CAB 130/1260

CAB 130/1260

SECRET

MISC 57(84) Series

CABINET

OFFICIAL GROUP ON COAL

MINUTES OF MEETING

No. of Meeting	Date of Meeting	Papers Considered	Subjects Discussed
1st	7.2.84	1 2, 3	1. OIL SUPPLIES TO THE CEGB 2. POWER STATION ENDURANCE THIS WINTER AND FURTHER DEVELOPMENT OF POWER STATION ENDURANCE
2nd	12.3.84		INDUSTRIAL ACTION IN THE COAL INDUSTRY
3rd	11.6.84	6	EXTENDING POWER STATION ENDURANCE
4th	29.6.84	7	EXTENDING POWER STATION ENDURANCE

(2635) 3 801973/074160 3/74 12m NCS 821

SECRET

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(2635) 3 801973/074160 3/74 12m NCS 821

MISC 57(84) Series

CABINET

OFFICIAL GROUP ON COAL

MEMORANDA

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Serial No.	Date	Brief Description
1	30.1.84	OIL SUPPLIES TO THE CEGB Note by the Secretaries
2	3.2.84	FURTHER DEVELOPMENT OF POWER STATION ENDURANCE Note by the Secretaries
3.	3.2.84	POWER STATION ENDURANCE THIS WINTER Note by the Secretaries
4	12.3.84	OIL SUPPLIES TO THE CENTRAL ELECTRICITY GENERATING BOARD IN THE EVENT OF A MINERS' STRIKE Note by the Secretaries
5	21.3.84	OIL SUPPLIES TO THE CEGB IN A MINERS' STRIKE Note by the Secretaries
6	7.6.84	EXTENDING POWER STATION ENDURANCE Note by the Secretaries
7	26.6.84	EXTENDING POWER STATION ENDURANCE Note by the Secretaries
8	5.7.84	EXTENDING POWER STATION ENDURANCE Note by the Secretaries

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SECRET AND PERSONAL

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MISC 57(84) 1st Meeting COPY NO 19

CABINET

OFFICIAL GROUP ON COAL

MINUTES of a Meeting held in Conference Room D, Cabinet Office on TUESDAY 7 FEBRUARY 1984 at 10.00 am

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PRESENT

Mr P L Gregson
Cabinet Office
(In the Chair)

Mr D L Pascall
Prime Minister's Office

Mr I T Manley
Department of Energy

Mr R J Priddle
Department of Energy

Mr E Wright
Department of Trade and Industry

Mr S A Robson
Treasury

Mr D H Metz
Department of Energy

Mr G Murray
Scottish Office

Mr P Wood
Department of Transport

SECRETARIAT

Brigadier J A J Budd
Mr J F Stoker

CONTENTS

SECRET AND PERSONAL

1. OIL SUPPLIES TO THE CEGB

The Group considered a Note by the Secretaries (MISC 57(84)1) covering a Note by the Department of Energy.

In discussion the following were the main points made:

a. The main variables affecting the practicability of a rapid move to maximum oil burn were the stocks of heavy fuel oil (HFO) held by the CEGB or readily available to it and the lead time for the availability of further stocks from normal suppliers or other sources. The CEGB had taken steps to maintain stocks although it would normally have been running them down over the winter and was studying the possibility of making limited arrangements for additional stocks at Fawley refinery. The Board had ruled out a more general expansion of storage capacity as being unjustified in view of the costs involved, though it would be possible to press them to reconsider this and other options which they were currently unwilling on costs grounds to consider at present. The levels of the Board's stocks, taken together with the likely availability of some 25-30 days additional consumption at maximum oil burn from strategic stocks held by the oil companies, should make it possible for maximum oil burn to be attained rapidly and maintained, given lead times of 3 weeks for fresh supplies for power stations linked to refineries and 4-6 weeks for Thameside stations. It should be borne in mind, however, that the strategic stocks held by oil companies were the subject of EC obligations and that international circumstances - for example in the Persian Gulf - might reduce their availability or rule it out altogether. It should also be established whether any of these stocks were held outside the UK and, if so, how much.

b. The significance of the likely effects on the market of a doubling of normal UK demand for HFO were not to be underestimated. On the other hand, the impact on the total UK consumption of oil would be no larger than 20 per cent. (It would be useful, however, to have any indication which could be provided of the possible significance for the market of switching to HFO from coal by large industrial consumers in the

event of a strike.) The effects on world markets of higher UK demand for HFO would clearly be smaller than on the domestic markets: the world market was used to responding to changes in demand and there was a world over-capacity for production of HFO. It would nevertheless be important to ensure if possible that excessive price effects were avoided, not only because there could be serious implications for bulk energy users if increases were passed on to consumers, but also because disturbance in the market might both alert the unions to the significance of oil burn in withstanding a miners' strike and engender an atmosphere of crisis which would not be favourable to the Government's aims. There was unlikely to be any advantage in the arrangements suggested by some oil companies under which the CEGB would obtain its own crude and arrange with refiners to have it processed. There might be advantage in giving guidance to the CEGB on the maximum price they should be prepared to pay for HFO, though it was not possible without foreknowledge of market and other relevant circumstances at the time of a strike to say precisely what that guidance should be. The need to avoid undue perturbation in the market was one of the arguments in favour of phasing the move to maximum oil burn.

c. The CEGB would wish to review their planning assumptions in the light of all relevant circumstances at the time of any strike. For the present, however, they were prepared to assume that it should be possible to move to maximum oil burn over a period of one month without undue perturbation of the market, without extra expenditure which it would not be prepared to find from existing resources and with a cost of no more than one week in endurance. It should be noted that this assessment assumed the availability of at least some of the strategic stocks held by the oil companies under their EC obligations. It might be desirable on grounds both of endurance and of industrial relations to phase in oil burn smoothly from a point before a miners' strike actually began, though this would need to be weighed at the time against the possibility that early action might be judged provocative and unhelpful to remaining prospects for avoiding a strike.

THE CHAIRMAN, summing up the discussion, said that the Group should submit to Ministers as soon as possible within the next few weeks a report on what would be involved in a move to maximum oil burn. The report should begin by describing the scale of the problem and the significance of questions affecting stock levels and delivery lead-times. It should set out options for dealing with the problem, identifying those which were and were not currently favoured by the CEGB. It should set out the cost implications of oil burn and emphasise the desirability of consultation with and guidance to the CEGB as far as possible in advance of a miners' strike, to include discussion of matters affecting the timing of a move to maximum oil burn.

The Group -

1. Invited the Department of Energy, in consultation with the Department of Trade and Industry, to report further on the implications for the market of the extent to which industrial consumers were likely to switch to HFO from coal in the event of a miners' strike.

2. Instructed the Secretaries to prepare a draft report on the lines indicated by the Chairman in his summing up, drawing on material in MISC 57(84)1 and reflecting points made in the discussion.

2. POWER STATION ENDURANCE THIS WINTER AND FURTHER DEVELOPMENT OF POWER STATION ENDURANCE

The Group considered Notes by the Secretaries (MISC 57(84)3 and MISC 57(84)2) covering Notes by the Department of Energy.

In discussion the following were the main points made:

a. The miners' overtime ban was the main constraint on deliveries, and hence on maximum stocks of coal. Though the CEGB and NCB advised that deliveries were being made at the greatest possible rate, it was still expected that stocks at the power stations would be 2-2½ million tonnes lower by the end of March than they would have been had the ban not taken place. Whether and to what extent it would be possible to make this ground up and achieve a further increase in stocks in addition by November 1984 would depend very largely on when the ban ended, making possible much higher delivery rates.

b. The view of the CEGB was that commercial considerations, including the likely benefit to consumers in the event of a miners' strike, did not justify a further major expansion of stocks. MISC 57(84)2 had suggested that it might be physically possible to accommodate a further 10 million tonnes of stocks at power stations in addition to maximum levels in 1983, and that this might be achievable at a rate of 2-3 million tonnes per annum: if the Government wished to use any significant amount of this additional stocking capacity, it was likely that the Board would insist that it be grant-financed. The ability of the NCB to provide extra coal for higher stocks and their willingness to make it available to the CEGB on deferred payment terms were likely also to diminish as the capacity of the industry was brought progressively into line with its markets.

c. It was not clear from MISC 57(84)2 what action had been taken by the Department of Energy to follow up the Ministerial decision of 2 November 1983 that additional stocking capacity should be provided at power stations by November 1984 when this could be done at modest cost and would not involve planning applications likely to give rise

to public controversy. It had been thought that the CEGB might be prepared to finance limited additional facilities of this kind from within their own resources. If such action had not been taken Ministers would expect to be assured that it could be put in hand in time for next winter or the obstacles to such action would have to be explained by them. In due course it would be necessary to establish what further action to increase power station stocking capacity, within the parameters set by Ministers, might be feasible by November 1985 and November 1986.

d. Ministers had endorsed in November 1983 proposals by the Secretary of State for Scotland to achieve increased oil-fired output with the use of existing manning to provide through the Scottish interconnector a contribution somewhat greater than assumed in current plans. Since then it had been made clear at official level to the SSEB that every effort should be made to maximise provision from this source in the event of a strike, and other means of extending endurance in Scotland had been discussed with them and the NCB.

