously delayed.

Against this background, I now turn to the points in your letter. We both attach importance to adequate investigation and preparation, and we are in agreement that Parliament should be involved in this process. I myself consider the role of Parliament as vital in establishing the "settled energy policy background". The Select Committee on Energy is examining the nuclear programme at present, and expects to report in the autumn. It would be customary for the Government in due course to publish a reply to their report. This reply, which would normally be the subject of a debate in Parliament, could deal with the place of nuclear power, and in particular the programme envisaged by the Government, in our energy policy. I do not think that such a debate which, because of the Select Committee report, is likely to happen anyway, will prejudge issues proper to the inquiry, which in my view focus on the need for the particular increment of capacity in the time and place proposed, and the safety of the reactor type chosen on the particular site. (Safety needs careful handling; the licensing of reactors is dealt with by the Nuclear Installations Inspectorate under procedures which do not call for public hearings - but the NII will explain at the inquiry the reasoning which has led them to the view that they are willing to issue a licence, and could no doubt deal

in so doing with any relevant matters raised in Parliament).

I note your concern that there should be adequate investigation of the points at issue. The Select Committee has taken evidence from many witnesses about matters relevant to the inquiry; this evidence, together with their report and the Government's response to it, will be available to the inquiry. The NII's evidence on PWR safety will also be available. The Inspector may well wish to follow the Belvoir precedent and hold a pre-inquiry meeting at which he could commission any further evidence he thought necessary for the inquiry itself. However, I expect that the investigative background to the inquiry will already be ample both in respect of the work done by the Select Committee and the submissions of the parties - in addition to other published information - even before any work commissioned by the Inspector.

On the question of a two-stage inquiry, I must repeat my comments of 23 April. It would be very difficult to circumscribe the scope of the two stages so that they were clearly distinguishable from each other. It is not clear from your letter what you have in mind, but if you are thinking of a first "generic" and a second "specific" stage, I see major difficulty in the concept. How could one usefully have a general discussion about the PWR without getting into detailed questions, and how could one then avoid prejudicing the second stage of the inquiry? I remain convinced that there are these objections of principle, quite apart from the strong likelihood of having to go through much the same process twice, with consequent delay and expense. (Incidentally, I do not agree with your interpretation of the MISC 20 and CPRS reports; the CPRS indeed described two-stage procedures as "a recipe for delay").

I note that your officials have been working up material on these issues: I think it would be helpful if that material could be made available to my officials who in their turn could explain and amplify my views as appropriate.

I am copying this letter to the recipients of yours and also to the Prime Minister, the Lord Chancellor (who will need to be consulted if, as seems distinctly possible, a judicial Inspector is to be sought), Sir Robert Armstrong and Mr Ibbs.

Yours ever

David

D A R Howell

Energy 2

Chancellor

To glance

01 211 6402

TL
3/7

The Rt Hon Sir G Howe MP QC
The Chancellor of the Exchequer
HM Treasury
Parliament Street
SW1P 3HE

3 July 1980

Dear Geoffrey

DEPLETION POLICY

Thank you for your letter of 27 May.

I enclose a paper agreed by Department of Energy, Treasury, FCO and CPRS officials, which concentrates on the revenue implications of implementing in full the three depletion measures which we endorsed in E on 11 March.

The strategic case for implementing a depletion policy has not changed since E's discussion. As set out in your letter our production forecasts have fallen since then reflecting our assessment of the latest forecasts which we have received from the companies. But our demand forecasts have also fallen largely on account of the gloomier economic prospects in the period immediately ahead. As the table below demonstrates we are therefore still left with a very substantial net exportable surplus of UKCS oil in the mid-1980s with a potential peak of some 35m tonnes in 1984 and in total equivalent to some two or three years UK demand for oil.

Potential Net Exportable Surplus
m tonnes

	1980	1981	1982	1983	1984	1985
Current Estimate	-(1/4)	7/10	16/21	23/30	30/35	25/30
1979 WEDP Review	-(3/6)	10/13	17/22	20/27	25/35	20/35

On both strategic and economic grounds it is essential to try to roll forward some of the large net exportable surplus into the late 1980s and 1990s to reduce our dependence on OPEC oil which is likely to be even less secure then than now. Leaving aside production cutbacks which we shall need to consider very carefully next year, one of the points brought out by the paper agreed by our officials is that the three depletion measures we have already agreed upon, even if implemented in full, will at most only roll forward a limited proportion of the net exportable surplus.

I fully understand that you and your colleagues in the Treasury are concerned about the revenue implications of the depletion measures which we have already endorsed. However, the paper agreed by our officials brings out that these measures are only likely to involve a reduction in revenue of an average of £150m a year over the period up to 1985, compared with the forecast average loss of some £250m p.a. in those years when we collectively endorsed the three depletion measures. The sums involved are limited and well within the margin of error for calculating both North Sea tax take and the PSBR. The only way of reducing the annual average figure of £150m significantly would be to allow substantially more gas to be flared than can be justified on gas conservation and energy policy grounds. We could not possibly justify such a profligate policy with our finite natural resources either to Parliament or to the electorate. You will also note that the other major depletion measure agreed at E, namely development delays, would not lead to a reduction in tax take nor an increase in the PSBR in the period up to 1985 but would rather lead to an increase in tax take and a reduction in the PSBR in this period.

One point that I would however wish to draw to your attention is that in earlier discussions with BP they indicated that a request for an upward profile variation was now less likely and the assumption underlying current production forecasts in the enclosed note is that no request will be made. Since the enclosed paper was agreed my officials have had a preliminary discussion with BP on depletion, at which the Treasury was represented. BP stated that they had not completed their review of the Forties field and were consequently not in a position yet to say whether or not they would be applying for an upward profile variation. It is therefore possible that BP will put in such an application, if only for tactical reasons. Even then it is not at all clear whether they would seek as large an upward profile variation as we earlier thought might be the case (ie some 3 million tonnes a year). Even if they do so we may have to reject it on grounds of good oil field practice, ie that such a change will reduce the recoverable resources of the field. Were a serious application to be made I would, of course, review it with you in the light of all the circumstances at that time.

I hope you will agree that, having studied the paper and the considerations set out above, it would be wrong to reopen the collective decisions taken by E on depletion. I should add that if we do not take action on some of the development delay and gas flaring cases this year we shall have foreclosed our options permanently.

My officials will, of course, continue to keep in touch with your officials about the implementation of the policy, where significant volumes of oil or gas are involved.

I am sending copies of this letter and the report by officials to the Prime Minister, the Foreign and Commonwealth Secretary, Sir Robert Armstrong and Mr Ibbs.

Yours ever

David

D A R Howell

REVENUE IMPLICATIONS OF DEPLETION MEASURES ENDORSED BY E COMMITTEE

This review by officials from the Department of Energy, the Treasury, FCO and the CPRS has been undertaken following the Chancellor's letter of 27 May to the Secretary of State for Energy.

Total UKCS Tax Receipts

2. The Medium Term Financial Strategy (MTFS) forecast revenue receipts from UKCS Sea Oil in the financial years 1980/81 to 1983/84 on the basis of the oil production forecasts given in the 1979 Review of Depletion Policy and the other assumptions on income growth, exchange rate and oil prices underlying the MTFS were:

£ billion, 78/79 prices

	80/81	81/82	82/83	83/84
MTFS	$2\frac{3}{4}$	$3\frac{1}{4}$	$4\frac{3}{4}$	$4\frac{3}{4}$

3 The latest estimates shown in the table below together with the MTFS forecast was prepared by the Inland Revenue as part of the recent National Income forecasting exercise (NIF) on the basis of current assumptions including a lower oil production forecast, a higher path for the real world price of oil and higher UK domestic inflation.

£ billion, 78/79 prices

	80/81	81/82	82/83	83/84
NIF	2.7	2.9	4.4	4.3
MTFS	$2\frac{3}{4}$	$3\frac{1}{4}$	$4\frac{3}{4}$	$4\frac{3}{4}$

4 UKCS tax revenues at 1978/79 prices in the latest forecast (NIF) are lower in every year than in the MTFS. In 1983/4, for example, they are some £0.4 billion down and this is mainly due to the net effect of three factors; lower oil production forecast -£0.5 billion; higher real dollar oil prices +£0.6 billion and a higher UK domestic inflation assumption -£0.4 billion.

Depletion Measures

5 The scope for deferring production from the peak is estimated as follows:

Measure	Decisions from	Maximum Reduction in 1984/85 (m. tonnes)
Gas Flaring Restrictions	1980	2
Refusal of Upward Profile Variations	1980	1
Development Delay	1980	4
Production Cutback	1981	15-16 22-23

6 This is a little different from the 27 m. tonnes potential identified in the 1979 Review of Depletion Policy; the reduction being mainly accounted for by a loss of 3 m. tonnes potential under the head of refusal of upward profile variations at BP's Forties field (this potential production having been taken out of the base production forecast already on the assumption that BP will not now seek an upward profile variation in view of the expected reservoir performance of this field) and some 2 m. tonnes slippage in production under the development delay head in part accounted for by a delayed production start up at Mobil's Beryl B field.

