



CCAD

DEPARTMENT OF ENERGY  
THAMES HOUSE SOUTH  
MILLBANK  
LONDON SW1P 4QJ

Direct Line 01-211 4953  
Switchboard 01-211 3000

From the  
Parliamentary Secretary

Rt Hon John Biffen MP  
Chief Secretary to the Treasury  
Treasury  
Parliament Street SW1P 3HE

12

23 September 1980

26/9

*Dear John*

1980 IFR - DEFERMENT OF MORECAMBE BAY GASFIELD

At E(80)24th, it was agreed that David Howell would make proposals on the timing of the development of the British Gas Corporation's Morecambe Bay Gasfield. In his absence abroad I am writing to you.

In consultation with your officials, my officials have prepared the attached paper on the subject. As you will see, it concludes that there is a strong case for giving BGC approval for the first phase of the development because:-

- a. it will be a profitable investment which will meet the RRR criteria;
  - b. without it there is a serious risk that BGC will be 3m therms a day short of their forecast peak winter requirement in 1983/4, after having made allowance for their continuing to restrict supplies (primarily to industry) and assuming that the Rough storage project is commissioned to time. Furthermore, if Rough slips one year there will be an even greater deficit in 1984/5;
  - c. although there are other possible sources of supply, it is very unlikely that they could be developed in time to meet the 1983/4 and 1984/5 deficits;
- and
- d. although it would be possible in principle to reduce the forecast deficits by further supply restrictions, this could only be achieved by a massive cutback in industrial and commercial sales, which would reduce BGC's revenue by some £350m a year at 1980 prices. Because their gas costs could not be reduced prorata for contractual reasons the effects on their profits and hence the harm to the PSBR would, in fact, be greater than the cost of developing Morecambe.

On the other hand, there does not seem to be the same pressing need for developing the second phase because other options, such as the development of additional Southern Basin supplies, could well be able to replace it.

I agree with these conclusions. Apart from the opportunities for industry (including British Steel) that a project of this magnitude will give, we believe that we must take every step possible to enable



Rt Hon John Biffen MP  
September 1980

BGC to remove their current restrictions on supplies to industry. Until this happens the UK energy market will not work efficiently and the pressures on coal and oil to keep prices down will be lessened. Admittedly there are signs that gas demand has fallen recently, but this is as a result of the recession in economic activity and is unlikely to have a significant impact on peak winter demand. In any event, I believe any easing in the supply constraints on BGC should be used to sell more gas to industry, rather than defer profitable capital investment.

Furthermore, we must recognise the risks we would be taking if we refused to allow the first phase of Morecambe to proceed. BGC have told us that without it there will be a serious risk that they will not be able to meet peak demand in 1983/4 and 1984/5. Even with it a risk exists, but that would be due to a failure on the part of BGC and their suppliers rather than to explicit action by us. If we refused them consent, I have no doubt that the blame for any supply failures in those years would be laid squarel at our door.

The same risks may not apply to the second phase of Morecambe, because that will produce additional peak capacity after 1985 and there are other ways of achieving that within the timescale. In addition, we must take steps to encourage further gas exploration, particularly in the Southern Basin. On the other hand, if BGC did press ahead with Phase 2, there would be greater scope for them to increase their sales to industry and thus open up the energy market more. On balance, however, I am inclined not to give approval at this stage to the second phase, although the extent to which this is possible will depend on discussions we will have with BGC once we have agreed that the first phase must proceed.

I am therefore seeking your agreement to:-

a. deleting the first phase of development of the Morecambe Bay Gasfield from the list of possible option cuts in the 1980 Investment and Financing Review. This would probably reduce the cuts which we are considering for BGC to:-

<u>1981/2</u>	<u>1982/3</u>	<u>1983/4</u>
£20-55	£20-65	£20-70

b. opening discussions with BGC about the possibility of deferring the second phase of Morecambe Bay until negotiations for additional supplies are sufficiently far advanced to enable us to compare the benefits in national economic terms of developing those instead.



Rt Hon John Biffen MP  
September 1980

I am copying this letter to the members of "E" Committee and  
Sir Robert Armstrong.

*J -*

*Norman*

NORMAN LAMONT



CONFIDENTIAL

CAPITAL INVESTMENT REVIEW: MORECAMBE

British Gas is proposing to develop its Morecambe field in up to 3 phases each supplying a nominal 6 million therms a day at peak. Planning is currently to complete Phase I by the winter of 1983/84 and Phase II by 1984/85. No target date has yet been proposed for Phase III, which will drain a separate part of the field.

2. British Gas' estimate on cost of the first 2 phases of the development is:-

£m	1980/81	1981/82	1982/83	1983/84	1984/85
Morecambe					
Phase I	31	80	88	75	70
Phase II		35	45	50	44

The investment for Phase II is lower because it can make use of some of the facilities needed for Phase I. In fact Phase I output may be well above the nominal figure of 6 million therms a day depending on well productivity which will be known only after production begins. In that case Phase II may not be needed on a smaller scale.