THE CHAIRMAN, summing up the discussion, said that it might be appropriate for the Secretary of State for Scotland to be invited to report to colleagues on action taken in Scotland following the meeting of Ministers in November. The Group should report further to Ministers in two stages. As the first stage, they should report on action affecting endurance during 1984. This should include progress with increasing stocking capacity at power stations following decisions by Ministers in 1983 and the amount of extra capacity likely to be achieved by November 1984. The report should discuss constraints on deliveries of coal and estimate how far it might be practicable by November 1984 to rebuild stocks of coal to November 1983 levels and beyond on a range of assumptions about the duration of the overtime ban and taking account of all available sources of coal. The Department of Energy should provide material on these points. The report should explain what was being done to keep stocks of ancillaries broadly in line with coal stocks. It should also briefly review the position in 1984 covering both the stocking of fresh and spent nuclear fuel and the arrangements for replenishing stocks of carbon dioxide at existing nuclear power stations. A second report would deal later with the scope for increasing power station coal stocking capacity by November 1985 and

November 1986; with action to improve arrangements for the storage and use of carbon dioxide at nuclear power stations under construction; with any further action which might be required to keep stocks of ancillaries in line with coal stocks; with the use of the Scottish interconnector in the long term and with the possibility of supplying lighting-up oil for use in a strike by means of an extension to the Government pipeline.

The Group -

1. Took note, with approval, of the Chairman's summing up of their discussion.

2. Invited the Scottish Office to advise the Secretary of State for Scotland to report to colleagues on progress with the arrangements he had proposed in November 1983 to provide during a miners' strike a contribution through the Scottish interconnector somewhat greater than that assumed in the plans then current.

3. Invited the Department of Energy to advise further on:

   i. action taken to increase coal stocking capacity at power stations since November 1983 and the levels of capacity likely to be achieved by November 1984;

   ii. the nature of current constraints on coal deliveries to power stations and what level of stocks it might be possible to achieve by November 1984;

   iii. the arrangements for the replenishment of carbon dioxide at nuclear power stations during a miners' strike;

   and, in due course:

   iv. to provide, in consultation as necessary with the Scottish Office, the further information necessary for a supplementary report to Ministers later in the year on the matters indicated by the Chairman in his summing up.

4. Instructed the Secretaries, drawing on MISC 57(84)2 and 3, on further material to be provided by Departments and on points made in the discussion, to prepare a draft report to Ministers on power station endurance during 1984 with a view to submission as soon as possible within the next few weeks on the basis described by the Chairman in his summing up.

Cabinet Office
8 February 1984

c/c

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MISC 57(84) 2nd Meeting COPY NO 19

CABINET

OFFICIAL GROUP ON COAL

MINUTES of a Meeting held in Conference Room C, Cabinet Office on MONDAY 12 MARCH 1984 at 4.00 pm

PRESENT

Mr P L Gregson, Cabinet Office (In the Chair)

Mr S A Robson, Treasury
Mr P J Honour, Home Office
Mr D H Metz, Department of Energy
Mr G Murray, Scottish Office
Mr D B Smith, Department of Employment
Mr D H J Hilary, Home Office
Mr I T Manley, Department of Energy
Mr R J Priddle, Department of Energy
Mr M Close, Department of Trade and Industry
Mr P Wood, Department of Transport

SECRETARIAT

Brigadier J A J Budd
Mr J F Stoker

SUBJECT

INDUSTRIAL ACTION IN THE COAL INDUSTRY

INDUSTRIAL ACTION IN THE COAL INDUSTRY

THE CHAIRMAN said that the meeting had been convened to discuss matters in the letter dated 9 March 1984 addressed to him from the Deputy Secretary Conservation, Department of Energy about industrial action by the National Union of Mineworkers (NUM). The Group would wish to review the current extent of industrial action and how matters were likely to develop; likely endurance by power stations and industry; any initial issues for Ministers; and questions related to public order and the Government's public position on the dispute.

In discussion the following were the main points made.

a. About half of National Coal Board (NCB) pits were unaffected. The whole of the Yorkshire, Durham and Kent fields were on strike, along with much of the South Wales and Scottish fields. It was hard to predict how matters would develop. It was unlikely that the situation would clarify fully until after the weekend, when the results of all the ballots which were pending in some areas would be available. The attitude to the strike of unions other than the NUM, and in particular of the National Union of Railwaymen (NUR) and Amalgamated Society of Locomotive Engineers and Firemen (ASLEF), could clearly be important: there had been no sign of action promised by the rail unions before the strike against increased imports of coal. Meanwhile, there were signs of some disunity among miners over the strike, with some disorderly scenes particularly at one Scottish pit on the changeover to the afternoon shift.

b. Where management seeking to carry out safety work were faced with aggression, the NCB had made it clear that power would be switched off so that pumps and fans would no longer operate. This had been done in two pits so far. In general, the NUM was expected to allow pits to be kept in a safe condition.

c. The NCB intended for the present to keep its public statements on the industrial action in a low key. This was clearly the right course while internal disagreements in the NUM were unresolved and while ballots were pending in some coal fields. Ministers would wish to

comment if necessary in a similarly low key: briefing would be prepared for the use of the Prime Minister at Questions on the following day. The NCB hoped that the views of the workforce would be favourably affected by a newly prepared issue of the industry's internal newspaper which was being distributed explaining the Board's strategy for the industry and setting out details of recent changes in redundancy terms.

d. Assuming some imports of electricity from Scotland and a move to maximum oilburn phased over 4 weeks, endurance for the power stations currently stood at around 6 months. This endurance was not constrained by stocks of ancillaries. The production of statistics on the production and stocks of coal would be accelerated by the Department of Energy so as to make figures for each week available from about the middle of the week following. Industrial coal stocks currently stood at about 14-18 weeks for the cement industry and 6 weeks on average for other large consumers. Domestic stocks stood at up to 6 weeks and would decrease in importance with the approach of Spring weather.

e. The Central Electricity Generating Board (CEGB) had been asked by the Secretary of State for Energy to ensure a high state of preparedness against the possible need to step up oilburn. The Board was already holding stocks of oil higher than normal for the time of year and was talking to potential suppliers of extra oil. It was not currently making advance purchases of supplies, and would be unwilling to do so without further guidance from Ministers. A move to increase oilburn would be one of the first key decisions for the Government and Board if the strike were to continue and grow. Costs of increased purchases of oil to the CEGB would be high, however, and additional oilburn would be highly visible: on balance, decisions to begin forward acquisitions of oil for extra burn were not likely to be timely at least until the prospects for the strike had clarified early in the following week.

f. Preparations were being made for mutual aid arrangements for the police to be put in hand and for the activation if necessary of the National Reporting Centre. The Home Secretary had been in touch with the

President of the Association of Chief Police Officers, and, through him, with the Chief Constables mainly concerned. It was intended to hold a meeting with them in the course of that week, involving also the Departments of Energy and Employment, to lay the basis for local contingency plans for policing. A regular contact group had already been set up by the Department of Energy with the CEGB and NCB to look at civil contingencies preparations. Implementation of such arrangements would require the co-operation of the regional offices of the Department of Trade and Industry.

g. The Chairman of the CEGB would be invited to inform Ministers of the Board's intentions before taking any civil action under the Employment Act 1980.

h. It might prove necessary as matters developed for the South of Scotland Electricity Board (SSEB) to switch from coal to oil as the fuel for providing electricity exports to England and Wales. The need for such a switch would need to be considered taking into account the respective commercial interests of the two Boards and the distribution of industrial action North and South of the border.

THE CHAIRMAN, summing up the Group's discussion, said that the Prime Minister was currently considering the composition of the proposed small group of Ministers to monitor developments. It would be necessary to establish clearly the relationship between existing Groups and Committees and any ad hoc machinery for co-ordinating the Government's role in withstanding the strike. Questions of politics and handling would be for the Secretary of State for Energy and others in the proposed Ministerial Group. Practical and technical issues arising from day to day would be appropriate to the Civil Contingencies Unit. The Official Group on Coal, while it should not be seen as an official shadow of the proposed Ministerial Group, might be commissioned by it to do particular work from time to time. Common elements of Chairmanship and Secretariat between the various Standing and ad hoc groups would give a useful degree of flexibility. The Group had agreed that there would be advantage in arranging a meeting of the Ministerial Group for that week, if it were possible to do so, for a preliminary discussion. It was for consideration in the light of events whether it would be desirable to circulate a paper for that discussion. If so,

it would most usefully be confined to a brief summary of the basic facts on endurance. It was possible that the Secretary of State for Energy might wish to provide such a paper, though it would be possible for it to be remitted to the Secretariat of the Official Group if he preferred. The first key decision for Ministers on withstanding a continuing strike would be on the question of increasing oilburn, though, with ballots pending in some coal fields and with continuing dissension within the NUM, it was unlikely that this decision would be timely until the middle of the following week at the earliest. In the meantime, the Secretariat would circulate a draft of a report by the Group on oilburn for clearance in correspondence if possible for submission that week; and members should monitor developments generally, keeping in close touch with each other and with the Secretariat.