7 The tax revenue implications in the years to 1985 and the net benefits to the economy over time of implementing the first three depletion control measures endorsed by E Committee are discussed in turn below. The net benefit to the economy is determined by assessing the change in net present value in

1979 prices (defined as Government revenue plus UK company take) with and without depletion controls at a test discount rate of 5%. Decisions on production cutback which cannot be implemented before 1982 at the earliest will be the subject of a further report by officials to E Committee in about a year's time. The potential effect on revenue of this measure are therefore not dealt with here.

Summary of the Revenue Effects in the Years to 1985 from Depletion Control

8 The tax revenue effects of implementing the first three depletion control measures in full for the years to 1985 are estimated to be:

£ million, 78/79 prices

	1980	1981	1982	1983	1984	1985
Gas Flaring Restrictions	-40	-80	-220	-150	-170	-150
Refusal of Upward Profile Variations	-30	-30	-30	-20	-5	-5
Development Delay	0	+5	+10	+10	+40	+130
Total	-70	-105	-240	-160	-135	-25

9 The maximum potential impact would occur in the financial year 1982/3 with the average loss of revenue over the period 1982 to 1985 running at under £150 m a year. This compares with an average loss of £250 m a year between 1982 and 1986 given in the 1979 Review endorsed by Ministers. The difference between the two estimates is mainly accounted for by the removal of the option to refuse an upward profile variation at BP's Forties field - a decision which Ministers are not now expected to have to take.

10 The effect of these measures on the PSBR would however be somewhat less than shown above as delaying the development of BNOC's Clyde field (30/17b) - which is included under the development delay head - would defer 100% of BNOC's investment not just the Corporation Tax element. This additional benefit would amount to some £5 m in 1983, £25 m in 1983 and 84 and £10 m in 1985.

Gas Flaring

11 The UK has already since 1975 flared gas equivalent to some 13 m. tonnes of oil worth at current prices some £1.5 billion with flaring over the past three years running at the equivalent of some 7-8% of total oil production. Energy Ministers in agreement with Treasury Ministers began to introduce

tougher flaring controls at the Shell/Esso Brent field in November 1979 and Ministers collectively have endorsed a progressive tightening of flaring restrictions on economic and gas conservation grounds. On both gas conservation and economic grounds there is a strong justification for further action on Brent during the course of 1980 and 1981. We currently pay a premium in terms of gas flared of around $10 per barrel of oil produced at the Brent field. The potential net benefit to the economy from imposing tougher flaring restrictions at Brent over the next two years which would defer some 1.5 m. tonnes of oil is estimated at £60 m. in 1979 prices.

12 In the years 1982 to 85 the revenue implication of taking up the estimated potential under the gas flaring head has been illustrated using BP's Forties field. This field was identified in the 1979 Review as a prospective candidate for tougher flaring restrictions and this has been reinforced by possible gas gathering pipeline developments. As Forties is in the full tax paying position and also has a low gas/oil ratio, it can be considered as a "worst case" example for illustrating action under the gas flaring head. Even so, the net benefit to the economy of deferring some 2 m. tonnes of oil a year at peak is estimated at around £15 m. in 1979 prices.

Refusal of Upward Profile Variations

13 Assuming that BP do not seek an upward profile variation at their Forties field the main prospect under this head at the present time is Mobil's Beryl A field. If an upward profile variation was refused it would incur a small net loss to the economy in the order of £5 m. in 1979 prices. A decision to refuse an upward profile variation would therefore rest on deferring oil from the years of peak production when we have a large potential export surplus.

Development Delay

14 It is possible that five major fields will come forward for development before 1985. These are the three protected fields Hutton, Alwyn and Andrew and two unprotected fields Clyde (30/17b) and T-Block. Assuming a one year delay for protected fields and a five year delay for unprotected fields the net benefit to the economy of action here is estimated at around £160 m. in 1979 prices. The effect of development delay on revenue, unlike the other measures considered, is to increase substantially the Government's tax take over the period to 1985. This revenue gain arises because delaying the development of fields reduces companies' ability to offset Corporation Tax liabilities on existing fields against development expenditure on new fields.

Summary of the Net Benefit to the Economy from Depletion Control

15. The total net benefit to the economy over time from implementing the first three depletion control measures endorsed by E Committee is estimated at around £230 m. The bulk of this, some £160 m, is accounted for by development delay; with a further tightening of gas flaring restrictions contributing some £75 m. There is estimated to be a small net loss from the refusal of upward profile variations of around £5 m.

Conclusions

1. The net effect of a lower forecast for oil production, higher real dollar oil prices and a higher UK domestic inflation assumption since the MTFS means that the real UKCS tax revenues are lower throughout the period to 1983/84 than in the MTFS. In 1983/4, for example, they are some £0.4 billion down and this is mainly due to the net effect of three factors; lower oil production forecast - £0.5 billion; higher real dollar oil prices + £0.6 billion and a higher UK domestic inflation assumption - £0.4 billion.

2. Excluding the option to refuse an upward profile variation at BP's Forties field, a decision which Ministers are now unlikely to have to take, the measures available and potential to defer production are essentially unchanged from those endorsed by E Committee.

3. The loss of revenue in the early-mid 1980s is estimated at a little under £150 m a year with the maximum potential impact being in 1982/83. The estimated loss of revenue given in the 1979 Review of Depletion Policy was some £250 m a year. The difference being accounted for mainly by Forties production on which Ministers are now unlikely to have to take decisions.

4. The net benefit to the economy of the use of the three measures endorsed by E Committee on which decisions have yet to be taken is of the order of £230 m in 1979 prices.

Department of Energy
25 June 1980

2 MARSHAM STREET
LONDON SW1P 3EB

My ref: H/PSO/13497/80

Your ref:

M Braxter

cc PS/Mr King
PS/Sir G. Ward
Mr McAndrew
Mr Bladed

2 JUN 1980

12 10/3

PWR INQUIRY

Thank you for your letter of 23 April.

Your brief and broad reference to the inquiry into the first PWR in your memorandum to the Select Committee is of course perfectly acceptable to me. I agree that we should continue to repeat as necessary that the inquiry will be full and thorough but without going into detail at present.

I also agree that Parliament ought to be involved. The question of how and when it should be involved during the investigatory process is important. I want to avoid an inquiry in circumstances in which it seemed to those taking part and to the public generally that the issues proper to the inquiry had already been settled. But this is a matter of judgement in the light of the proposals when they arrive.

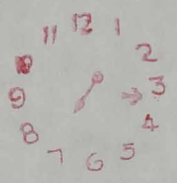
The question of a one-stage or two-stage inquiry is, perhaps not as straightforward as you suggest. There are several forms which a two-stage inquiry can take, and it does seem important for the formal statutory planning inquiry to take place against as settled a factual and energy policy background as possible. It does not follow that the type of investigatory activity to produce this should be within the statutory framework and should lead to the significant repetition and other difficulties at the formal stage with rightly concern you. And it is fair to say that most informed comment in recent times, particularly since Windscale, sees advantages in a two-stage approach. There is support for this in exceptional cases, as major energy projects are, in last year's CPRS and MISC 20 reports on Planning Procedures and Industry.

My officials have been working up material on these issues, and this should provide a basis for discussion between us. I will be in touch again in due course.

I am copying this to George Younger and Nicholas Edwards.

MICHAEL HESELTINE

The Rt Hon David Howell MP



Energy

PRIME MINISTER

Fast Reactor Policy

E(80) 60

BACKGROUND

The Secretary of State for Energy puts forward his proposals for developing our approach to the fast reactor. He starts from the premise that, while fast reactors are not yet economic and there is uncertainty about the time-scale in which they will be introduced commercially, they could be capable of making a major contribution to United Kingdom energy supplies in the first quarter of the next century. By then uranium supplies could be constraining thermal reactor programmes - and possibly earlier if supplies were to be disrupted for political reasons - but fast reactors use depleted uranium of which we will have substantial stocks.

2. The Secretary of State advised against relying on other countries to develop the technology and letting us have a licence. There is no certainty that they would do so and we should waste the expertise built up over the last 25 years. He argues that, if we are to have the necessary technology available, for commercial ordering when needed, we need to build and operate a full-scale fast reactor in this country, subject to safety clearances and a full public inquiry. He rejects an independent effort as far too costly and advises collaboration. For the moment the most likely partners are France, who are in the lead in this field, and Germany. Collaboration with the Americans could be attractive. But President Carter is against fast reactors and it is a question of waiting until after the Presidential Election to see whether there is any chance of pursuing an American option.

