

File on B14



C  
Prime Minister ① |

Agree A, B and C?

Yes not

(you will see from

plans A+B that the Treasury and DTI concur)

Prime Minister

POWER STATION AND INDUSTRIAL ENDURANCE

The official group on coal, MISC 57, has been considering a number of issues in connection with endurance in the event of a miners' strike. A report on the medium term is in preparation. The two reports attached to this minute deal with industrial endurance and ancillary materials at power stations.

MCS

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Having studied these reports, I propose that on the first one, we should take immediate decisions to:

A

- (i) increase stocks of coal held by the cement industry at a cost of £1-1.2m (paragraph 13);
- (ii) increase coal stocks held by small industrial consumers and at depots, cost £1.5m (paragraph 17-18);
- (iii) increase coal stocks held by large industrial consumers, cost £2.2m (paragraph 16)

These measures would need to be financed by increases in the NCB's deficit grant limit and EFL.

B

I also suggest that MISC 57 should examine further the possibilities for a scheme to help certain customers who normally draw coal direct from the pits (paragraph 20).

C

As to the second report, my conclusion is that we should take no immediate action on additional stocks of ancillary materials at power stations. This question will need to be looked at further in the light of the forthcoming report on endurance in the medium term.

The decisions in paragraph 2 are now urgent if these additional stocks are to be in place by October. I would therefore be grateful for your earliest agreement to proceed.

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I am copying this minute to the Home Secretary, the Chancellor of the Exchequer, the Secretaries of State for Defence, Scotland, Employment, Trade and Industry and Transport, and to Sir Robert Armstrong, for the usual limited circulation.

A handwritten signature in cursive script, which appears to read "Cecil Dull".

SECRETARY OF STATE FOR ENERGY

23 June 1983

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INCREASING INDUSTRIAL ENDURANCE OF A MINERS' STRIKE

Report by the Official Group on Coal (MISC 57)

INTRODUCTION

1. The current pattern of coal consumption in Great Britain is as follows:-

electricity generation	73 per cent
industry	16 per cent
domestic consumption	7 per cent
miscellaneous	4 per-cent

Most of the industrial consumption is accounted for by large firms; at least 80 per cent is consumed in major establishments, and over 60 per cent is used by the iron and steel industry, including substantial imports.

2. In the event of a miners' strike the Government's first priority must be the maintenance of electricity supplies, which is the present strategy. As the table above demonstrates, industry is the only other substantial user of coal. The achievement of lengthy power station endurance therefore raises the questions of how far industrial endurance might similarly be extended and what the effects would be if coal burning industry were temporarily to cease operation during a miners' strike. The purpose of this report is therefore:-

- a. to assess the significance to the economy of the continued functioning of coal burning industry during a miners' strike;
- b. to confirm the continued acceptability of a strategy which assumes considerably shorter endurance of coal burning industry than of the power stations; and
- c. to consider how far it would be feasible and desirable to increase the endurance of coal burning industry.

In order to set the remainder of this report in context, Ministers will recall that the level of power station endurance planned for November 1983 is 26 weeks.

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3. There seems no need to consider special measures to improve the endurance of domestic and other minor coal consumers. It is not unreasonable to assume that they would often have access to alternative sources of energy to a considerable extent. Where this was not possible some inconvenience and possibly hardship would have to be endured, although in the case of particularly vulnerable domestic users (the old, the sick etc) the National Union of Mineworkers (NUM) has maintained coal deliveries during previous strikes and there is no reason to believe that they would not do so again.

THE INDUSTRIAL AND ECONOMIC EFFECTS OF A LENGTHY MINERS' STRIKE

4. The main industries whose output would be directly affected by a loss of coal supplies are as follows:-

iron and steel  
cement  
motor vehicles

Other industries which would be affected eventually are parts of the engineering and metal trades (including aerospace and electrical engineering), the paper and board and sugar processing industries and, to a lesser extent, the chemical industry.