The Group -

1. Took note, with approval, of the Chairman's summing up of their discussion.

2. Took note that the Chairman would seek to arrange a meeting of the proposed Ministerial Group that week if possible.

3. Invited the Department of Energy to consider in due course, consulting the Chairman, the Department of Employment and the Home Office, whether it might be appropriate for the Secretary of State for Energy or for the Chairman to circulate a paper as a basis for discussion in the Ministerial Group.

4. Instructed the Secretariat to circulate a draft report on oilburn for clearance in correspondence in time for submission if possible that week.

Cabinet Office
13 March 1984

MISC 57(84) 3rd Meeting COPY NO 19

CABINET

OFFICIAL GROUP ON COAL

MINUTES of a Meeting held in Conference Room A, Cabinet Office on MONDAY 11 JUNE 1984 at 2.30 pm

PRESENT

Mr P L Gregson, Cabinet Office (In the Chair)

Mr D Pascall, Prime Minister's Office
Mr S A Robson, Treasury
Mr D H J Hilary, Home Office
Mr I T Manley, Department of Energy
Mr D H Metz, Department of Energy
Mr R J Priddle, Department of Energy
Dr M Harte, Ministry of Defence
Mr G Murray, Scottish Office
Mr E Wright, Department of Trade and Industry
Mr D B Smith, Department of Employment
Mr P Wood, Department of Transport

SECRETARIAT

Brigadier J A J Budd
Mr J F Stoker

SUBJECT

EXTENDING POWER STATION ENDURANCE

SECRET AND PERSONAL

EXTENDING POWER STATION ENDURANCE

The Group considered a memorandum by the Department of Energy (MISC 57(84)6) on extending power station endurance.

In discussion the following were the main points made.

a. Of total pithead stocks of approximately 12 million tonnes (in England and Wales), approximately 4 million tonnes were in areas where pits continued to work. It was clear that some limited lifting of stocks had taken place in such areas and continued to do so. Decisions about whether attempts should be made to lift and move stocks were being taken by officials of the National Coal Board (NCB), Central Electricity Generating Board (CEGB) and British Railways (BR) in close local consultation over logistical, industrial relations and other constraints. It would be possible to encourage them to seek to maximise the lifting of stocks within these constraints, but there must be a risk that the application of a more general and overt policy of moving stocks from working areas might be counterproductive in its effects on existing production and deliveries. The shifting of stocks from striking pits would be a very contentious and visible move.

b. The lifting of coal from stocks involved considerably more handling than loading new-wrought coal. Loading at the pithead was done by NCB employees. Where pits were working, loading of stocks, in addition to new-wrought coal, might be seen by these employees as a change in the recent pattern of their work. Where pits were on strike, it would be necessary to provide labour to go in to lift and load stocks, as well as to transport them.

c. It was not yet clear what the effect might be on movements of coal from the Nottinghamshire pits of the action called in support of the miners' strike by railmen at the BR depot at Shirebrook. Broadly speaking, it had been possible for BR over recent weeks to provide transport for all the coal that the NCB offered. It was probable, however, that the amount of coal offered for movement depended to some extent on informed, local assumptions about the capacity of BR to provide trains.

d. It was generally feasible, if necessary, for coal to be loaded for transport by road even at pits the production from which was normally moved by rail. It was possible also for power stations normally supplied by rail to take road deliveries, subject to certain surmountable difficulties. Concurrent road and rail deliveries would compete for unloading facilities. Road deliveries would require a great deal of handling of coal, which would often involve a change from the usual pattern of work for the CEGB employees involved in unloading.

e. In strictly numerical terms, the national fleet of tipper lorries was adequate for road deliveries at any levels likely to be required to move the stocks of coal available for lifting. It was not possible to generalise on whether contractors would be likely to be willing to take on the work of moving stocks. Fear of blacking and the degree of unionisation among their drivers would be relevant considerations, if not necessarily critical ones. On the other hand, experience at Orgreave, Ravenscraig and elsewhere suggested that there might be no lack of contractors prepared to operate even in conditions of considerable tension. The CEGB were already moving considerable amounts of coal by road: so too were other industrial consumers, who continued to receive a high proportion of their normal deliveries. Investigation of what was involved in the CEGB road operation should cast further light on circumstances in which it might be feasible to increase levels of deliveries by this means. It would be desirable also as far as possible to identify the nature of the constraints, both at the pits and at the power stations, which would determine the maximum amounts of coal which could be loaded, moved and delivered by road.

f. The maldistribution of stocks in relation to CEGB generating capacity was not a serious obstacle to the use of any additional coal which it might prove possible to lift from stock. The National Grid provided flexibility for it to be burnt at any of the 19 major power stations in England and Wales, apart from 2 where stocks were already at very high levels.

g. Ministers' remit to the Group was to study the possibility of moving coal stocks

> "without losing production currently being secured and without provoking retaliatory action elsewhere".

Serious risks would arise in these areas from any large-scale or highly-visible initiative to increase significantly the amount of stocks being lifted. The nature of these risks would not be radically different at a rate of delivery of 200,000 tonnes per week than at a level of 500,000 tonnes per week: the higher delivery rate would allow a later start in moving stocks at the cost possibly of more acute industrial relations and other difficulties, while the lower rate would require the risks to be confronted sooner, albeit possibly in a less acute form.

h. The possible industrial relations implications would be particularly severe if Servicemen, rather than contractors, were used to load and move stocks. There would be a genuine risk that production of coal in areas still working, or its delivery by rail, or both, might cease. There would be difficulties in providing the necessary numbers of Service drivers before the Autumn because of existing military commitments and it would be necessary for the Government to satisfy itself that its vires under emergency legislation were adequate for the requisitioning of the necessary vehicles at such time as it might be decided to bring in Service manpower.

i. Movement of coal by road at levels necessary for the delivery of 10 million tonnes to power stations was likely to mean a large additional demand on police resources which were already under strong pressure. The fact that police operations tended in the nature of things to take place on ground chosen by the pickets limited the ability of the police to optimise the concentration of their resources. It was likely that it would be impossible for the police to guarantee adequate protection for operations on a scale necessary to deliver 500,000 tonnes of coal per week by road, given the logistical problems and the likely degree and nature of picketing.

j. If coal deliveries in England and Wales continued at the present rate, it might eventually be necessary for the South of Scotland Electricity Board (SSEB) to review present levels of exports via the inter-connector with a view to bringing endurance North and South of the border back into balance. The CEGB and SSEB were in constant touch over matters arising from the dispute.

THE CHAIRMAN, summing up the discussion, said that the Secretariat should prepare a draft report to Ministers, drawing on MISC 57(84)6 and on points made in the discussion. It should explain how considerations involved in the movement of stocks differed from those involved in the movement of new-wrought coal. It should review the extent to which lifting of stocks was already taking place in working areas and the nature of the tactical judgements which were being taken locally by the CEGB, BR and NCB. Ministers would no doubt wish to be assured that movements on this basis were being maximised within the constraints imposed by logistical considerations and the delicacy of the tactical judgements required. The Department of Energy should provide to the Secretariat as soon as possible for inclusion in the draft report information about the existing road delivery operation of the CEGB and its possible relevance to increased movement of coal stocks; and the nature of the physical constraints on loading and deliveries at pits and power stations. The draft report should set out the issues for Ministers in terms of a spectrum of difficulties. At one end of the spectrum were modest levels of deliveries from working pits, with loading and unloading by willing NCB and CEGB employees without any major deviation from their normal work routine. At the other end of the spectrum were movements from strikebound pits, with loading by labour brought into pits specially and with staff at power stations required to undertake work outside their normal routine, possibly in circumstances likely to produce in them feelings of sympathy with the strikers' cause. The draft should give due weight to considerations affecting the possible use of contractors and Servicemen, to the major police effort required by any significant increase in movement of stocks, to the risks to the continuation of existing production and delivery of coal and to the risk of provoking action in support of the miners by workers in related industries. It should remind Ministers that a major increase in movements from stock would require detailed planning and discussions with the NCB and CEGB which had not as yet taken place. He would circulate the draft report for comments, and possibly for further

discussion, before submitting it to Ministers as soon as possible.

The Group -

1. Took note, with approval, of the Chairman's summing up of their discussion.

2. Instructed the Secretaries to prepare a draft report to Ministers on the basis indicated by the Chairman in his summing up.

3. Invited the Department of Energy to explore and provide information as soon as possible to the Secretariat for inclusion in a draft report, on:

a. existing arrangements by the CEGB for road-borne deliveries of coal; and

b. the nature of the physical constraints on loading and deliveries at pitheads and power stations.