3. As the Secretary of State explains in his paragraphs 12-16, it would be necessary to negotiate hard to secure genuine collaboration and to ensure that the French did not make all the running. In particular we would have to ensure that we retained freedom to build a fast reactor in this country at a time of our own choice.

4. There have already been exploratory talks at working level with the French. But the Secretary of State believes that an expression of political interest is now necessary to give impetus to these discussions. He therefore seeks authority to open negotiations with the French and Germans. I understand that

if this is given he is likely to visit the French in July. But he would not enter into any commitments before putting further proposals to colleagues. This would probably be later in the year and after the American Presidential Election.

5. He recommends that to underline the seriousness of our interest he should be authorised to make a statement in Parliament before the Summer Recess - see his paragraph 17. This would indicate the broad lines of the Government's interest and undertake that the construction of a full-scale fast reactor would be subject to a full and independent public inquiry.

6. If construction of a fast reactor were to start as early as 1985 the United Kingdom Atomic Energy Authority say they would need additional public expenditure provision rising from £6 million in 1981-82 to £20 million in 1983-84. However, the Secretary of State believes that these bids could be reduced or eliminated as a result of cost sharing and on the basis of a more realistic assumption on timing of construction.

HANDLING

7. After the Secretary of State for Energy has introduced his paper, the Chancellor of the Exchequer will wish to comment on the financial implications and the Foreign Secretary on the proposals for collaboration. The Secretaries of State for Employment and the Environment may wish to say something on the need for assurances on the health and safety and planning aspects.

8. In discussion you will wish to cover the following questions -

a. Do we need to take any decisions now?

It might be argued that there is no need for any action now. The time-scale is very long and some Ministers may think that the Secretary of State for Energy has yet to make a convincing case that the prospects for our other sources of energy supply from the year 2000 are such as to justify building up this further alternative. On the other hand the Secretary of State is not asking for irrevocable commitments, but rather for further work as an insurance policy against the time that fast reactors might become economic. It may well be that unless we enter into negotiations with prospective partners we shall lose our opportunity.

b. What should be the negotiating objectives in discussions with prospective partners?

If it is accepted that further action should be taken now, it is unlikely that any Minister will argue for an independent effort. But if there are to be negotiations with possible partners Ministers will wish to enter a number of conditions. It will be important not to foreclose on the possibility of collaboration with the Americans until the outcome is known of the Presidential Election. Any deal with the French must ensure that they do not take the opportunity to secure an unfair advantage for their industry; and the objectives set out in the Secretary of State's paragraphs 12-15 are important. Before contracts are signed it will be necessary to check whether there are satisfactory break-clauses. But most important of all, Ministers are likely to insist that the Secretary of State should not enter into any commitments whatsoever until he has reported back on the outcome of his discussions and set out detailed proposals.

c. What are the public expenditure implications?

The Chancellor of the Exchequer will wish to speak on this. For the moment they seem too uncertain for Ministers to say anything more than that. If this particular item did lead to additional expenditure, then the Secretary of State would need to look for off-setting savings elsewhere. But again there should be no question of entering into any financing commitments at this stage.

d. Should there be a Parliamentary statement before the Summer Recess?

If the Secretary of State is to embark on negotiations, this is likely to become public knowledge and it would therefore be prudent to make a general, non-commital statement on the lines of paragraph 17 of his paper. As he points out, it will be particularly important to give assurances that there would be an independent public inquiry before any fast reactor were constructed.

CONCLUSIONS

9. In the light of the discussion, you will wish to record conclusions on -

i. Whether the Committee endorses the broad strategy set out by the Secretary of State for Energy; and, if so

ii. whether he may now enter into discussions with the French and the Germans without commitment, without foreclosing on the possibility of collaboration with the Americans, and on the lines set out in paragraphs 12-15 of his paper;

iii. whether he should make a Parliamentary statement before the Recess on the lines of his paragraph 17;

iv. inviting him to report further in the Autumn on the outcome of his consultations and with proposals.

RCA

30 June 1980

CONFIDENTIAL

Qa 05066

To: MR LANKESTER

From: J R IBBS

Fast Reactor Policy

1. At tomorrow's meeting of E Committee Ministers are due to discuss a memorandum by the Secretary of State for Energy on Fast Reactor Policy (E(80)60). In this Mr Howell asks the agreement of colleagues (i) to make a public commitment to the eventual construction of a fast reactor in this country, and (ii) to begin detailed negotiations on collaborative terms with the French and Germans.

2. The policy question of whether we need to maintain a fast reactor option is an imponderable one. This reflects the fact that access to fast reactor technology is basically an insurance policy against very long-term risks which are not open to meaningful quantitative analysis. On the basis of the evidence presented in Mr Howell's paper, collaboration seems to provide the best option of pursuing this insurance policy.

3. However, the CPRS believes that we should be cautious and non-precipitate over the current initiatives that are coming from the French and Germans. An international agreement once signed is difficult to walk away from and this particular one would set the framework of our entire fast reactor policy until the end of the century. Clearly the French objective in collaborating now is to lock us into their technology and prevent us from providing a springboard for the Americans, should there be a change of Administration following the Presidential election later this year. Furthermore our current technological leads may have more to offer the Americans than the French. For this reason the CPRS would argue that, while negotiations should now start with the French, on no account should these be concluded until the outcome of the American Presidential election is known (paragraph 10 of the Secretary of State's covering note implies that negotiations with the French and Germans could be concluded before the Presidential election). Meanwhile we should maintain contact with the Americans.

4. The CPRS also believes that the timing of any statement by Mr Howell, which could initiate a wider debate, should be firmly based on our own

domestic energy policy considerations rather than a move to ease our negotiations with the French.

5. I am sending a copy of this minute to Sir Robert Armstrong.

30 June 1980

Energy
Sir R. Armstrong.
13/6

CONFIDENTIAL
FM FCO 130845Z JUN 80
TO IMMEDIATE VENICE
TELNO 43 OF 13 JUNE 80.

FOR PS/SOS

FOLLOWING TELEGRAM NOW REPEATED TO YOU AT REQUEST OF PRIVATE OFFICE WAS RECEIVED FROM WASHINGTON TELNO 2223 OF 12/6.

INFO THE HAGUE, TEHRAN, TOKYO

TELECON KELLY/BACON: IRAN OIL PRICES

AS INSTRUCTED WE INFORMED STATE DEPARTMENT THAT SHELL WERE SENDING A REPRESENTATIVE TO TEHRAN TOMORROW 13 JUNE WITH THE INTENTION OF OFFERING TO BUY AN UNSPECIFIED VOLUME OF IRANIAN CRUDE IN JUNE AT PRICES OF DOLLARS 32.50 AND 33.50 PER BARREL, FOR HEAVY AND LIGHT CRUDE RESPECTIVELY, WITH NO SIDE CONDITIONS OR PREMIA. IF A DEAL COULD BE CONCLUDED ON THIS BASIS, WHICH WAS UNCERTAIN, THE IRANIANS WOULD REGARD SHELL'S SECOND QUARTER CONTRACTUAL LIABILITIES AS FULFILLED. SHELL'S REPRESENTATIVE WOULD NOT DISCUSS THIRD QUARTER PURCHASES NOR WOULD HE AGREE TO THE ESTABLISHEMT OF ANY LINK BETWEEN THE TWO QUARTERS. OUR ATTITUDE TOWARDS NEGOTIATIONS ON THIS BASIS WAS FAVOURABLE, ALTHOUGH WE HAD NOT SO INFORMED SHELL. WE HAD, HOWEVER, SAID THAT WE WOULD SEEK THE VIEWS OF THE US GOVERNMENT.

2. ROSEN'S INITIAL REACTION WAS THAT AN OFFER OF DOLLARS 33.50 FOR IRANIAN LIGHT COULD UPSET ATTEMPTS TO ESTABLISH THE NEW MARKER CEILING PRICE OF DOLLARS 32 AGREED AT THE OPEC MEETING. HE POINTED OUT THAT YAMANI HAS BEEN QUOTED AS SAYING THAT UNDER THE TERMS OF THE ALGIERS ACCORD IRAN SHOULD DROP ITS PRICE FROM DOLLARS 35 TO DOLLARS 32, ALTHOUGH YAMANI HAD ADMITTED THAT THERE WAS NOTHING SAUDI ARABIA COULD DO IF IRAN REFUSED. BUT ROSEN WOULD CONSULT WITHIN THE ADMINISTRATION AND GIVE US A CONSIDERED RESPONSE LATER IN THE DAY.

3. ROSEN READ OUT TO US THE FOLLOWING RESPONSE AT 2300Z, WHICH HAD BEEN CLEARED WITHIN STATE DEPT (COOPER) AND WITH NSC (OWEN) AND THE DEPT OF ENERGY (GOLDMAN).