5. However, for all industries except cement production the shortfall in domestic production occasioned by a miners' strike could probably be made good for the duration of a lengthy miners' strike through increased imports or extra production by manufacturers not dependent on coal. In particular, in the case of iron and steel it seems likely that production could be maintained at two of the British Steel Corporation's (BSC) five main plants (Redcar and Port Talbot) since these are normally supplied with imported coal by ship. Whether production could also be maintained at Ravenscraig would depend on whether the movement by rail of imported coal from Hunterston to Ravenscraig continued during a miners' strike.

6. In the case of motor vehicle production, some of British Leyland's major plants are dependent on coal and might, therefore, have to close temporarily. The effects of this would clearly be felt not only by the Company itself but also by its component suppliers.

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7. The production of cement is totally dependent on coal. Cement is not normally imported in significant quantities. However, in the event of a miners' strike it might prove possible to import about 20 per cent of normal cement consumption. Moreover, if the major cement works at Northfleet were successfully to import coal during a miners' strike (which it is capable of doing, but normally does not), its continued cement production plus cement imports might together provide up to 40 per cent of normal domestic consumption.

8. Given that normal electricity supplies would continue for up to 26 weeks, the industrial and economic effects of a lengthy miners' strike would build up only gradually, since different establishments have different endurance; there would, however, be significant step changes when production had to cease at those vehicle plants dependent on coal and, more importantly, when supplies of cement were exhausted. The possible economic effects of a lengthy miners' strike have been analysed using the Department of Industry's input/output model. This suggests that once industrial coal stocks were exhausted and supplies of cement reduced to the 20-40 per cent of normal, GDP might be reduced by around 20 per cent and unemployment increased by about  $1\frac{1}{2}$  million, or possibly slightly more. The model attributes the bulk of these effects to the reduction in cement supplies. If the normal level of cement supplies could be maintained, the economic effects would be relatively modest; GDP would be reduced by only around 5 per cent and unemployment might increase by only  $\frac{1}{3}$  million. The most serious effect seems likely to be on the balance of payments. The model suggests that the adverse impact might range from  $\pounds 3\frac{1}{2}$ - $5\frac{1}{2}$  billion, with cement supplies of 20-40 per cent of normal, <sup>to</sup> up to  $\pounds 9$  billion if normal levels of cement supplies were to be maintained. (The reason for this apparently paradoxical relationship between the level of cement supplies and the total impact on the balance of payments is that the greater the level of cement supplies the greater the level of total economic activity and therefore the higher is the demand for imports, while the level of exports is unlikely to vary much with the availability of cement supplies.)

9. It is impossible to predict what, if any, the permanent effects on manufacturing industry would be of a lengthy miners' strike in terms of lost jobs, production and markets. There has never been a really lengthy miners' strike on which to base such an analysis. However, it is generally true that the lasting effects on the economy of strikes are often less serious than were supposed before or during the strike.

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10. The above analysis suggests that, although the immediate effects on the economy of a prolonged miners' strike would be serious they would not be intolerable so long as power supplies were maintained. This confirms that the correct strategy is to concentrate on improving power station endurance. Nonetheless, measures which might improve the endurance of coal burning industry at reasonable cost are clearly worth considering, particularly in the case of the cement industry and to a lesser extent vehicle production. The possibilities which have been identified in consultation with the National Coal Board (NCB) are discussed in the following section.

POSSIBLE MEASURES TO INCREASE INDUSTRIAL COAL STOCKS

11. The NCB believes that industrial coal stocks are normally at their highest in October, because coal prices are usually increased on 1 November; industrial action associated with the NUM pay claim can normally be expected in the winter; and heating requirements are greater in the winter. The average endurance of major establishments in manufacturing industry as a whole was  $9\frac{3}{4}$  weeks at the end of September 1982, based on coal consumption during the fourth quarter of 1982. Because of the likelihood of a miners' strike at that time, this level of industrial coal stocks is believed to be close to the physical limits of normal stocking sites. The average endurance, calculated on the same basis, of major establishments in the three most vulnerable industries was as follows:-

iron and steel	6-10 weeks
cement	$11\frac{1}{2}$ weeks
motor vehicles	$6\frac{1}{2}$ weeks

The NCB believes that in the absence of incentives the average endurance of major establishments by this October would probably be about 10 weeks. Small industrial consumers typically have an endurance of not more than 3-4 weeks.