Cabinet Office

12 June 1984

c/c

MISC 57(84) 4th Meeting COPY NO 19

CABINET

OFFICIAL GROUP ON COAL

MINUTES of a Meeting held in Conference Room A, Cabinet Office on FRIDAY 29 JUNE 1984 at 3.00 pm

PRESENT

Mr P L Gregson
Cabinet Office
(In the Chair)

Mr S A Robson
Treasury

Mr I T Manley
Department of Energy

Mr R J Priddle
Department of Energy

Mr G Murray
Scottish Office

Mr D H J Hilary
Home Office

Mr D H Metz
Department of Energy

Mrs E Pearce
Ministry of Defence

Mr E Wright
Department of Trade and Industry

Mr D B Smith
Department of Employment

SECRETARIAT

Brigadier J A J Budd
Mr J F Stoker

SUBJECT

EXTENDING POWER STATION ENDURANCE

EXTENDING POWER STATION ENDURANCE

The Group considered a Note by the Secretaries (MISC 57(84)7) covering a draft report from the Group on extending power station endurance.

The Group discussed a number of proposed amendments to the draft circulated with MISC 57(84)7. In addition, the following main points were made in discussion.

a. The Group had been asked to consider whether it might be practical to increase endurance by burning oil in plant at some power stations usually fired by coal. At Longannet in particular, there were four coal-fired sets each of which was equipped with boosters designed to produce an additional 100 MW on top of its normal capacity of 600 MW by burning heavy fuel oil. This was a special design feature which was not shared by the generality of coal-fired sets. The boosters had not so far been used during the dispute, but the plans of the South of Scotland Electricity Board (SSEB) to align its endurance with that South of the Border while maintaining maximum exports of electricity through the interconnector included some use of the boosters during August and September.

b. More generally, it was possible for coal-fired plant to generate electricity by continuous burning of lighting-up oil. The main practical constraint was the supply of oil, which was more readily available to stations on the coast than to the inland. The Central Electricity Generating Board (CEGB) had agreed to take advantage of generating capacity from this source where it was possible to do so without prejudice to the stocks of oil necessary for lighting-up purposes. This would marginally increase endurance, perhaps by half a week.

c. The Group had been asked to consider whether it would be possible to increase endurance by greater use of private gas- or oil-fired generating capacity to produce electricity for the National Grid. In broad terms, it was technically possible to increase endurance by a week or so by increasing the load factor on such plant to maximum levels over a period of 6 months. To do so would carry a very

substantial cost penalty, however, not only because of the cost of fuel, but also because using the types of plant concerned (eg. combined heat and power systems) at the necessary levels would incur a very large and expensive loss of thermal efficiency.

d. Ministers continued to look to imports as an additional source of coal. The CEGB had not imported coal during the dispute. It regarded movement of domestically produced coal as a priority, and was concerned that bringing in imports would run considerable industrial relations risks. If it were decided to run these risks, the CEGB thought it likely that they could achieve imports of about 70-100,000 tonnes per week of coal for use at Thameside power stations.

THE CHAIRMAN, summing up the discussion, said that the Secretariat would revise the draft report attached to MISC 57(84)7 in the light of points made at the meeting and that he would submit it to Ministers in the course of the following week. He would make a separate brief report on the scope for increasing endurance by burning oil at Longannet and other power stations normally fired by coal and on the constraints on increasing the use of private gas- and oil-fired generating capacity to produce electricity for the National Grid.

The Group -

1. Instructed the Secretariat to revise the draft report attached to MISC 57(84)7, taking into account points made in their discussion.

2. Took note that the Chairman would submit the revised report to Ministers in the course of the following week.

3. Took note that the Chairman would make a separate report on the scope for burning oil at coal-fired power stations and on constraints on increasing the use of private gas- and oil-fired generating capacity to produce electricity for the National Grid.

Cabinet Office
2 July 1984

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MISC 57(84) 1

COPY NO

30 January 1984

CABINET

OFFICIAL GROUP ON COAL

OIL SUPPLIES TO THE CEGB

Note by the Secretaries

The attached note on oil supplies to the Central Electricity Generating Board (CEGB) is circulated for discussion at a meeting of the Group to be arranged.

Signed J A J BUDD
J F STOKER

Cabinet Office
30 January 1984

OIL SUPPLIES TO THE CEGB

Note by the Department of Energy

1. The two key elements in achieving six months' endurance of the power stations in the face of a total interruption of coal deliveries are high coal stocks and maximum oil-burn from the outset. CEGB oil consumption would increase from a normal winter level of 40-90 kt/week (average 60 kt) to a maximum weekly rate of about 350 kt, equivalent to doubling the present UK demand for heavy fuel oil (HFO). Even with maximum stocks at oil-fired power stations, deliveries would have to increase from some 35 to 350 kt/week within a 2-3 week period (see Annex A for details).

2. When construction of the CEGB's modern large oil-fired stations was started UK refineries had sufficient capacity to produce the necessary fuel oil for base-load operation. However, the escalation in oil prices over the past decade has meant that these stations are now largely operated only when required to meet winter demand. This, together with the move away from oil-burn by industry generally, has led both to closure of UK refineries and a shift of output towards the lighter products where demand is relatively buoyant. The UK is in fact now a net importer of fuel oil which is currently cheaper than crude as feedstock for a number of newly installed catalytic crackers.

3. These developments have prompted a review of the ability of the oil industry to supply the CEGB in an emergency. Department of Energy officials have impressed upon senior management in the oil companies the importance that the Government attaches to such supply. The CEGB has had detailed discussions with the companies to see what could be achieved in practice.

Response of the oil market

4. Maximum oil-burn by the CEGB would lead to a doubling of normal UK fuel oil demand. In addition, if coal supplies were restricted demand by industry could be somewhat greater, both because some companies may have the ability to switch between coal and oil and also because companies using HFO might pick up orders from competitors tied to coal.

5. The view of the Department of Energy is that there is in principle enough refinery flexibility, taking into account plant both in the UK and overseas, for these extra demands for HFO to be met without any increase in the output of other products. Once equilibrium is re-established, therefore, the extra demand for fuel oil could be translated into an additional demand for the same quantity of crude, ie 350 kt/week or 0.35m barrels per day (cf UK oil production 2.3 mb/d, OPEC output 17.5 mb/d). For this reason, the price of HFO is likely to settle down in the long run at some where near parity with heavy crude oil, ie around $200 per tonne compared with the current price of $170. If Mexico and the OPEC countries that produce heavy crude stick rigidly to their production ceilings, the incremental crude might have to be a lighter grade and the price of HFO accordingly more expensive, perhaps $230 per tonne.

6. However, the route of prices over the 6 month endurance period is hard to predict. Much will depend upon the perceptions and responsiveness of the refiners. The oil companies, who have adjusted their output to meet current market requirements, may well be reluctant to re-arrange their crude oil purchases and rebalance refinery outputs internationally to deal with a situation of limited and uncertain duration. Thus it may not be possible fully to match supply to demand at the outset of an emergency if excessive spot prices are to be avoided.

Matching supply and demand

7. The oil companies would in general use their existing UK refinery capacity and overseas systems to supply the CEGB to the fullest extent possible. The general view of its main suppliers whom the CEGB have consulted is that they would experience real logistic difficulties that would hinder supplies sufficient to sustain maximum oil-burn from the outset. Recourse to the open market would be one approach to make up the shortfall, though lead times and price consequences are uncertain. Nevertheless, some companies take the view that the most efficient and cost-effective means to meet the CEGB's requirement would be to let the market respond to an increment in demand of well-understood origin. Prices should not rise above $230 per tonne, on this view, and could be significantly less. The renting and filling by the CEGB, well ahead of time, of oil storage capacity both at UK refineries and on the Continent would help minimise perturbance.

8. On the other hand, other companies who have talked to the CEGB have strong reservations about letting the market operate: prices could reach $250 or more and might ultimately stabilise at $230 per tonne. These prices would apply to all customers, of course, and would have political implications. Some companies do not rule out an increase in crude oil prices.

9. Those companies concerned about upsetting the market have suggested an alternative approach. The CEGB could purchase crude and arrange to have this processed by refineries with spare capacity, possibly overseas. Heavy crudes could be minimally refined to yield the greatest possible amount of fuel oil. Such an approach might enable the oil product market to be largely by-passed. On the other hand, such processing arrangements can be very difficult and time consuming to negotiate and would almost certainly involve the CEGB in substantial forward commitments.

10. The Department of Energy see attractions in relying upon the market to meet the difference between the CEGB's needs and what the companies could supply from within their own systems. This would minimise the overhang after the emergency (or if the emergency in the event did not occur) of stocks or processing commitments which could release products no longer desired by the CEGB onto a rapidly weakening market. Moreover, although increases in the spot price of HFO hit all customers, in the UK and abroad, the UK depends less on fuel oil than its competitors. Thus UK industry is likely to suffer relatively less from such increases than foreign competitors. In contrast, the cost of special measures, such as processing deals, would be borne solely by the UK economy. Against this, however, it must be recognised that rapidly rising fuel oil prices could cause political difficulties. For instance, such market perturbance might - though it is not certain - attract the attentions of the unions.