QUOTE

THE U.S. IS CONVINCED THAT IT WOULD NOT BE ADVISABLE FOR SHELL TO ENTER INTO A DEAL WITH IRAN IN WHICH IT WOULD PAY DOLLARS 33.50 FOR IRANIAN LIGHT AND NOT BE RELEASED FROM ITS OBLIGATIONS UNDER ITS ENTIRE CONTRACT, INCLUDING THE THIRD QUARTER. THIS WOULD BE AN ESPECIALLY BAD IDEA WHEN, AFTER LENGTHY DISCUSSIONS IN THE OPEC MEETING IN WHICH IRAN TRIED TO ACHIEVE A DIFFERENT RESULT AND FAILED, OPEC HAS AGREED ON A CEILING PRICE FOR MARKER CRUDE OF DOLLARS 32. THE U.S. BELIEVES THAT IT IS IN SHELL'S OWN LONGER-TERM INTEREST AS WELL AS IN THE INTERESTS OF THE UK AND OTHER CONSUMING COUNTRIES THAT SHELL PAY NO MORE THAN DOLLARS 32.50 FOR IRANIAN LIGHT OIL, WHICH IS COMPARABLE TO SAUDI LIGHT. TO PAY MORE WOULD RISK UNDERMINING WHATEVER POSITIVE ELEMENTS THERE ARE IN THE OUTCOME OF THE OPEC MEETING AND ENCOURAGING YET A NEW ROUND OF PRICE INCREASES.

UNQUOTE.

4. BY WAY OF EXPLANATION ROSEN SAID THAT, ALTHOUGH THE OPEC MEETING HAD LED TO SOME PRICE INCREASES, THIS DID NOT IN THE U.S. VIEW JUSTIFY PAYING MORE FOR IRANIAN CRUDE. THE KEY POINT WAS THE DOLLARS 32 MARKER CEILING PRICE, WHICH WAS AN IMPORTANT STEP TOWARDS PRICE UNIFICATION. THE SAUDIS AS WELL AS OTHER COUNTRIES MIGHT REACT BADLY TO A MOVE WHICH JEOPARDISED THIS. STRICTLY SPEAKING NO COMPANY SHOULD PAY MORE THAN DOLLARS 32 FOR IRANIAN LIGHT BUT THE U.S. HAD ARGUED IN THEIR RESPONSE FOR A MAXIMUM OF DOLLARS 32.50 BECAUSE THEY DID NOT WISH TO BE UNDULY RESTRICTIVE AND BECAUSE THAT PRICE HAD BEEN PAID EARLIER IN THE YEAR.

5. PLEASE ADVANCE TO D LE B JONES AND KELLY (DEPT OF ENERGY) MISS BROWN AND FALL, ALL DESKBY 08.00Z 13 JUNE.

CARRINGTON

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ZBVOTNERGUUDVES+3

CONFIDENTIAL

Energy

SECRETARY OF STATE FOR ENERGY
THAMES HOUSE SOUTH
MILLBANK LONDON SW1P 4QJ 211 6402

Tim Lankester Esq
10 Downing Street
London SW1

5 June 1980

Dear Tim,

IRAN AND SHELL

Thank you for your letter replying to my Secretary of State's minute of 2 June to the Prime Minister, giving details of the proposal made by the National Iranian Oil Company (NIOC) to Shell.

After discussion between Mr Howell and the Chairman of Shell, the Shell board decided on 3 June not to accept the Iranian proposal for a resumption of regular liftings in July because it involved a price of $35 a barrel. Shell did, however, think it important to keep negotiations with the Iranians open and to secure a final settlement in relation to liftings since 1 April. They therefore proposed to offer to lift one cargo during June at the Iranian GSP of $33.50 in return for Iranian agreement not /any to press/contractual claims.

In the light of the Prime Minister's decision the Embassies in Washington and Tokyo were instructed to inform governments in strict confidence and to report their reactions. The Japanese found it "difficult to support" our action on grounds of the price, the concern it would give to the Americans and their preference for assessing matters in the light of the OPEC meeting on 9 June. The American Administration said they would not object provided that the total price did not exceed $33.50 and subject to four conditions.

Shell's initial reaction on the evening of 4 June was that the American terms were unacceptable. But, after consultation with the Hague, Mr Baxendell told Mr Howell that Shell would negotiate for a single cargo at a price of $33.50; seek NIOC's agreement to release the company from all obligations under the existing contract; and accept that HMG would consult the US before Shell made any further purchases of Iranian oil. Shell "did not understand" the American request that there be no side deals. On Secretary Muskie's particular condition that they should not in future pay more than $32.50 a barrel for Iranian oil, Shell's negotiator would be under firm instructions to avoid any commitment to prices for liftings after the one cargo now under negotiation. Baxendell stressed Shell's bitterness at what they saw as an American attempt to squeeze them out of Iran and expressed the hope that the Americans would urgently help Shell find crude oil elsewhere.

Mr Howell agreed that Shell might go ahead on this basis and their negotiator is proceeding accordingly. Mr Howell has today explained the general position to Secretary Duncan; the Embassies in Washington and Tokyo are informing those governments. I will let you know the outcome of Shell's negotiations.

I am sending copies of this letter to George Walden (FCO), John Wiggins (Treasury) and David Wright (Cabinet Office).

Yours sincerely,

J D West
Private Secretary

Energy

CONFIDENTIAL

FCS/80/89

SECRETARY OF STATE FOR ENERGY

Iran and Shell

1. Thank you for sending me a copy of your minute of 2 June to the Prime Minister. I agree with the line you recommend that we should take with Shell.

2. I agree also with your view that we would risk a major dispute with the Americans if we were to acquiesce in Shell's going ahead before the OPEC meeting. Indeed, I think it likely that the Americans will wish to urge us to do our utmost to persuade Shell to refrain from buying Iranian oil also thereafter. The case on energy grounds for doing so may be weaker if the OPEC meeting results in price changes which bring the Iranians more into line. But there are also important political factors involved, as the Americans tend to see our refraining from buying Iranian oil in the context of economic sanctions.

3. As you suggest, it will be easier to strike a balance when we know the results of the OPEC meeting and the American and Japanese reactions to what we shall tell them. The consultations you propose are a key element in the picture, and it will be important to make it clear to the Americans in particular that we have taken no decision about what should happen after the meeting.

4. I am sending copies of this minute to the Prime Minister, the Chancellor of the Exchequer and Sir R Armstrong.

C

(CARRINGTON)

Foreign and Commonwealth Office
3 June 1980

CONFIDENTIAL

HS

Energy

10 DOWNING STREET

From the Private Secretary

3 June 1980

Iran and Shell

The Prime Minister has considered your Secretary of State's minute of 2 June, and agrees that he should consult the American and Japanese Governments on the basis that we should ask Shell to hold off finalising the deal which the Iranians have offered them at least until after the OPEC Ministerial meeting in Algiers.

I am sending copies of this letter to George Walden (Foreign and Commonwealth Office), John Wiggins (H.M. Treasury) and David Wright (Cabinet Office).

T. P. LANKESTER

W.J. Burroughs, Esq.,
Department of Energy.

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PRIME MINISTER

IRAN AND SHELL

At the request of the National Iranian Oil Company Shell representatives went to Tehran over the weekend. The Iranians made them an offer to supply two cargoes of crude in June equivalent to 90 000 barrels per day and continue supply from 1 July at a rate of 120 000 barrels per day. The price for the light crude would be $33.50 a barrel plus a premium of $3 on half the supply making an average price of $35 a barrel. Heavy crude, which would constitute half the supply, would be priced at $1 a barrel less. There would be no hidden extras. The Iranians would retain the right to increase the Government selling price at any time but might agree to accept some type of hardship clause under which the premium element would be reduced if the basic price went above a certain amount. Shell have been asked if they are interested to resume negotiations on Wednesday.

The Iranians have emphasised to Shell that this offer is strictly confidential and must not be discussed with BP or the Japanese companies. Shell made it clear that they would have to tell the British Government.

On commercial grounds Shell would like to accept because:-

a) In the short term the price offered is no more and probably less than they would have to pay to obtain comparable crude from other sources.

b) Acceptance would enable them to resume a continuing relationship with the Iranians.

c) Conclusion of the deal would probably bring extra crude into the international market with a beneficial effect on prices generally.

In view of the undertakings which have been given we shall have to consult the American and Japanese Governments before any deal is concluded. We are committed to the Americans to discourage our oil companies from buying Iranian oil "at prices sharply above those asked by other OPEC countries". There is little doubt that the Americans will argue strongly that the price now being asked by the Iranians is still sharply different from those asked by other OPEC countries and that it is particularly undesirable for Shell to conclude a deal on this basis in the week before the OPEC Ministerial meeting at Algiers which may set a new general level of prices.