12. In principle industrial coal users might import coal during a miners' strike. Coal traders and large companies would know the market well enough and the NCB would be prepared to offer advice despite its obvious concern to protect its markets. However, in practice the miners are likely to succeed during a strike in blocking abnormal coal imports on any significant scale. The main scope for improving industrial endurance lies, therefore, in offering to industry incentives to increase their levels of coal stocks above what they would otherwise have been and perhaps also their coal stocking capacity. The options for

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doing so are discussed in the following paragraphs. These generally build on the arrangements which the NCB has already negotiated with a number of its major customers, including the cement companies, following the decision taken by Ministers before Christmas to allocate £2.5 million to finance discounts and extended credit terms by the NCB for the purpose of ensuring that industrial coal stocks were maintained at about the October 1982 level rather than being run down during the winter, as is generally the case, both for financial reasons and because by then there is no longer perceived to be a risk of a miners' strike over pay. These special terms were introduced because of the possibility of a miners' strike early this year over closures. This issue now before Ministers is what measures need to be taken to ensure adequate industrial coal stocks by November 1983 against the possibility of a miners' strike then.

#### The Cement Industry

13. The present arrangements with the three cement companies provide for their coal stocks in October 1983 to be sufficient for about 18 weeks expected consumption in the case of one company and 10-12 weeks in the case of the other two. (The difference arises because one company had spare coal stocking capacity immediately available and could therefore take maximum advantage of the discount on offer, whereas the other two would have to enlarge their stocking capacity to increase their stocks above 10-12 weeks; this they would be prepared to do if the previous discounts were to be repeated). It ought to be possible to bring the coal stocks of all three up to between 16-18 weeks, but this would require new arrangements involving in total about 200,000 tonnes extra coal at a cost of £5-6 per tonne. In addition, stocks of cement and cement clinker are normally sufficient for a further 4-6 weeks normal consumption. Thus, the total endurance of cement supplies would be 20-24 weeks if this measure were to be implemented.

#### The British Steel Corporation

14. The endurance of the BSC's two major plants which are dependent on NCB coal (Llanwern and Scunthorpe) is currently only about 5 weeks. The NCB considers that there is no practical chance of building up stocks further at Llanwern if the present high rate of coal consumption there is maintained. The level of coal stocks at Scunthorpe could in the NCB's view be increased from the 6 weeks planned for October 1983 to perhaps 8 weeks, but the local works management do not regard this increase in endurance as worth the effort involved. In practice the temporary closure of Llanwern and Scunthorpe would not matter a

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great deal, since at least some of their products could probably be supplied from those plants which are likely to continue to operate (see paragraph 5) or from stockholders or imports.

#### Motor Vehicles

15. The existing arrangements should bring stocks very close to capacity - about 6 weeks - at British Leyland, but the NCB are currently considering whether this could be improved by exceptional measures.

#### Other Major Industries

16. The present arrangements with most other large coal consumers should provide for an average endurance of about 10 weeks by October 1983. The NCB considers that it ought to be possible to increase the endurance of a few of its major customers, mainly in the chemical and textile industries, to perhaps 15-20 weeks or even longer in some cases by offering an additional incentive of about £5 per tonne relating to total additional coal stocks of 450,000 tonnes.

#### Smaller industry

17. Stockholding on their own sites by smaller industrial companies is limited, and it is unlikely that such companies' endurance would exceed 3 or 4 weeks. The NCB consider that with a determined effort this could be raised to 5 or 6 weeks at a cost, probably, of £6 a tonne on a total tonnage of about 150,000 tonnes.

18. A number of consumers in this category are supplied from depots. The total stockholding for this category of consumers could be raised to an equivalent of 7 weeks consumption if additional deals were made to hold increased stocks of industrial coal at depots. This would be more expensive per tonne because of double handling, and the NCB estimates that this would cost about £7 to £8 a tonne on a total tonnage of 80,000. The NCB would plan to use about 15 of the 44 larger coal depots throughout the country for this purpose. Many of the 44 depots are in the South and West of the country, and in the North West. Those in the North West would probably be the more vulnerable to picketing, but the location of coal there would probably be the more valuable to industry. There was little or no picketing of these depots in the strikes in the early 1970s, but that is not necessarily a guide to what would happen today. Against the risk of successful picketing, however, must be set the probability that some coal could be got away from these depots in anticipation of a strike. Moreover, this measure would make it easier for the Government to resist pressure during a miners' strike from small industrial consumers for it to be settled quickly.