Scope for Government intervention

11. There are a number of steps that the Government might in principle take to assist:

a. the Secretary of State for Energy has wide powers under the Energy Act 1976 to regulate the production,

supply, acquisition, use of and price of oil products. This requires that an Order in Council has been made on the grounds that there is an emergency affecting fuel or electricity supply. Use of such powers seems unlikely to be helpful, however, since the extra CEGB demand would be on the international market. Statutory control could indeed be counter-productive since it would be resented by the companies. There could, however, be a case for the Department to initiate a co-ordinated approach at the time to manage the impact of an emergency on the market.

b. the oil companies are required under an EEC directive to maintain stocks of products in general equivalent to 76½ days of normal consumptions. Some 45-50 days of such stocks constitute an irreducible operational minimum, however. Provided that there was unlikely to be any international crisis, eg in the Gulf, that would disrupt oil markets, up to 25 days of HFO supplies - equivalent to 3-4 weeks maximum oil-burn - could be made available to the CEGB in an emergency (albeit with implications for our EEC obligations).

c. the companies' oil stocking obligation relates to sales in the previous year. Abnormal supplies to the CEGB in one year would therefore lead to the need to hold higher and more expensive stocks in the following year, which would tend to discourage the companies from helping out in an emergency. The Department of Energy would therefore aim to exempt the companies from such abnormal stocking obligations ahead of any emergency.

12. More generally, the Government must be concerned about perturbations in the oil market. It seems unlikely that the CEGB's additional demand would be significant in terms of the crude oil market (para 5); indeed over the next half year at least such a modest increase in demand could be helpful in relation to the present market weakness. Perturbance in the fuel oil market is of potentially greater concern. It is for consideration whether we should propose to the CEGB that in acquiring fuel oil it operates within a price ceiling; this could result in a supply shortfall early on in an emergency.

CEGB options

13. The CEGB, in consultation with its main suppliers, has considered a number of options which could be taken up to increase the chances that enough oil could be acquired to sustain maximum oil-burn from the outset. These include increasing stocks above the Board's present maximum stocking capacity of 1.1 mt. (Other possibilities exist and require further investigation.)

14. Options requiring commitment well ahead of firm evidence of need are as follows:

a. a crude oil refining deal (para 9) might secure 550-700 kt HFO at a cost of £150m with a 8-12 week lead time.

b. one refiner would be prepared to process additional heavy crude purchased by the CEGB as part of his operations at Pembroke. This would secure 300 kt HFO at a cost of £70m with a 6 week lead time.

c. oil storage at Milford Haven and on the Continent in respect of 700 kt would cost £85m and would take upward of 6 weeks to arrange.

15. Options requiring commitment rather less far ahead of need are:

a. filling storage at the Fawley refinery would secure 80 kt, equivalent to 1 week's consumption, at a cost of £10m, with a 4 week lead time.

b. oil purchases for early delivery to Thameside - 100 kt, £12m, 2 weeks.

16. Once a strike had started, the CEGB would be involved in commitments for supplies from the refineries linked to power stations on 3 weeks' notice, and to acquiring oil for the Thameside stations up to 4-6 weeks ahead. Gross costs of oil purchased would be about £50m a week or £1300m for a 6 month period.

17. The net cost of extra oil-burn would be about £20m a week since coal would be saved. If this were allowed to feed through the normal fuel price adjustment mechanism of the CEGB's bulk supply tariff, average electricity prices to monthly-billed industrial and large commercial consumers would increase by about 15 per cent. Quarterly-billed consumers, domestic and other commercial, would experience no immediate increase though the Area Electricity Boards would carry additional costs of £11m a week above budget (equivalent to about 10 per cent of revenue from quarterly-billed consumers) which they may have to recover, depending on the Government's view, when tariffs were next adjusted. It might be possible to spread the extra cost of oil-burn over a longer period than that of the period of the dispute; this would lessen the immediate impact on industrial consumers. It might also be possible to avoid passing passing on all or part of the extra costs if the Government were willing to relax the ESI's financial target and EFL.

18. A further option would be to build up to maximum oil-burn gradually. For instance, normal oil-burn continuing for one month before switching to maximum burn would lose about 2 weeks' endurance, as would half maximum burn for two months. Such delay would minimise the need for forward commitments as well as reduce the effect on prices in the market.

Discussion

19. Maximum oil-burn could contribute two months to the six months' endurance period. It would have to be undertaken from the outset and sustained to achieve the full benefit. The constraints on availability of fuel oil are in practice likely to be:

a. the cost of arrangements to commit supplies to the CEGB in advance of need, whether forward purchases of oil or rental of plant for storage or processing.

b. price perturbation in the market.

There could also be logistic problems in making supplies available via coastal tankers to power stations in the South East.

20. The CEGB are exploring with Esso arrangements to store oil at Fawley (para 15a). The Board are also discussing with Shell and others the possibility that one company might act as agents for the CEGB in acquiring oil for the Thameside stations. This could involve a rolling forward purchasing programme, reselling when necessary. At present the Board have ruled out on grounds of cost forward commitments to processing (para 14a and b) and to major storage (para 14c).

21. It is hard to judge the consequences for fuel oil prices of CEGB market oil-burn. Much would depend on the state of the oil market, the handling of purchases and the response of the refiners, both in Europe and further afield. It would be desirable to avoid as far as possible competitive purchasing by a number of companies of supplies for the CEGB. Using one major company as agent for open market purchases may be sensible in this context, though some flexibility might be lost.

22. It is probably not desirable to lay down in advance any particular price ceiling for CEGB fuel oil purchases. Political judgments would need to be made, possibly on a day-to-day basis, in the light of the circumstances, including "visibility". Insufficient acquisition would mean that the build-up to maximum burn would be constrained; this need not have a major effect on endurance, however (para 18).

Conclusions

23. There is likely to be considerable uncertainty as regards the availability of fuel oil for power stations at the outset of an emergency though over time the international supply system should be able to adjust to meet the changed pattern of demand. Use of stocks would help smooth the transition. Such stocks would include both the CEGB's existing stocks (paragraph 13), any additional stocks the Board might put in place (though these are limited by cost, paragraphs 14 and 15) and the oil companies' statutory stocks (paragraph 11b).

24. A phased build-up to maximum burn, spread perhaps over a few weeks, may be the most satisfactory course (paragraph 18). The intention would be to minimise price perturbation in the spot market while avoiding the need to reduce oil-burn at any

ANNEX A

Power Station	Source of supply (refinery)	Normal winter deliveries (kt/week)	Maximum Consumption (kt/week)	Usable stocks (kt)	Time available to arrange additional supplies (weeks)
Ince	Shell (Stanlow)	-	35	85	2
Fawley	Esso (Fawley)	20	70	10	0 (Note 1)
Pembroke	Gulf (Milford Haven)	5-10	70	100	1 (Note 2)
	Texaco (Pembroke)	5-10			
SE Region stations	Spot market	-	190	800	1-2 (Note 3)

Notes

1) Esso could hold one week's stock at their refinery, at the CEGB's expense.

2) Storage capacity at refineries could provide another 2 weeks' stocks.

3) The time shown is that needed in respect of the large stations at Kingsnorth and Grain.

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point owing to a supply constraint. Little endurance need be lost. The trade off between price escalation and endurance would need to be decided at the time (paragraph 22).

Department of Energy
25 January 1984

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MISC 57(84) 2

COPY NO 20

3 February 1984

CABINET

OFFICIAL GROUP ON COAL

FURTHER DEVELOPMENT OF POWER STATION ENDURANCE

Note by the Secretaries

The attached note by the Department of Energy is circulated for discussion at the meeting of the Group arranged for 10.00 am in Conference Room D, Cabinet Office, 70 Whitehall on Tuesday 7 February.

Signed J A J BUDD
J F STOKER

Cabinet Office

3 February 1983

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FURTHER DEVELOPMENT OF POWER STATION ENDURANCE

Note by the Department of Energy

1. The Group's report to Ministers in July 1983 (MISC 57(83)12) discussed the broad scope for increasing power station endurance in the medium term. This note considers the practical possibilities for the electricity supply system in England and Wales in the light of the subsequent Ministerial discussion and of further study by the CEGB. Separate notes deal with oil supply (MISC 57(84)1) and with the position this winter (MISC 57(84)3).

Power station coal stocks

2. The July report concluded that an additional 10 mt of coal stocks at CEGB power stations, taking them to 40 mt, would give a substantial increase in endurance. Taking into account the contribution from the three AGRs now commissioning, and from imports via the interconnector with France under construction, the present six months' endurance would be increased to approaching one year.

3. The CEGB advises that it would be feasible to take into stock an extra 10 mt of coal at power stations. To be effective in terms of endurance much of this coal would need to be allocated to 15 large stations and laid down on new sites. Planning applications would be needed in six or more cases which could require up to two years to achieve approval. Site preparation would involve the demolition of buildings in some cases. The Board judges that it could take until 1988/89 to

complete the stockbuild, at an annual rate of 2-3 mt a year. In the present year the main task will be to recover from the effects of the miners' overtime ban. It may not be possible to do more than restore power station stocks next autumn to the level they had reached last November. Thereafter, the rate at which men are now leaving the coal industry will bring forward the date at which current output meets current demand - though there would still remain over 20 mt of pithead stocks which might be drawn upon.