The attached table compares Iranian prices with those being asked by other OPEC countries after adjustment for quality differences. The Iranian prices are certainly different. Whether they are "sharply different" is a matter of opinion. But we are unlikely to convince the Americans.

If Shell settle this week the Iranians will be able to say at Algiers that they have accepted $35 a barrel as an appropriate commercial price for Iranian light crude. I doubt if this argument would make much difference to the outcome: but it could lead to us getting some of the blame for a further increase in oil prices generally.

This suggests that we should urge Shell to postpone their next round of discussions with the Iranians until after the OPEC meeting and to indicate the minimum interest in the Iranian offer needed to keep it open. There is a risk that the Iranian offer will be withdrawn if Shell do not conclude this week. But we could only acquiesce in their going ahead if as a Government we are prepared to risk a major dispute with the Americans. I imagine we will not be: and if you agree I would propose to consult the American and Japanese Governments on the basis that we ask Shell to hold off until after the OPEC meeting. How we proceed thereafter would then depend on American and Japanese reactions and the outcome of the OPEC meeting.

I am sending copies of this minute to the Foreign and Commonwealth Secretary, the Chancellor of the Exchequer and Sir Robert Armstrong.

SECRETARY OF STATE FOR ENERGY

2 JUNE 1980

OVERPRICING OF IRANIAN CRUDE OIL

	MAY			FEBRUARY
Crude	Current Price	Parity Value ≠ Compared to Iranian Light	Effective Iranian Overpricing	Effective Iranian Overpricing
Saudi Arabia	28.00	34.50	6.50	5.83
United Arab Emirates	31.56	36.30	4.74	4.54
Iraq	30.18	34.90	4.72	4.09
Kuwait	29.50	33.90	4.40	2.91
Nigeria	36.69	39.63	2.94	2.83
UK	36.25	37.70	1.45	1.88
Libya	36.50	37.50	1.00	1.05
Algeria*	38.21	39.03	0.82	0.01

≠ This takes quality and location into account and is the value of the crude compared with the price - $35 - Shell have been asked to pay.

* Including $3 exploration surcharge.

a FCO
HMT
CO

jfh

Energy

30 May 1980

The Prime Minister has seen and noted your letter of 23 May conveying your Secretary of State's report on the IEA Ministerial meeting on 22 May.

I am sending copies of this letter to Paul Lever (Foreign and Commonwealth Office), Martin Hall (HM Treasury) and David Wright (Cabinet Office).

MAP

W.J. Burroughs, Esq.,
Department of Energy.

TGN

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Energy

Treasury Chambers, Parliament Street, SW1P 3AG
01-233 3000

27 May 1980

The Rt Hon David Howell MP
Secretary of State for Energy

MBM yet (Tsy and Energy officials say that depletion policy will not have any effect).

Dear David

DEPLETION POLICY

I understand that your Department has just reduced still further its estimates of North Sea oil production over the next few years so that they are now:

m tonnes

1980	1981	1982	1983	1984	1985
81	91	103	112	119	115

The extent of the recent reductions in the forecasts can be gauged by comparing them with the forecasts in the officials' report on depletion circulated in February. The figures there were:

m tonnes

1980	1981	1982	1983	1984	1985
86	100	110	116	126	126

(For the MTFS the forecasts for 1980 and 1981 were reduced, on the advice of your officials, to 83 and 99m tonnes respectively).

Both sets of forecasts assume a best estimate of field capabilities. That is, they do not take account of reductions in production as a result of the implementation of decisions on depletion policy except to the extent that they assume the continuation of the flaring restrictions at Brent. I understand that the reductions reflect your engineers' latest assessment of the effects on field production profiles of reservoir problems.

/Lower oil production

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Lower oil production will significantly reduce the Government's take from the North Sea and it will therefore make it harder to achieve the objectives of the Medium Term Financial Strategy without unwelcome changes in other policies. The Inland Revenue's first estimates of the effect on North Sea take at 1978-79 prices of the reduction in forecast production since the MTFS are £0.4 bn for 1981-82, £0.7 bn for 1982-83, and £0.5 bn in 1983-84. There will of course be other influences on North Sea take, but these reductions compare with fiscal adjustments in the MTFS of zero in 1981-82, £2.5 bn in 1982-83 and £3.5 bn in 1983-84. The effect on our ability to reduce the burden of taxation is obvious.

In these circumstances I think that we ought to reconsider the decisions on depletion policy taken at E Committee on 11 March. I recognise that substantial quantities of oil may not be involved, particularly if BP do not seek a profile variation consent for their Forties field. But further reductions in production, in this case self-inflicted, would make it yet harder to meet the Medium Term Financial Strategy. Furthermore, the recent reductions in the forecasts have already gone a long way to secure the reductions in production which would have been secured by the implementation of the three depletion measures endorsed by E Committee without any action by us.

In view of the importance of the Medium Term Financial Strategy I think that we ought to have the opportunity to reconsider our decision on depletion policy before you make your statement to Parliament. Could I therefore suggest that our officials should prepare a paper which shows the effect on Government take during the next few years, and particularly in the period of the Medium Term Financial Strategy, or all the depletion decisions in prospect. We can then consider the consequences for the Strategy before you make your statement and formally announce our decisions on depletion policy.

I am sending a copy of this letter to the Prime Minister, the Foreign and Commonwealth Secretary and to Sir Robert Armstrong.

GEOFFREY HOWE


27 MAY 1980

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SECRETARY OF STATE FOR ENERGY
THAMES HOUSE SOUTH
MILLBANK LONDON SW1P 4QJ
01 211 6402

(2)

Michael Alexander Esq
Private Secretary to the
Prime Minister
10 Downing Street
LONDON SW1

23 May 1980

Dear Michael,

IEA MINISTERIAL MEETING - 22 May

My Secretary of State has asked me to let you know the outcome of the meeting. It went well from our point of view and we achieved a result within the lines set out in Mr Howell's minute of 9 May.

Ministers reached agreement - apart from some Canadian wriggling on energy pricing - on the medium term policies needed to restructure the Energy Economies of IEA countries and reduce their dependence on imported oil. Detailed recommendations on measures which the individual countries should take form an annex to the communique (copy attached). The references to the UK are satisfactory. In particular the reference to increased hydrocarbon exploration and development speaks of maximizing production in the longer term, a formulation which suits us very well.

The difficult issues were the ones identified in Mr Howell's minute - how to handle a tight market and oil import targets for 1985 and 1990. The Americans pressed strongly for a commitment in principle now to the introduction of import ceilings in a tight market situation and for a 4 mbpd reduction in our existing group oil import goals for 1985 (now standing at 26.2 mbpd) and a further 2 mpbd reduction by 1990. But with the aid of less than impartial chairmanship from Lambsdorff we secured a satisfactory compromise on the following lines:-

a) In the short term Ministers have agreed to meet at short notice if tight market conditions appear imminent and, if they decide that such conditions exist, to take positive short term action as necessary to prevent a scramble for scarce oil. In such cases Ministers will take a decision on the use of individual oil ceilings. Mr Howell made it quite clear in his statement that "... In (his) view it would not be sensible to decide in advance of the event whether or not ceilings would be used. That will have to be decided at the time. That is the sense in which we read and recognise the paragraph..."

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(2)

b) So far as 1985 is concerned we obtained a satisfactory compromise, with the emphasis on a determination to undershoot existing Group objectives but with Ministerial decisions on the quantification of the reduction to follow later. We were joined by many delegations in emphasising that national goals would not be altered.

c) For 1990 we have settled on a formulation similar to that agreed at the Energy Council in Brussels last week. Namely Guidelines indicating that the ratio between the rate of energy consumption and the rate of economic growth for IEA countries as a group over the coming decade should be reduced to about 0.6 and the share of oil in total energy demands should fall from 52% at present to about 40%.

Mr Charles Duncan and the rest of the strong US team (including Mr Richard Cooper, Under Secretary for Economic Affairs at the State Department, and Mr Henry Owen, Presidential Adviser) went along with this compromise with a good grace.

It is hoped that this will leave the Venice Summit free to concentrate on broader issues of policy, despite the renewed disarray in world oil prices.

Copies of this letter go to Paul Lever at the FCO, Martin Hall at the Treasury and David Wright at the Cabinet Office.