Special strategic stocks

19. Another problem relates to the concentration of industrial customers in and the near the coal fields who typically can hold little or no stocks on their own premises and who therefore normally draw coal direct from the pits. The NCB believes that it ought to be possible to organise strategic stockpiles for these customers on sites away from the pit fields; neither the sites nor the coal stockpiled at them would be owned or manned by the NCB. The NCB has in mind a total provision of perhaps 150,000 tonnes, which would provide an endurance of perhaps 7-8 weeks. The cost involved would be between £8 and £10 per tonne. This is higher than in the other proposals discussed above, because the sites involved would have to be specially equipped.

20. The creation of such stockpiles would be bound to be visible and difficult to explain in the absence of a threat of early industrial action. Moreover, during a miners' strike such stockpiles would clearly be targets for picketing. Thus, if Ministers agree in principle that discounts along the lines proposed above might be offered, Departments will have to establish urgently with the NCB whether a practicable scheme along these lines could be devised before any steps are taken to establish the stockpiles.

Summary of Costs

21. To summarise, the total costs of all the above schemes are as follows:-

cement	£1-1.2m
other large industries	£2.2m
small industries	£0.9m
coal depots	£0.6m
strategic stocks	£1.2-1.5m
	<hr/>
	£5.9-6.4m
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The NCB thinks that in practice extra expenditure in 1983-84 of £5 million in round figures might be involved, since it may not prove possible in the event to carry out fully all of the schemes discussed above.

DISCUSSION OF THE OPTIONS

22. All the above measures are designed to maximise stocks by November 1983, and if they are to be implemented fully early decisions will be required. It is for later decision whether further measures should be taken to increase

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industrial stocks in the longer term, either generally or in particularly important industries such as cement, and, if so, what these measures should be. It is very likely that further incentives would be required since, if there is not a miners' strike, industry's normal inclination would be to run down their coal stocks.

23. The approach of offering subsidies to industry to increase coal stocks or to maintain them at higher levels than normal carries the risk that the subsidy will be spent on measures which industry would anyway have taken of its own accord. Arguably industry is at least as well placed as the Government to assess whether to take special steps to increase its endurance of a miners' strike beyond that already planned for October 1983. However, the NCB's view is that in general industry will only build up its coal stocks and maintain them at relatively high levels if there is a clear threat of early industrial action in the coal industry; and that at present industry does not generally perceive such industrial action taking place in the foreseeable future. Its judgement, therefore, is that the subsidies proposed above will be required if the endurance of coal burning industry is to be increased. It is clearly impossible completely to avoid the risk that a subsidy will be offered needlessly. This risk can, however, be reduced by monitoring the expenditure closely and by concentrating subsidies on those industries where increased endurance is of particular importance to the economy as a whole, and coal stocks therefore need to be as large as possible, (ie the cement industry) or where the industry concerned is least likely to take measures of its own accord to improve its endurance of a miners' strike. But it cannot be eliminated altogether, because there is no way of knowing for certain what firms would have done in the absence of a scheme. It is for Ministers to decide whether this risk should be accepted given the overall benefits of the additional stock levels which might be achieved.

24. The discussion in paragraph 8 above of the extent to which the economic effects of a miners' strike would be mitigated by maintaining as high a proportion as possible of normal cement supplies suggests that there is a good case on wider economic grounds, which the industry itself may not be best placed to judge, for ensuring that normal cement supplies are maintained for as long as possible. The measures discussed in paragraph 13 above would increase the endurance of the cement industry to a total of around 20-24 weeks at a cost of £1-1.2 million. The same is also true of motor vehicle production, although

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as noted in paragraph 15, there appears to be only very limited scope for increasing its coal stocks.

25. The economic impact of the cessation of other large coal burning industries would, however, be relatively modest. The case for a subsidy to them therefore requires more careful consideration.