3. Since Morecambe gas is slightly lower in calorific value than that normally distributed it must be blended with other gas to make it suitable. BGC therefore plans that the additional transmission capacity which would in any case be needed to provide supplies from Scotland to the North-West and West Midlands from the mid-1980's should be provided by a pipeline down the west coast to pick up the gas from Morecambe. While BGC has not examined other means of providing this capacity it is thought that costs would probably be similar whatever the route. Onshore transmission has therefore been excluded from the costs quoted.

Discussion



large-scale source of winter supplies and that its development would produce a rate of return at least equal to the RRR. The question remains, however, whether it should be developed on the scale and to the timetable which BGC have proposed.

5. The case for deferment of all or part of BGC's plan for Morecambe relates to two main concerns:

- i) Short term PSBR effects. The capital cost of Morecambe is high and a saving of some £240 million over the current PESC period could ostensibly be made by deferring Morecambe for 2 years, for instance;
- ii) Depletion Policy. About 5-6 tcf of gas been discovered, but not proved or developed, in the Southern Basin. So long as these reserves remain uncontracted, there is little incentive to further exploration there. The poor response to the Southern Basin blocks offered in the Seventh Round is evidence of this. The development of Morecambe will, within a restrictive depletion policy, defer the development of that discovered Southern Basin gas and therefore further defer exploration for more. It is important for depletion policy reasons for us to have the best possible knowledge of the available reserves.

6. Supply and Demand

British Gas currently has excess supply capacity during the summer but an urgent requirement for additional capacity during the winter. The table below shows its forecast of peak supply and demand from 1983/84 which is the first year in which Morecambe could contribute.



CONFIDENTIAL

Peak Supply & Demand: 1989 Corporate Plan

(million therms/day)	<u>1983/84</u>	<u>1984/85</u>	<u>1985/86</u>	<u>1990/91</u>
Peak demand without marketing restrictions	116	122	126	135
Less:				
contracted supplies & Committed Storage (excl. Rough) *	105	105	100	70
expected but not yet contracted supplies at normal load factors	-	-	3	30
Remaining requirements for peak supplies	11	17	23	35

\* Rough is excluded because of a real possibility that the project will slip significantly.

7. Current plans are to meet <sup>the</sup> very substantial deficits up to 1985/86 by a combination of marketing restrictions, development of the Rough storage and development of Morecambe.

Other Potential Peak Capacity

8. Provision onshore of peak capacity would, like Morecambe, add directly to the PSBR and would cost approximately twice as much.

As far as the Northern Basin is concerned there is no real prospect of obtaining additional seasonal supplies. The load factors on the Brent line and the new gas-gathering line will be high and their output cannot be raised above the levels which have been taken into account in the table in para 6. While in principle it might be physically possible by the addition of compression to the UK line to Frigg to increase supplies by around 3 m. therms/day by about 1983/84, we cannot rely on the licensees and the Norwegian Government to agree to the extra production from the field, and at best negotiations would be likely to be protracted. It is therefore only



CONFIDENTIAL

the Southern Basin which could replace all or part of the contribution from Morecambe.

9. Three possibilities for additional Southern Basin supplies have been examined in some detail.

i) a scheme, suggested by Amoco, for collecting gas from several small deposits. These deposits have not been proved, indeed the largest one concerned has been identified only by seismic survey. Not all are in the ownership of Amoco. This must be seen as a potential prospect for the later 1980s, not 1983 - 1986.

ii) the Sean field. This could be developed to give peak capacity of some 6 million therms a day for 5-6 years with first supplies in 1984/85 and peak output the following year. This scheme offers no help in 1983/84 and, because the field has not yet been fully proved, is less reliable than Morecambe as a contributor to supplies in 1984/85. It does however appear to be a potential substitute for Phase II of Morecambe. There are other fields which it might well be possible to develop on a similar timescale if BGC were to approach the producers with serious proposals soon.

iii) Hewett. The licensees have offered two possibilities :

a) to increase peak capacity by 2 million therms a day in exchange for a quadrupling of the price paid for existing contracted production. The latter would cost BGC around £160m a year from 1981/82 and since only 55% of this would be recouped via Corporation Tax and royalties there would be a net cost of £72m a year to the PSBR. In addition, the offsetting of the licensees' capital expenditure of around £100m against their profit for Corporation Tax purposes would result in a short-term loss of around £50m in tax revenue.

b) to store gas from other fields in Hewett during the summer to maintain the reservoir pressure and hence winter output capability. The licensees have not produced a detailed analysis of this option but the contribution to peak supplies might again be around 2m therms/day. The cost to BGC appears likely to be much greater than that for the equivalent output from Morecambe.

It must be added that besides being expensive additional supplies from Hewett must also be regarded as unreliable, both because of the performance of the field in recent years and because of past experience of the difficulties of obtaining agreement from the 13 licensees to new contract arrangements.