Yours ever,

W J Burroughs
Private Secretary

DEPARTMENT OF ENERGY
Thames House South
Millbank
London SW1P 4QJ

Tel: Direct Line: 01-211 6402
Switchboard: 01-211 3000

Please attach to Letter 23/5
FROM Dr Burroughs → M. Alexander
IEA - Ministerial

With the Compliments of

the

Secretary of State

IEA OECD

press release

Château de la Muette - 2, rue André-Pascal, 75775 Paris Cedex 16 - 524.82.00

IEA/PRESS(80)8
Paris, 22nd May, 1980

COMMUNIQUE

INTERNATIONAL ENERGY AGENCY

Meeting of Governing Board at Ministerial Level

22nd May, 1980

The Governing Board of the International Energy Agency (IEA) met at Ministerial Level on 22nd May 1980 in Paris under the Chairmanship of the Minister of Economics of the Federal Republic of Germany, Otto Graf Lambsdorff.

1. At the last Ministerial Meeting in December 1979 Ministers responded to the turbulent oil market conditions by establishing oil import ceilings for 1980, revising the 1985 Group Objective, and establishing individual countries' contribution to this Group Objective, creating a monitoring system and emphasizing the need for further steps for restoring order in the oil market. This time Ministers met in order to review progress achieved and take additional action.

Assessment of World Energy Situation

2. Ministers expressed their concern about the level of oil prices which confronts the world economy with declining economic activity, having serious negative results for all countries. In particular, the price increases since the end of 1979 have occurred despite falling oil demand and appear to have been made without taking into account their adverse impact on the world economy.

3. Ministers considered projections of world energy supply and demand trends through the 1980s and agreed that, in order to protect and enhance economic growth prospects, IEA countries will continue to strengthen and implement their energy policies in ways which ensure that structural changes in energy economies actually take place over the medium term, reducing the need for energy and oil in particular, and also provide protection against short-term market disruptions. They recognized that if energy problems are not resolved, the ability to manage the general economy effectively would be put seriously in question, which could damage the prospects for economic growth on a lasting basis.

Measures to Ensure Structural Change in the Medium Term

4. Ministers considered the results of the 1979 annual review of IEA countries' energy policies and programmes conducted by the IEA's Standing Group on Long-Term Co-operation and noted its report "Energy Policies and Programmes of IEA Countries - 1979 Review". They agreed that not all measures, as required by the IEA Principles for Energy Policy, have been put in place or are sufficient to produce the necessary results.

5. Ministers discussed the extent to which countries have followed up on the Principles for Energy Policy. They noted the Secretariat analysis of areas where energy policies could be strengthened in individual IEA countries as set forth in Annex I, which they regard as a useful instrument for a substantial and qualitative monitoring of IEA countries' energy policy efforts. They recognised that the indicated areas represent a considerable potential for achieving significant results over the medium term. They therefore agreed that each Minister will give weight to this analysis within his country's process of deciding what national energy policies are required.

6. Ministers welcomed the formation of the Coal Industry Advisory Board to help governments develop programmes and policies to greatly increase coal production, trade and use. They believe that the Board should have a very important role in the formulation of policies toward coal development, welcomed its intention to develop an action programme by autumn, invited it to provide concrete recommendations on action needed to double coal production and use by 1990, and agreed to give great weight to its recommendations and consider them quickly. Ministers also noted that the expansion of nuclear power, under appropriate conditions taking into account the progress made in the International Nuclear Fuel Cycle Evaluation, is indispensable for ensuring structural change in the medium term.

7. Ministers recognised that the process of restructuring energy economies will involve major investments, which will have to be encouraged by active policy and will best develop under conditions of economic growth. They noted the concern of some countries that under their particular circumstances this could pose difficulties, which the Governing Board at official level will consider and will report on to the next meeting of Ministers.

8. Ministers agreed that medium and long term Group Objectives are important and agreed instruments to serve as numerical indicators which point the directions for structural change, provide a framework within which to identify the measures necessary to achieve them, and form a basis for monitoring progress. They should be designed to get well ahead of the situation rather than merely keeping up with it.

9. Ministers agreed that results actually achieved by IEA countries as a group for net oil imports in 1985 should substantially undershoot the existing 1985 Group Objective (26.2 mbd of oil imports, including bunkers), to reflect both the potential for savings and oil production probabilities.

Ministers agreed to quantify the reduction as part of the monitoring process, taking into account consumption and imports. Based on currently available information the Secretariat estimates this potential with all existing uncertainties at around 4 mbd.

10. Ministers agreed that efforts to reduce oil imports will be continued beyond 1985. It is expected that as a result of these efforts it will be possible to reduce the ratio between the rate of increase of energy consumption and the rate of economic growth for IEA countries as a group over the coming decade to about 0.6 and the share of oil in total energy demand from 52% at present to about 40% by 1990.

11. Ministers agreed that regular and effective monitoring is essential to ensure that existing and additional measures are being implemented and are in fact resulting in the necessary structural changes in all IEA countries.

Short Term Instruments

12. Ministers concluded that because of the time required to achieve structural change, short-term instruments must be available in the meantime to limit the damaging economic effects of short-term price or volume disruptions which could occur in the oil market. They therefore decided upon the following actions to improve the preparedness of IEA countries:

Yardsticks and Ceilings

(a) Arrangements for yardsticks and ceilings, in order to measure progress in achieving structural change and medium-term goals and to put the IEA in a position to deal at short notice with a deterioration in the oil market situation, as follows:

- Estimates of individual countries' oil requirements, derived from consumption, stock change and indigenous production, will be developed on an annual basis.

- Under normal market conditions, these estimates will serve as yardsticks for measuring progress in implementing measures to achieve structural change. For this purpose, they will be compared with medium-term goals in order to determine whether measures and their results are tending over time towards medium and long-term objectives. They will also be compared with the short-term oil supply outlook in order to monitor oil market developments.

- If at any time tight market conditions appear imminent, Ministers will meet at short notice. If Ministers decide that tight oil market conditions exist, IEA countries will take positive, effective short-term action as necessary, in particular, measures to restrain demand in order to prevent the scramble for scarce resources which could otherwise occur. In such cases Ministers will take a decision on the use of individual oil import ceilings based in part on these estimates as a means of self-imposed restraint and as a means for monitoring its effectiveness. The ceilings will represent a political commitment stating the degree of self-restraint which individual countries are willing to impose upon themselves in a tight market situation.

(b) A system for adjustment of ceilings and goals, because the need may arise to establish new oil import ceilings and goals and to respond quickly if changing oil market conditions require their adjustment.

Stock Policies

(c) A system for consultations between governments within the IEA and between governments and the oil industry on stock policies, which will be used to respond to oil market conditions beginning in 1980. The Governing Board at official level will consider guidelines for the use of stocks for this purpose.

(d) Reconfirmation that the 90-day emergency reserve requirement appears to provide reasonable protection against future emergencies.

13. Ministers also considered other measures for dealing with short-term oil market disruptions, including:

- Flexible use of stocks over and above the 90-day emergency reserve requirement and normal working stocks to meet short-term market disruptions.

- Other mechanisms, including those referred to by the Ministers in December 1979.

These areas will be considered further by the Governing Board at official level.

14. Ministers reviewed the results for the first monitoring round for the first quarter of 1980, which shows that all IEA countries expect to stay within the limits of the 1980 oil import ceilings established at the meeting of the Governing Board at Ministerial level in December 1979. They discussed the present situation in the international oil market and concluded that at present the 1980 oil import ceilings established in December 1979 do not appear to require adjustment, and that ceilings for 1981 do not now appear necessary. But this could change rapidly for 1980 or 1981 if there is a deterioration in the oil supply or in the oil demand situation. Ministers will reconsider the oil market conditions in their fall meeting.

Energy Research, Demonstration and Development and Commercialisation

15. Ministers will attach greater political importance to energy research, development and demonstration, as well as commercialisation of new technologies, as essential elements for ensuring that medium-term structural changes in their energy economies are carried over into the long term. They endorsed the Report of the International Energy Technology Group, and its recommendations for accelerating commercialisation of new energy technologies.

16. Ministers noted that an IEA RD & D Group Strategy has been developed. They concluded that the Governing Board at official level will pursue the strategy's accelerated scenario, which minimizes oil imports for the IEA as a whole. They agreed that IEA countries will use the IEA RD & D Group Strategy as a guide for setting national priorities and funding levels as well as for IEA collaborative project priorities. The Committee on Energy Research and Development will closely monitor and periodically consider the extent to which aggregate national RD & D efforts are consistent with the Group Strategy. The Coal Industry Advisory Board is invited to provide recommendations as to which new technologies should be pursued in order to further speed up expanded production and use of coal.

17. The political aspects of energy RD & D issues and in particular the follow-up of the Report of the International Energy Technology Group and the IEA RD & D Strategy Report, should be given high priority. Consideration should be given to a meeting of Ministers and highest level officials responsible for energy technology in IEA countries for that purpose.