26. As for smaller industries, the economic effects would also be modest if they were temporarily to cease operation. But since their endurance of a miners' strike is likely to be very much less than that of major companies, Ministers may feel that there is a case for encouraging them to increase their coal stocks through the measures discussed in paragraphs 17 to 20. If the problem of picketing at depots and at strategic stocks near the pitheads could be overcome and all the above measures could therefore be implemented, the cost might be up to £3 million. But if not, and the measures were confined solely to increasing the coal stocks held by small industries on their own sites (ie. paragraph 17), the cost would be around £0.9 million.

#### FINANCING THE SCHEMES

27. The costs given above are the gross costs to the NCB of discounts or extended credit terms in the period 1 April - 31 October 1983. The NCB have argued that they represent also a reasonable measure of the net additional costs to them, the benefits to the Board of earlier payments being more than balanced by the costs of disruption of delivery patterns when the additional stocks are drawn down at the end of the period. However, it is not clear how rapid or disruptive a run-down of stocks by industrial customers will occur in November; and it is possible that it will not happen at all, if, for instance, Ministers agree a scheme to maintain stocks at high levels for a further period or industry retains high stocks of its own accord. Departments are agreed that the NCB might be told that the Government was prepared in principle to meet the full costs incurred by the NCB in offering discounts/extended credits through increases in the Board's EFL and Deficit Grant limits, if this proved necessary, but that, if high levels of stocks continue beyond November, the costs would be adjusted downwards by a retrospective calculation of the financial benefits to the NCB.

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CONCLUSIONS

28. Ministers are invited:-

- (i) to note the likely industrial and economic effects of a lengthy miners' strike as set out in paragraphs 4-10 above;
- (ii) to agree that in the light of (i) the Government's strategy should continue to be to give first priority to power station endurance and that it is acceptable that at November 1983 endurance of coal burning industry should be less, in some cases considerably so, than that of the power stations;
- (iii) to decide which, if any, of the measures to increase industrial endurance discussed in paragraphs 13-20 the NCB should be authorised to take at a total cost in practice of up to perhaps £5 million.

Cabinet Office

11 May 1983

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POWER STATION ENDURANCE: ANCILLARY MATERIALS  
Report by the Official Group on Coal (MISC 57)

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INTRODUCTION

1. This report considers the steps that might be taken to increase further by November 1984 the stocks of ancillary materials held at the power stations. We shall shortly be reporting to Ministers on the options for increasing power station endurance of a miners' strike in the medium term to 9-12 months or more. However, very early decisions are required on ancillary materials if the work required to increase stocks by November 1984 is to be completed on time. Hence this separate report.

THE PRESENT POSITION

2. By November 1983 power station coal stocks will provide some 26 weeks endurance in the event of a miners' strike. Ministers have taken no decisions on the desirable size of power station coal stocks by November 1984, so we have assumed for planning purposes that they will remain sufficient to provide 26 weeks endurance.

3. The Central Electricity Generating Board (CEGB) has urgent work in hand to increase stocks of, or manufacturing capability at power stations for, essential ancillaries (other than carbon dioxide, for which see below) to 20 weeks normal use by November 1983. The cost of about £70 million is being borne by the Board. The CEGB judge that with prudent use and with the deliveries that should be possible during a strike lasting for up to 6 months, 20 weeks stocks should be stretchable to 26 weeks. The Board is therefore prepared to accept a commitment to 6 months endurance without further expenditure on storage facilities for, or additional stocks of, ancillaries.

4. In the case of carbon dioxide (which is used as a coolant only in nuclear power stations) stocks at the power stations are sufficient for 3 weeks normal use. There are no plans at present to increase this. The CEGB believe that, since the majority of nuclear power stations are remote from the coal fields and there is no possibility of pickets influencing the primary fuel supply, picketing would be sporadic and not determined. Moreover, past experience is

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that pickets would be prepared on safety grounds to allow stocks of carbon dioxide to be replenished during a strike. However, in his minute of 13 December 1982 to the Prime Minister the Secretary of State for Energy expressed disquiet about this position and said that he would therefore be pursuing with the Central Electricity Generating Board how quickly and at what costs stocks of carbon dioxide might be brought up to 20 weeks endurance allowing for a single replenishment. This is discussed below.