4. The cost to the CEGB of taking into stock an additional 10 mt of coal is estimated as (at current prices): £450m for the coal; £20m for site preparation and equipment; and £25m for handling costs. There would also be transport costs of about £30m and the NCB would incur extra handling costs of up to £10m

Ancillary materials

5. The CEGB advises that it would be technically feasible to increase stocks of essential commodities at power stations to match the additional endurance from another 10 mt of coal. The capital expenditure would be about £25m and the increase in working capital, £15m.

Carbon dioxide

6. The Board is examining the feasibility of schemes to conserve and recover carbon dioxide at nuclear stations. These could lead to savings in consumption of 10-15 per cent. For Heysham II, the AGR station under construction, supplies of carbon dioxide are assessed as equivalent to six weeks, compared with three weeks' normal use at existing stations. The Board is examining the possibilities for installing more storage or conservation equipment at Heysham. Plans have been concerted with the supplier to fill tanks when required.

Interconnector

7. The CEGB and SSEB are reviewing the long-term needs of the transmission system in the north, taking into account the extra output from the two new stations at Heysham and that at Hartlepool. There may well be a good economic case for reinforcing the Scottish interconnector for when the Torness AGR is available to export to England. However, problems of overall system capacity and stability could make for difficulties, given that the net power flow in England is from north to south.

Costs

8. The CEGB considers that the present level of its expenditure to achieve 26 weeks' endurance, although large, is defensible as in the interest of consumers. The Board takes the view, however, that to absorb the additional capital and revenue expenditure to increase endurance yet further would not be defensible and not possible within the financial objectives of the Board.

9. It would probably be possible to persuade the CEGB to build up coal stocks and ancillaries further if the Board were reimbursed for the extra costs (£85m at current prices for 10 mt, para 4, plus £35m, para 5). There would also be the need to make available 10 mt of coal, worth £450m.

10. The NCB have not yet been formally consulted. While in principle the additional demand for coal would be welcome, the Board would need to be satisfied that the terms of additional supply were acceptable.

Department of Energy
3 February 1984

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3 February 1984

CABINET

OFFICIAL GROUP ON COAL

POWER STATION ENDURANCE THIS WINTER

Note by the Secretaries

The attached note by the Department of Energy is circulated for discussion at the meeting of the Group arranged for 10.00 am in Conference Room D, Cabinet Office, 70 Whitehall on Tuesday 7 February.

Signed J A J BUDD
J F STOKER

Cabinet Office

3 February 1984

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POWER STATION ENDURANCE THIS WINTER

Note by the Department of Energy

1. Coal stocks at CEGB power stations reached a peak of nearly 31 million tonnes at the end of October, at the start of the NUM overtime ban. Since then the effect of NUM action has meant that deliveries of NCB coal have fallen short of programme by an average of 80 kt a week (5 per cent). Supplies from non-vested sources have been increased by about 10 kt a week and over the Christmas period 180 kt of imported coal were delivered to Thameside power stations. Coal stocks at CEGB power stations on 22 January were 26.7 mt, compared with 24.4 mt at the same time last year.

2. If the overtime ban continues with its present impact on deliveries, CEGB stocks could be some 2-2½ mt below plan by the end of March. The CEGB sees little scope for circumventing NUM action though the Board has told the NCB that any coal of suitable quality would be accepted, even in excess of the commercial programme of deliveries. Nevertheless, as the seasnn progresses endurance will in fact increase, from 26 weeks at end-January to around 30 weeks at end-March, and to a maximum of 33 weeks.

3. These estimates of endurance assume a phased build-up to maximum oil burn over four weeks. The CEGB has purchased 100 kt of fuel oil for delivery to Thameside power stations during January and early February to maintain high stocks, rather than running down such stocks as would be the normal practice through

the winter. The Board plans to maintain a high level of oil stocks so long as there is a serious threat of major disruption to coal deliveries.

4. Stocks of ancillary materials are at a level corresponding to 20 weeks' supplies as planned, stretchable to approaching 26 weeks. The Board's suppliers can provision all major locations to ensure that stocks are at a maximum level when required. Arrangements have been completed for any necessary replenishment during a strike including deliveries in ESI-liveried and unmarked vehicles; and use of helicopters (though only after discussion with Government).

5. The CEGB has been reviewing arrangements for fuelling nuclear power stations. Stocks of fresh nuclear fuel are in place to match overall system endurance. There is, moreover, sufficient storage at the nuclear stations for 6 months' stocks of irradiated fuel in case picketting were to prevent its transport to BNFL for reprocessing. However, such an increase in stocks would involve some practical problems, eg deterioration in pond conditions and increasing operator exposure.

Department of Energy
3 February 1984

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12 March 1984

CABINET

OFFICIAL GROUP ON COAL

OIL SUPPLIES TO THE CENTRAL ELECTRICITY GENERATING BOARD IN THE EVENT OF A MINERS' STRIKE

Note by the Secretaries

Attached is a draft report to Ministers on oil supplies to the Central Electricity Generating Board in the event of a miners' strike. The draft contains a number of square brackets where the Secretaries would either be grateful for further information from the Department of Energy or for their comments on the points made. Would members please pass any comments on the draft to the Secretaries (Mr Stoker, Room 316, 70 Whitehall; 233-6161) by Noon on Thursday 15 March. It is hoped that it will be possible to submit the report by the weekend.

Signed J A J BUDD
J F STOKER

Cabinet Office
12 March 1984

OIL SUPPLIES TO THE CENTRAL ELECTRICITY GENERATING BOARD
IN THE EVENT OF A MINERS' STRIKE

I. INTRODUCTION

1.1 The achievement of maximum oilburn from the outset of a miners' strike is assumed in present estimates of endurance. The Official Group on Coal was commissioned to investigate where trouble might arise in the move to maximum oilburn and what action might be taken in advance to make sure that the necessary oilburn was achieved. This report has been prepared following consultation with the Central Electricity Generating Board (CEGB).

1.2 The oil burned in oil-fired power stations is heavy fuel oil (HFO). The CEGB's winter oil consumption varies between 40,000 and 90,000 tonnes per week and averages 60,000 tonnes per week. Maximum oilburn would increase this weekly consumption to about 350,000 tonnes. The ability of the CEGB to move rapidly to maximum oilburn will depend on their stocks of HFO, the distribution of stocks in relation to consumption and lead-times for obtaining additional supplies to sustain oilburn at maximum. Section II of this paper reviews the current position, including CEGB stocks, arrangements for resupply, likely market effects of increased UK demand for HFO and the timing of the move to maximum oilburn. Section III examines the scope for further action. Section IV summarises the report and the Group's recommendations.

SECTION II. THE PRESENT POSITION

UK Production of HFO

2.1 When construction of the CEGB's modern, large, oil-fired stations was started UK refineries had sufficient capacity to produce the necessary fuel oil for base-load operation. However, the escalation in oil prices over the past decade has meant that these stations are now largely operated only when required to meet winter demand. In the event of an increase of the order described in Section I in the demand of the CEGB for HFO, their suppliers would have to adjust production and would also have some logistical difficulties to overcome in getting the supplies to the power stations where they were needed. It would not, therefore, be straightforward to make available immediately supplies sufficient to sustain maximum oilburn.

Oil Supplies to Power Stations

2.2 Oil-fired power stations fall into two groups. Just under half of consumption at maximum oilburn is accounted for by stations at Ince, Fawley and Pembroke, which draw their supplies direct from linked refineries. Notwithstanding the changes in the market and in UK refinery production over recent years referred to at paragraph 2.1 above, oil to keep these stations at maximum oilburn should be available from normal sources given a three-week lead-time for ordering. Just over half of consumption at maximum oilburn is accounted for by large stations in the South East region normally supplied from the spot market. Oil to keep these stations at maximum oilburn should be available given an ordering time of 4-6 weeks. In both cases, these ordering times represent a forward commitment which would be likely to

extend beyond the end of any emergency due to a miners' strike and which would have cost implications for the CEGB.

2.3 Gross costs of oil purchase by the CEGB might be about £50 million per week once the position had stabilised following the beginning of a miners' strike [, assuming an HFO price of $ [ ] per tonne (see paragraph [2.8] below).] On these assumptions the net costs, taking into account the saving on coal, would be about £20 million a week. If this were allowed to feed through the normal fuel price adjustment mechanism of the CEGB's bulk supply tariff, average electricity prices to monthly-billed industrial and large commercial consumers would increase by about 15 per cent. Quarterly-billed consumers, domestic and other commercial, would experience no immediate increase though the Area Electricity Boards would carry additional costs of £11 million a week above budget (equivalent to about 10 per cent of revenue from quarterly-billed consumers) which they might have to recover, depending on the Government's view, when tariffs were next adjusted. It might be possible to spread the extra cost of oilburn over a longer period than that of the period of the dispute: this would lessen the immediate impact on industrial consumers. It might of course be possible to avoid passing on all or part of the extra costs if the Government were willing to relax the ESI's financial target and EFL.