International Co-operation

18. Ministers noted that a smooth medium-term transition away from an oil-based economy, accompanied by stable short-term oil market conditions, is a prerequisite for a prospering world economy in which all nations can pursue economic growth and development. They believe that action along the above lines will contribute to these results. Ministers also expressed their hope that oil-exporting countries would adopt a similar view of their contribution to better world economic conditions, and again stated the willingness of IEA countries to discuss these issues with oil-producing countries. They accepted the need for further action by the international community to help developing countries in meeting their energy requirements by the development of indigenous energy resources. This was considered to be an effort to which both industrialized countries and oil-exporting countries could contribute. Ministers recognised the importance of discussion of energy issues in the forthcoming Global Negotiations within the United Nations system, and will make every effort to contribute to their success. They will also continue to support strongly the forthcoming United Nations Conference on New and Renewable Sources of Energy.

Annex I

Secretariat Analysis of Areas Where Energy Policies Could be Strengthened in Individual IEA Countries

(i) Oil prices in general should reflect international oil prices. The United States should continue its progress in decontrolling oil and natural gas prices. Canada should take steps as rapidly as possible to increase domestic oil prices to a level that encourages further energy conservation, substitution of other fuels for oil, and development of alternative sources of energy. In countries with abundant gas reserves (Australia, Canada, New Zealand) and options to increase non-oil fired electricity (Australia, Canada, New Zealand and Sweden) pricing policies for those fuels should take into account the desirability of encouraging their substitution for oil in appropriate uses.

(ii) Efforts should be made in all countries (but particularly in Italy, Japan, the Netherlands and the United States) to reduce oil-fired electricity generation as rapidly as possible by substituting other fuels and restricting oil use to middle and peak loads. No new oil-fired electricity plants should be authorised except in particular circumstances where there are no practical alternatives. Existing capacity should be operated with maximum use of fuels other than oil.

(iii) Strong action is necessary in all countries to reduce the non-feedstock use of oil in industry. Careful review of the situation is warranted in Greece, Ireland, Japan, the Netherlands and the United States where forecasts suggest that oil use may grow rapidly, and in Germany, Italy and the United Kingdom where stronger action may be necessary to achieve the expected results.

(iv) Non-oil fuels, used either directly (including district heating) or converted to electricity should be substituted for oil in residential use wherever infrastructure exists or can be provided. Countries now using or considering district heating should consider greater use of coal for this purpose, including the possibility of converting oil-fired units. Australia, Canada, Germany, Italy and Japan should endeavour to replace oil by natural gas, the latter three countries through increased imports. Sweden should encourage the substitution of electricity for oil in the residential sector. The United Kingdom should ensure that its current plans to substitute natural gas for oil over the 1980s are realised.

(v) All countries should give greater emphasis to strong and comprehensive conservation programmes to encourage the rational and efficient use of energy in general and oil in particular. They must effectively inform the public about why and how to conserve energy, and they must produce results. In particular, housing insulation efficiency standards should be reviewed and increased where necessary. Countries that do not have insulation retrofitting programmes should give serious and prompt consideration to introducing them, wherever climatic conditions make them appropriate. Major conservation gains can also be made in other sectors, particularly industry and transportation, and appropriate actions should be taken to ensure that savings result.

(vi) In the transportation sector, substantial oil savings can result through continuing increases in fuel efficiency. Countries which now have fuel economy programmes (Australia, Canada, Germany, Japan, New Zealand, Sweden, the United Kingdom and the United States) should extend their programmes to ensure that efficiency gains continue through the 1980s and

review the existing programmes to see if they could be strengthened. Results should be assured, by making programmes mandatory if necessary. Countries not now having programmes should consider introducing them.

Consideration should be given to setting standards for commercial and recreational vehicles, and all countries should review the level and structure of their taxes on fuel-inefficient automobiles and gasoline.

All countries not having reduced speed limits should consider imposing them and enforcing them, in order to impress upon motorists the need to save fuel.

(vii) Stronger actions are required to expand coal production (Australia, Canada and the United States, which should be prepared to develop further their capacity to export substantial quantities of coal); use (Germany, Italy, Japan, Spain, the United Kingdom); and trade, where greater attention to long-term contractual arrangements is necessary to provide the stability and confidence to develop new mines and transportation facilities. Positive action is required to deal with environmental considerations, including demonstration projects and other support for technologies that can reduce environmental impacts.

(viii) Efforts should be made to increase natural gas supplies through increased domestic production (Norway, the United Kingdom and the United States) and imports (Austria, Belgium, Germany, Italy, Japan, Sweden and the United States). Strategies for gas use in all countries should ensure that use

is minimised in electricity generation and industry, where other alternatives to oil exist. Canada should continue and strengthen its efforts to promote increased domestic use of natural gas to replace imported oil.

(ix) Greater efforts must be made to accomplish projected nuclear programmes and to create an environment in which discussion of nuclear issues can take place in an objective and balanced way, taking account of economic and energy considerations as well as safety and proliferation aspects (Germany, Italy, Japan and the United States), and to streamline regulatory processes for the licensing of nuclear plants and for authorisations related to nuclear fuel cycle activities in other Member countries.

(x) Hydrocarbon exploration and development activities should be strengthened in order to maximize production in the longer term (Denmark, New Zealand, the Netherlands, Norway, Spain, the United Kingdom and the United States). Opportunities to increase production through enhanced recovery should be actively pursued.

(xi) Early action is required to accelerate the development and commercialisation of new energy technologies, particularly in the areas of conservation and liquid and gaseous fuels.

(xii) Countries which have not been individually mentioned above in connection with specific lines of action should actively pursue similar opportunities for new or stronger policy measures in all of the above areas which are applicable to them.

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SECRETARY OF STATE FOR ENERGY
THAMES HOUSE SOUTH
MILLBANK LONDON SW1P 4QJ
01 211 6402

Prime Minister

Paul — 21/5

Paul Lever Esq
Private Secretary to the
Foreign Secretary
Foreign and Commonwealth Office
Downing Street
SW1

21 May 1980

Dear Paul,

IRANIAN OIL PRICES

The American Secretary of Energy, Mr Duncan, called to see my Secretary of State yesterday and, as anticipated, the issue of Iranian oil prices arose. Mr Duncan urged strongly that the UK should continue to resist high Iranian oil prices, and also urged that we should discourage Shell from accepting the new (£35) Government Selling Price in respect of two tanker loads of Iranian oil which they had lifted at the beginning of April.

In reply, my Secretary of State invited Mr Duncan's attention to the considerable commercial disadvantages our companies were now suffering. They had followed HMG's guidance so far, but their supply position was difficult whereas other companies such as the Aramco companies were much better placed. Mr Howell suggested that the US should play its full part in resisting high OPEC prices, and referred to the cases of Libya and Algeria. Mr Duncan allowed that two thirds of Libyan oil oil exports were lifted by US companies, but said that a substantial part of the oil went to Europe. He would be willing to talk to American companies, but suggested that the UK should take the lead in discouraging other European countries from buying Libyan oil at a high price.

My Secretary of State was non-committal about Mr Duncan's suggestion, and, is in fact, very doubtful as to whether we should put ourselves in the front line in the way he suggested, or whether we should see this as anything more than a very informal operation applying where the opportunity arises in all OPEC countries when exorbitant increases are being sought. Mr Howell feels we have done our part by holding back Shell and BP in Iran and that now we should expect the Americans, and the Japanese, to play their full part.

I am copying this to Michael Alexander (No 10), to the Private Secretaries of members of OD and to David Wright (Sir Robert Armstrong's Office).

Yours ever,

Denis Walker

D P Walker
Private Secretary

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Energy

10 DOWNING STREET

From the Private Secretary

13 May 1980

Dear Denis,

IEA Ministerial Governing Board and EEC Energy Council

I am writing to confirm that, as I told you on the telephone earlier today, the Prime Minister is broadly content with the line set out in the Secretary of State for Energy's minute to her of 9 May. However the Prime Minister has said that under no circumstances should we agree to produce extra oil from the North Sea unless we consider that it is in our own interest to do so. The Prime Minister is also sceptical about the attempt to produce quantified guidelines for Community energy policy in 1990. She has characterised attempts to do as ridiculous.

I am sending copies of this letter to George Walden (Foreign and Commonwealth Office), John Wiggins (H.M. Treasury) and David Wright (Cabinet Office).

Yours ever

Michael Alexander

Denis Walker, Esq.,
Department of Energy.

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(1)

Prime Minister: The Foreign Secretary and the Cabinet Office are both content with the line proposed by Mr Rowell. Agree?

PRIME MINISTER

IEA MINISTERIAL GOVERNING BOARD AND EEC ENERGY COUNCIL

This minute seeks your agreement to the line I propose to take at the IEA Ministerial meeting on 22nd May and at the preliminary discussion in the EEC Energy Council on 13th May. It covers the question of targets about which I minuted you on 14th April.