OPTIONS: ANCILLARY MATERIALS OTHER THAN CARBON DIOXIDE

5. There seem to be two options for stocks of ancillary materials generally by November 1984, namely:-

- (a) maintain stocks at the levels planned for November 1983 i.e. a guaranteed 20 weeks and in the view of the CEGB a high probability that this level of stocks could be made to last for 26 weeks during a miners' strike. This option would involve no further expenditure beyond that already authorised; or
- (b) increase stocks of ancillaries to match exactly the likely level of power station coal stocks by November 1984. We have assumed this to be 26 weeks. This would cost £22 million more than option (a) above.

In the case of option (b) it is likely that the CEGB would seek reimbursement of the expenditure involved from the Government. This could well involve a grant, which would have to be announced publicly.

6. The decision between these options turns on the practicality of replenishment of stocks of ancillary materials at the power stations during a miners' strike. The CEGB is confident that this will prove possible; it has laid plans for unorthodox deliveries, including the use of large helicopters, to all power stations during a miners' strike. The Board is, therefore, as noted above, prepared to accept a commitment to achieve 26 weeks endurance on the basis of 20 weeks normal stocks. However, the possibility clearly cannot be excluded that the extent and intensity of picketing would increase the longer the dispute lasted. If in these circumstances replenishment were to prove impossible power station endurance would be determined by the availability of ancillary materials and, after allowing for measures to ensure the most economical use of such materials, might be limited to perhaps 22 weeks.

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OPTIONS: CARBON DIOXIDE

7. Increasing stocks of carbon dioxide at the power stations beyond their normal level of 3 weeks raises somewhat different considerations. If stocks of carbon dioxide at the nuclear power stations were to run out, these power stations would eventually have to be closed down. However, the CEGB estimates that 3 weeks stocks of carbon dioxide could in practice be made to last for up to 6 weeks at full output or rather longer at reduced output. Even if all the nuclear stations were eventually to have to close down, coalburn in other stations would have to be increased by only about 15 per cent to make good the shortfall; the CEGB therefore estimates that total endurance of a strike would be reduced by only about 2 weeks. In previous miners' strikes the scope for reducing electricity supplies in this way was not exploited by the miners, if, indeed, they were aware of it. The nuclear stations were generally not picketed, but where they were the replenishment of stocks of carbon dioxide was never seriously impeded, ostensibly on safety grounds. However, it clearly cannot be assumed that the same would happen in any future miners' strike. Unlike in the early 1970s the NUM is now firmly opposed to nuclear power. They might well now be aware that the operations of power stations could quickly be impeded during a strike by denying supplies of carbon dioxide; and any attempt by the Electricity Boards to oppose this for reasons of safety would clearly suit the NUM's wider purposes.

8. There would therefore seem to be a case in principle for increasing stocks of carbon dioxide to the level of stocks of other ancillary materials. The problem is that the work involved would take about 18 months to complete. Since the construction of large storage tanks would be required, this work could not be concealed for very long, particularly given the need for planning permission. Moreover, the CEGB would almost certainly insist that the costs involved (of the order of £40 million to increase stocks to 26 weeks) should be met by a special grant, for which Parliamentary approval would be required. Thus, public attention would quickly be drawn to the increase in stocking capacity well before the work could be completed, and the reasons for the increase would be difficult to obscure. The danger, therefore, is that the measures required to increase stocking capacity could unnecessarily draw the attention of the trade unions, particularly the NUM, to this area of vulnerability, perhaps at a time when the risk of industrial action in the pits was quite high.

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CONCLUSIONS

9. Ministers are invited to decide whether:-

- (i) in the case of ancillary materials other than carbon dioxide stocks by November 1984 should be:-
  - (a) maintained at their November 1983 level pending decisions on coal stocks and endurance in the medium term; or
  - (b) increased to 26 weeks at a cost of £22 million;
- (ii) in the case of carbon dioxide stocks by November 1984 should be:-
  - (a) maintained at the present level of 3 weeks; or
  - (b) increased to the level of ancillary materials generally at a cost of up to £40 million.

Cabinet Office

4 May 1983

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