10. The indications are, therefore, that Hewett would be an inadequate and, in terms of PSER, more costly substitute for Morecambe. The Amoco suggestions could not be implemented in time. Most probable timing for Sean would be a year later than Morecambe: it could not therefore substitute for Phase I of the Morecambe development but has promise as a substitute for Phase II.

#### Demand Restraint

11. A second possible option if Morecambe were deferred would be further to depress demand. But tariff demand up to 1983 is effectively determined by BGC's statutory obligation to supply and by the financial target and price decisions already taken. Only a massive increase in prices could have much effect on peak demand in the years <sup>to</sup> 1983/84 to 1985/86. Any reduction in peak demand therefore has/be obtained in the industrial and commercial firm contract markets. But these markets are expected to grow very slowly over the next few years and to reduce peak demand by 6 million therms per annum would require not only a cessation of expansion but also a massive cutback in renewals of existing contracts. A reduction in annual demand of around 1400 million therms, equivalent to about 25% of current supplies to these



CONFIDENTIAL


markets, would be needed. Even if this situation were acceptable the loss of revenue by BGC would amount to over £350 m a year at present gas prices, and <sup>because</sup> BGC is paying without taking for the gas, there would be very little corresponding reduction in total costs. The additional reduction in demand would not need to reach its full amount until 1983/84; but it would have to be phased in in the preceding years. It is very probable therefore that an additional planned restriction of demand of this magnitude would add more to the PSBR than developing Morecambe.

Supply/demand matching

12. Potential contributions to peak requirements in 1983/86 are, in m. therms/day:

	<u>1983/84</u>	<u>1984/85</u>	<u>1985/86</u>
A. Remaining Requirements (see para 6)	11	17	23
Existing marketing restraints	4	6	6
Rough	4	10	10
Morecambe Phase I	6	6	6
B. Sub-total	14	22	22
Morecambe Phase II	-	6	6
Sean	-	2	6
Potential Surplus if all succeed	+3	+13	+11

It must be borne in mind that the contributions from Rough and Morecambe I in 1983/84 and 1984/85 are somewhat uncertain. Because of the tight timescales there is a significant chance that either or both could slip by a whole year (and greater slippage is not impossible). The apparent surpluses shown in line B for 1983/84




and 1984/85 may therefore well not be achieved. A one year's delay in bringing Rough on stream would produce a deficit in each year of 1m therms/day, while a year's delay in Morecambe would produce a greater deficit (3m therms/day) in 1983/84 but a surplus of 5m therms/day in 1984/85. If a surplus is in fact achieved it will permit the removal of the marketing restrictions earlier than would otherwise be possible. The consequent expansion of sales will tend to reduce the PSBR, though because of the need to incur capital costs to distribute the additional supplies the effect in the first year of any phase of expansion is likely to be broadly neutral; thereafter the benefit could be around £50m/year per million therms/day of peak capacity.

13. The general picture which emerges is that if Morecambe I is deferred a year there will be a significant peak deficit in 1983/84 and again, if Rough should slip, in 1984/85. On the other hand Morecambe II appears only to be required on this timescale if Rough should slip by two years. After 1984/85 options such as the development of Sean may be able to replace Morecambe II's contribution to the expansion of supplies.

14. The development of Morecambe I would not defer the development of Southern Basin fields; the leading candidate for such development will, unless Morecambe II is also approved, be needed as fast as it can be developed. Approval of Morecambe I will significantly reduce the risk of a supply shortfall in all 3 winter seasons considered. Above all if no approval is given for Morecambe, a failure of supplies, even if it would have occurred in any case, can and is likely to be blamed on the Government.

15. It is more difficult to make the same case for approving Morecambe II. It will not contribute to peak requirements in 1983/84. In 1984/85 and 1985/6 it is not essential to meeting peak demand provided Rough and Phase I do not slip and Sean is developed to time although the margin for error will be narrow if BGC's marketing restrictions are withdrawn. Furthermore if



the Government maintains the current restrictive gas depletion policy, development of Morecambe II could defer development of any new Southern Basin gas for at least a year. In these circumstances it is difficult to see licensees taking any initiative to explore the Southern Basin further until BGC has made a start on contracting those fields that have been discovered for 10 years or more.

#### CONCLUSION

16. The arguments both on PSBR and supply security grounds point to approval of the first phase of Morecambe now. This conclusion is the stronger in that, if approval is not given, shortages in 1983/84 will be blamed on that act of non-approval. There is less justification for approving Morecambe II now although the extent to which delay is possible cannot be resolved without detailed discussions with BGC. If, following these discussions, it is agreed that Morecambe II can be deferred without apparent risk, then not only could negotiations for Sean or other supplies proceed far enough for the costs of producing that gas to be compared with those of developing Morecambe II, but the Government would also have given itself time to decide on its gas depletion policy before approving Morecambe II.

23 SEP 1980