Stocks

2.4 The stocks of HFO currently likely to be available to the CEGB at the beginning of a miners' strike total about 1.1 million tonnes. In principle, this is roughly three weeks consumption at maximum oilburn. But in practice the stocks are not evenly distributed in relation to maximum demand. Some stations hold more than three weeks' stocks,

while others hold considerably less. This uneven distribution is illustrated in Table 1.

TABLE 1

Power Station	Source of Supply	Normal Winter Deliveries*	Maximum Consumption*	Usable stocks**
Ince	Refinery	-	35	85
Fawley	Refinery	20	70	10
Pembroke	Refinery	10-20	70	100
SE Region Stations	Spot market	-	190	800

* Thousand tonnes per week.

** Thousand tonnes.

2.5 For maximum oilburn to be achieved rapidly, it might be necessary to take special action to fill gaps in stocks which could not be filled from normal sources, given the lead-times for resupply described above in paragraph 2.2 Such action might involve recourse to the spot market to fuel power stations usually supplied from linked refineries: that might be particularly expensive if it intensified the initial price reaction of the spot market to the abrupt increase in demand at the beginning of the emergency. The main possibility, however, would be to draw on strategic stocks which the oil companies are required by an EEC Directive to maintain equivalent to 76½ days normal consumption. In favourable circumstances, up to 25 days normal consumption of HFO - equivalent to 3-4 weeks maximum oilburn by the CEGB - might be available to the Board from this source. The role of the Government

would be [to authorise the oil companies to reduce their stocks below the prescribed normal levels.] This would need careful handling in view of the EEC commitment involved. It would then be for the CEGB to obtain the additional supplies from the oil companies within their normal relationship of client and supplier.

2.6 The purpose of these strategic stocks as a buffer against international crisis might limit their availability, however. The Government would have to take stock of international circumstances - in the Gulf, for example, - before it decided whether to seek to release strategic stocks. It is possible, too, that the oil companies might take a more cautious view than the Government of prevailing world circumstances and decline to release some or all of the stocks. In those circumstances [, despite the availability as a last resort of powers under the Energy Act 1976 to regulate the supply and acquisition of oil products, there would in practice be little that the Government could do without counter-productive effects on the general willingness of the oil companies to co-operate in mitigating the effects of the strike].

Reaction of the Market

2.7 The view of the Department of Energy is that there is in principle enough refining flexibility in the UK and overseas to meet the demand for extra HFO to maintain maximum oilburn. It is unlikely that the additional demand would have significant effects on the market for crude, where extra demand might be .35 million barrels per day, compared with UK production of 2.3 million barrels per day and OPEC output of 17.5 million barrels per day. At least over the next half

year or so, such an increase in demand might actually help to counter weaknesses in the market.

2.8 The effect on the HFO market merits more serious attention. Demand for HFO would continue to grow as a strike went on, as industries which were equipped to switch from coal to oil did so. This might increase eventual total UK weekly demand for HFO by a further 60,000 tonnes per week; a significant increase, though relatively modest compared with that arising from the CEGB's activities. Estimates of the effects of increased UK demand on HFO prices are inevitably speculative. Best available estimates are that a move to maximum oilburn might produce peak prices of $250 a tonne, compared with $170 at present; and that the price might stabilise somewhere between $200 and $230 a tonne.

2.9 The view of the Group was that, in spite of the likely price effects, the market could be relied upon to meet any difference between the CEGB's needs for HFO and what the oil companies could supply from within their own systems. The world market is used to responding to changes in demand and, although an initial market adjustment could have unwelcome price effects, there is a world over-capacity at the moment for producing HFO. The Group saw little advantage in alternative arrangements suggested by some oil companies consulted by the CEGB; namely that, to minimise the impact on the HFO market, the Board should buy its own crude and make a deal with one or more refiners to have it processed. This would be difficult and time-consuming to arrange and would involve substantial and costly forward commitments which would extend considerably beyond the end of the strike; and was ruled out on these grounds by the CEGB.

2.10 The Group considered, however, that it was desirable to ensure if possible thatexcessive price effects were avoided. Not only could there be serious implications for bulk energy users if high increases occurred and were passed on to consumers, but distortion in the HFO market might also alert the unions to the significance of oilburn in withstanding a miners' strike and engender an atmosphere of crisis which would not be favourable to the Government's aims. At the cost of some flexibility, the use of one company as an agent for the acquisition of supplies for the Thameside power stations might help to mitigate price effects by avoiding competitive purchasing by a number of CEGB suppliers. The Board are discussing this possibility with Shell and others. A more effective measure might be a maximum price which the CEGB should stay below in buying HFO, though it is not possible without foreknowledge of market and other relevant circumstances at the time of a strike and to say precisely what that figure should be. Inevitably, a maximum price might have some effect on the ability of the CEGB to move immediately to maximum oilburn.

Phasing

2.11 Phasing the move for any reason could have an effect on eventual endurance, but might have some advantages in addition to moderating the market effects. In particular, it could allow the oil companies to make in an orderly way at the outset of a strike the logistical and production arrangements necessary to maintain maximum burn. The CEGB will wish to review their planning assumptions in the light of all relevant circumstances at the time of any strike. With that proviso, however, and assuming that at least some of the strategic stocks held by the oil companies under their EEC obligations would be available, they are prepared to assume that it should be possible to move to maximum oilburn over a period of one month without undue perturbation

of the market, without extra expenditure which they would not be prepared to find from existing resources and at a cost of no more than one week in endurance.

2.12 The endurance cost of phasing the move would be reduced if oilburn was phased in from a point before a miners' strike actually began. This could also have tactical advantages if it avoided abrupt action on oilburn which could be seized upon as a casus belli by the miners' or other unions acting in support.

Conclusions

2.13 The Group concluded that it was likely to be worthwhile in the event of a miners' strike to phase the move to maximum oilburn over a period of up to one month, given the logistical and production advantages for the oil companies; the need to moderate so far as possible the impact of maximum oilburn on the HFO market; the relatively small cost in terms of endurance; and the likely scope for reducing that cost by beginning the move to maximum burn before a strike began. Before coming to a conclusion on phasing it would be necessary for the Government, in the run up to a miners' strike, to review key factors including levels of coal stocks; international circumstances and implications for the availability of strategic stocks of HFO; and the state of industrial relations in the coal industry and other industries where sympathetic action might be a possibility. The fullest consultation with and guidance to the CEGB as far as possible in advance of a miners' strike would be essential on a wide range of matters, including the level of any maximum price for HFO within which the CEGB should operate and the timing of the move to maximum oilburn.

III. POSSIBLE ACTION ON STOCKS

The Options

3.1 The Group considered that the only effective options for action in advance to enhance the ability of the Board to move to and maintain maximum oilburn involved expansion of HFO stocks and storage capacity. A major and permanent expansion of storage in the UK would be expensive and would bring no commercial benefits for the CEGB, who rule it out for those reasons. Short of that, it would be possible to achieve increased levels of stocks at the outset of a strike by temporary filling of storage capacity at Milford Haven and on the Continent. This could provide an extra 700,000 tonnes of stocks for use at the power stations at [ ], but it would cost £85 million and would take upwards of six weeks to arrange. At present, the CEGB rule out this, too, on cost grounds.

3.2 Action at shorter notice could fill gaps which might otherwise occur early on in a period of maximum oilburn because of the uneven distribution of CEGB stocks in relation to consumption. Two options considered by the Group were:

a. filling storage at the Fawley refinery to provide 80,000 tonnes, equivalent to one week's consumption, at a cost of £10 million and with a lead-time of four weeks;

b. oil purchases for early delivery to Thameside: 1000,000 tonnes at a cost of £12 million with a lead-time of two weeks.

The CEGB [have agreed] with Esso arrangements for a. above; and would be prepared to take action at b. [when it was clear that a miners' strike was imminent].

Conclusions

3.3 The Group agreed with the CEGB that a major expansion of the Board's storage capacity should be ruled out because of the high cost and the lack of any commercial benefit. They agreed also that it was unlikely that temporary arrangements for the filling of storage at Milford Haven and on the Continent would be worthwhile in present circumstances, given the high cost. They noted, however, that there were circumstances in which such action might merit more serious consideration: for example, if a miners' strike seemed likely when international tension made it doubtful that strategic stocks could be made available to help with achieving maximum oilburn. The Group welcomed the limited action already in hand to allow for the filling of gaps in the distribution of stocks of oil early in a period of maximum oilburn and the action already taken by the CEGB to avoid the normal run-down of stocks of HFO over the winter.

IV. SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

4.1 Maximum oilburn would involve an increase in CEGB consumption of HFO from a winter average of 60,000 tonnes per week to about 350,000 tonnes per week (Section I).

4.2 Market changes in recent years mean that there would be production and logistical difficulties for the CEGB's suppliers in a move to maximum oilburn, but oil to keep power stations at maximum burn should be available from normal sources given ordering times of 3-6 weeks (2.1-2.2).

4.3 Net costs of oilburn might be about £20 million a week and would lead to significant increases in bills if passed on to consumers (2.3).