IEA Ministerial

The main proposals are likely to be:-

a) Agreement on the medium-term policies needed to reduce the dependence of the Western economies on OPEC oil. The proposals include specific recommendations addressed to named countries which Ministers will be asked to "reflect" in the decisions of their Governments on national energy policies.

b) Acceptance that implementation of the suggested policies will reduce oil imports of IEA countries in 1985 by 4 million barrels per day below the existing group objective of 26.2 million barrels per day and by a further 2 million barrels per day by 1990.

It is ridiculous to quantify targets like this.

c) Development of annual figures indicating individual countries' requirements as a yardstick for measuring progress.

d) Endorsement of a system for turning these figures into net import ceilings in a tight market. This system was developed by the official Governing Board in accordance with the decisions of the

Ministerial meeting on 10th December (see my my minute of 12th December).

e) Agreement that if a tight market appears imminent Ministers will meet at short notice to take effective action to restrain demand. There is disagreement between the Americans and others who want agreement in principle now to the use of import ceilings in a tight market and those including the Germans and ourselves who have been arguing that it should be stated in terms that Ministers will decide at the time whether to introduce import ceilings. The Japanese are supporting the Americans on the grounds that if they are to persuade their companies to keep out of the spot market in a tight situation they must be able to show that the burden is being fairly shared.

f) Agreement to consult about oil stock policies and to examine the possibility of holding stocks above emergency reserves for flexible use in meeting short-term market fluctuations.

Ministers are likely to discuss relations with the OPEC countries in a restricted session. And of course in the event the meeting may have to give much time to the implications of the Iranian situation for the oil market.

There is much in the above which we accept and indeed welcome - the emphasis on strengthening the energy policies of individual countries with a pinpointing of weaknesses; an emphasis in the specific recommendations on pricing policies particularly the US and Canada, on the need for a political lead on nuclear power, and on the expanded use of coal; and the proposals for flexible use of stocks (which do <u>not</u> involve a buffer stock).

The most difficult issue is the decision on how to handle a tight market. We cannot afford on either political or economic grounds to stand back from international efforts to find practical means to stop a new tight market from leading to a price explosion like that of 1979. But I would wish to avoid a commitment in principle to the use of import ceilings. I doubt if they would work and they might lead to import controls and allocations if other measures to reduce consumption proved inadequate. I would therefore propose to stick on our present position ie that the decision must be left to be taken at the time. I would consult you again if the Germans seem likely to give way leaving us isolated or if a compromise emerges - but it is difficult to see one.

The other point which is difficult for us is the proposal in para 2(b) which indirectly sets a revised net oil import target for 1985 and a target for 1990. The Germans are prepared to agree to aim for import levels below the present 1985 goal but are opposed to putting figures to that aim. I hope that they will be successful in persuading the Americans that this is acceptable. But if it is essential in order to reach agreement, I would like to be able to accept a figure for the additional savings which may be possible provided it is not broken down into new national goals.

I enclose a note on your queries about the value of 1990 forecasts (Mr Alexander's letter of 17th April to my Private Secretary). I believe that we need long-term forecasts - both domestic and international - in the form of ranges and based on clearly stated assumptions as an aid to policy-making in an area where the lead times are so long. But single figure objectives or forecasts give a spurious air of precision to what is at best a very uncertain exercise. The pressures to meet them may encourage dirigiste rather than market oriented policies. However the fact is that a number of friendly countries, particularly the US, use targets in their own energy policy work and attach importance to their adoption internationally. The Germans are prepared to consider 1990 objectives in the IEA in terms of key energy indicators on the lines of the proposal before the Energy Council (para ? below). In the last

resort I do not believe this issue is worth a row and I would propose, if you agree, to seek a compromise either on the lines suggested by the Germans or if necessary on the basis of an IEA group figure for imports or consumption.

EEC Energy Council

Quantified guidelines are ridiculous

The Council will be asked to adopt a statement of Community energy policy objectives for 1990 which includes three quantified guidelines for the Community as a whole - to reduce to 0.7 or less the average ratio of growth in gross primary energy consumption to the rate of growth of the gross domestic product; to reduce oil consumption to no more than 45% of gross primary energy consumption; and to cover 70-75% of primary energy requirements for the production of electricity by means of solid fuels and nuclear energy. Guidelines of this sort are of little value without much careful analysis and interpretation although they may have some effect in stimulating the laggards eg the Italians and Dutch who burn too much oil in their power stations. I would explain our doubts. But the UK should have no difficulty in complying with the guidelines. So I would propose if a large majority of our partners press the point to agree to their adoption. I would resist French pressure to redefine the guidelines as "objectives".

Under no circumstances must we agree to reduce any extra oil from the North Sea. MT

Conclusions

I should be grateful for your agreement to handle the IEA and EEC meetings on the lines suggested above. This involves compromise. The line suggested in this minute is not one which I would ideally wish to adopt. But as I said in my minute of 14th April a compromise on these lines would be a small price to pay to avoid a major and unnecessary dispute with the Americans in the IEA - all the more undesirable in the light of developments in Iran - or with our partners in the Community. The main UK interest lies in avoiding a commitment in advance to use import ceilings in a sub-crisis and

to retain the right to decide for ourselves what national measures we would take to reduce demand. I would propose to concentrate on that.

I am sending copies of this minute to the Foreign and Commonwealth Secretary, the Chancellor of the Exchequer and Sir Robert Armstrong.

D A R HOWELL
SECRETARY OF STATE FOR ENERGY

9 MAY 1980

INTERNATIONAL ENERGY TARGETS FORECASTS TO 1990

National Forecasts

1. All Energy Ministers in developed countries have a responsibility for ensuring that their national economies can expect an adequate energy supply at reasonable cost. They all share, therefore, a common need to form as accurate a view as possible of future developments both nationally and internationally. In the UK the Secretary of State is responsible for approving the capital expenditure plans of the public sector energy industries, which is another way of saying that he is responsible for ensuring that supply/demand balance is maintained at an acceptable cost. The timescales involved in energy planning are very long indeed. Major objectives take up to 10 years or more to bring on-stream, and, while each of the energy industries has its own specialists to produce forecasts it is vital that the Department should form an independent and objective view of future developments which takes account of wider considerations, including the macro economic effects and the international dimension. If energy supplies 10 years hence are to be affected by policy decisions which have to be made now, the best possible quantitative assessment of the future must be available.

2. To this end the Department makes and has published projections of energy developments which go well beyond 1990. These projections are based on plausible hypotheses about further levels of economic activity, about the relationships between the level of economic activity and the growth of energy demand, about the availability and cost of oil and the likely pace of developments in coal, gas nuclear etc. Each of the projections is intended to represent a plausible and internally consistent view of the future. Collectively they are intended to span the range of possible future developments against which the suitability of energy policy can be tested. However none of these projections is by itself considered to be the one best single view of how the future might emerge.

International Targets

3. The main area in which an international consensus about future demand is important is that of oil supply. Given the effect upon our economy both of uncertainty about oil supply and of the consequences of that uncertainty for prices, it is important that the oil consuming nations adopt policies designed to restructure their energy economies and drastically to reduce their dependence on imported oil. The extent to which those policies are working (and indeed the extent to which they need to be modified) must be monitored and this can only be

done if yardsticks are established by which progress can be measured. Since the lead times for effective decision making internationally are at least as great as they are nationally, yardsticks for 10 years ahead are necessary. The UK's perception of the future, reflected in our national forecasts, need to be reflected in any quantified objective agreed internationally, partly to ensure that the international yardsticks do not conflict with our own and partly to draw support for domestic policies from the international concensus of which they form part.

4. At all times, however, we are talking about forecasts (or more properly projections) and a quantified presentation by possible futures against which policies can be measured, and, if necessary, modified. They are not targets which are, in the IEA context, single figure goals which Member Nations are committed to pursuing. Such a goal would not in our view, be appropriate for 1990 since the range of uncertainties are too wide and the potential difficulties of being required to adhere to a single figure target too great.

International case for accepting targets

5. The Carter Administration have attached particular importance to national and international targets. This stems in part from the American belief in goals as a spur to action; but also from the Administration's concern that domestic support for painful adjustments in energy consumption cannot be obtained without evidence that America's allies are pulling their weight; and from their conviction that quantified evidence of industrialised countries' determination to reduce oil demand will strengthen the hand of OPEC moderates - Saudi Arabia in particular. The French and the Danes share the first and the last of these views which complement the IEA Secretariat's desire to create an effective mechanism for indicating to governments the direction their policies should take and for measuring the results. Over the last three years Ministers of IEA Member countries have endorsed - with greater or lesser conviction - the principle of medium (1985) and long (1990) term objectives in the IEA's efforts to reduce energy consumption.

PART 4. ends:-

Energy to NJS of 7.5.80.

PART 5 begins:-

s/s Energy to PM + att of 9.5.80.