4.4 Current CEGB stocks of heavy fuel oil are in principle equal to three weeks consumption at maximum oilburn, but are not evenly distributed in relation to demand. To move rapidly to maximum oilburn it might be necessary either to draw on strategic stocks (which would have implications for EEC obligations), to have greater recourse to the spot market, or both. The availability of strategic stocks would depend on the international situation at the time (2.4-2.6).

4.5 Maximum oilburn would be unlikely to affect the market for crude oil. It would however be likely to increase the market price of HFO to a degree which could be significant but which would probably be tolerable. It would be desirable to ensure as far as possible that distortion in the market was not such as to produce excessive price

effects or to engender an atmosphere of crisis which did not favour the Government's aims. Market effects would be reduced to some degree if one company was used by the CEGB as sole agent for the acquisition of supplies on the spot market. There would be a more significant impact on price effects if the CEGB were to stay below a specified maximum price in buying HFO. Depending on the circumstances at the time, it should be possible to move to maximum oilburn over a period of one month without undue perturbation of the market, without extra expenditure which the CEGB would not be prepared to find from its existing resources and at a cost of no more than one week's endurance (or less if the move were begun before the onset of a miners' strike) (2.7-2.11).

4.6 Scope for action in advance to enhance the ability of the Board to move rapidly to maximum oilburn is limited and is confined to action on oil storage capacity and stocks. The CEGB rule out on grounds of cost both a major and permanent expansion of stocks and the temporary filling of large-scale storage capacity at Milford Haven and on the Continent. The value of the latter would in any case be reduced by the long lead-time involved. The CEGB [have agreed] more limited short-term arrangements to fill early gaps in existing stocks by increasing storage at Fawley and by making purchases on the spot market when necessary for early delivery to Thameside power stations (3.1-3.2).

Recommendations

4.7 The Official Group

i. concludes that, although it will be necessary to overcome some logistical and production problems, existing stocks and resupply

arrangements are likely to allow maximum oilburn to be achieved rapidly;

ii. recommends phasing the move to maximum oilburn over a period of up to one month to allow necessary logistical and production adjustments to be made in an orderly manner and to minimise market perturbation, provided that the cost in endurance is no more than one week and that full advantage is taken of any opportunity to reduce the endurance cost by initiating action before the onset of a miners' strike;

iii. recommends that the Government

a. should urge the CEGB to pursue further the use during a miners' strike of one oil company as sole agent for purchases on the spot market;

b. should give appropriate guidance to the CEGB on the maximum price they should pay for HFO provided that, in the circumstances at the time, such a maximum price would be likely to reduce market perturbation without delaying the achievement of maximum oilburn beyond a phasing-in period of one month;

iv. agrees that major, permanent expansion of CEGB oil storage capacity is not justified in the absence of any commercial benefit, but

a. notes that it might be desirable for the Government to press the CEGB to reconsider its rejection of larger-scale expansion of temporary storage on the lines discussed at paragraph 3.1 above if a strike appeared likely at a time when it was doubtful that strategic stocks could be drawn on; and

b. recommends that the CEGB should be urged to carry through the arrangements described at 3.2 above for filling early gaps in HFO stocks; and to continue for 1984/85 the policy pursued this year of avoiding the normal winter run-down of oil stocks.

c/c

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MISC 57(84) 5 COPY NO 20

21 March 1984

CABINET

OFFICIAL GROUP ON COAL

OIL SUPPLIES TO THE CEGB IN A MINERS' STRIKE

Note by the Secretaries

Attached is the Group's report in the form in which it was submitted to Ministers on 16 March.

Signed J A J BUDD
J F STOKER

Cabinet Office
21 March 1984

OIL SUPPLIES TO THE CENTRAL ELECTRICITY GENERATING BOARD
IN THE EVENT OF A MINERS' STRIKE

I. INTRODUCTION

1.1 The achievement of maximum oilburn at Central Electricity Generating Board (CEGB) power stations throughout a miners' strike is assumed in present estimates of endurance. The Official Group on Coal was commissioned to investigate where trouble might arise in the move to maximum oilburn and what action might be taken in advance to make sure that the necessary oilburn was achieved. This report has been prepared following consultation with the CEGB.

1.2 The oil burned in oil-fired power stations is heavy fuel oil (HFO). The CEGB's winter oil consumption varies between 40,000 and 90,000 tonnes per week and averages 60,000 tonnes per week. Maximum oilburn would increase this weekly consumption to about 350,000 tonnes. The ability of the CEGB to move rapidly to maximum oilburn depends on their stocks of HFO, the distribution of stocks in relation to consumption and lead-times for obtaining additional supplies to sustain oilburn at maximum. Section II of this paper reviews CEGB stocks, arrangements for resupply, likely market effects of increased UK demand for HFO and the timing of the move to maximum oilburn. Section III examines the scope for further action. Section IV summarises the report and the Group's recommendations.

SECTION II. THE PRESENT POSITION

UK Production of HFO

2.1 When construction of the CEGB's modern, large, oil-fired stations was started UK refineries had sufficient capacity to produce the necessary fuel oil for base-load operation. However, the escalation in oil prices over the past decade has meant that these stations are now largely operated only when required to meet winter demand. Refinery output has changed and some refineries have closed. In the event of an increase of the order described in Section I in the demand of the CEGB for HFO, their suppliers would have to adjust production, would need to draw upon their international supply systems and would also have some logistical difficulties to overcome in getting the supplies to the power stations where they were needed. It would not, therefore, be straightforward to make available immediately supplies sufficient to sustain maximum oilburn.

Oil Supplies to Power Stations

2.2 Oil-fired power stations fall into two groups. Just under half of consumption at maximum oilburn is accounted for by stations at Ince, Fawley and Pembroke, which draw their supplies direct from linked refineries. The output of these refineries may not be sufficient to meet the needs of the power stations at maximum burn without disrupting supplies of other oil products. The companies expect therefore to draw on their international supply systems or the spot market. The CEGB would expect to enter into commitments with a three-week lead-time for ordering. Just over half of consumption at maximum oilburn is accounted for by large stations in the South East region normally supplied from the spot market. Oil to keep these stations at maximum oilburn should be available given an ordering time of 4-6 weeks. In both cases, these ordering times represent a forward commitment which would be likely to extend beyond the end of any emergency due to a miners' strike and which could have cost implications for the CEGB.

2.3 Gross costs of oil purchase by the CEGB might be about £50 million per week once the position had stabilised following the beginning of a miners' strike, assuming an HFO price of about $200 per tonne (see paragraph 2.8 below). On these assumptions the net costs, taking into account the saving on coal,

would be about £20 million a week. If this were allowed to feed through the normal fuel price adjustment mechanism of the CEGB's bulk supply tariff, average electricity prices to monthly-billed industrial and large commercial consumers would increase by about 15 per cent. Quarterly-billed consumers, domestic and other commercial, would experience no immediate increase though the Area Electricity Boards would carry additional costs of £11 million a week above budget (equivalent to about 10 per cent of revenue from quarterly-billed consumers) which they might have to recover, depending on the Government's view, when tariffs were next adjusted. It might be possible to spread the extra cost of oilburn over a longer period than that of the period of the dispute; this would lessen the immediate impact on industrial consumers. It might of course be possible to avoid passing on all or part of the extra costs if the Government wished to reduce the impact on consumers and were willing to relax the ESI's financial target and EFL. Against this, it could be argued that there is no reason why consumers should not pay for costs incurred in maintaining their supplies; a temporary supplement of 10-15 per cent is likely to be seen as preferable to disconnections.

Stocks

2.4 At the beginning of a miners' strike the CEGB would expect to be holding stocks of over 1 million tonnes. In principle, this is roughly three weeks' consumption at maximum oilburn. But in practice the stocks are not evenly distributed in relation to maximum demand. Some stations hold more than three weeks' stocks, while others hold considerably less. This uneven distribution is illustrated in Table 1.

TABLE 1

Power Station	Source of Supply	Normal Winter Deliveries*	Maximum Consumption*	Usable stocks**
Ince	Refinery	-	35	85
Fawley	Refinery	20	70	10
Pembroke	Refinery	10-20	70	100
SE Region Stations	Spot market	-	190	800

* Thousand tonnes per week.

** Thousand tonnes

2.5 For maximum oilburn to be achieved rapidly, it might be necessary to take special action to fill gaps in stocks which could not be filled from normal sources, given the lead-times for resupply described above in paragraph 2.2. Such action might involve recourse to the spot market to fuel power stations usually supplied from linked refineries: that might be particularly expensive if it intensified the initial price reaction of the spot market to the abrupt increase in demand at the beginning of the emergency. The main possibility, however, would be to draw on strategic stocks which the oil companies are required by an EEC Directive to maintain equivalent to 76½ days normal consumption. In favourable circumstances, up to 25 days normal consumption of HFO - equivalent to 3-4 weeks maximum oilburn by the CEGB - might be available to the Board from this source. The role of the Government would be to authorise the oil companies to reduce their stocks by a specified amount below the level of their prescribed stocking obligations. This would need careful handling in view of the EEC commitment involved. It would then be for the CEGB to obtain the additional supplies from the oil companies within their normal relationship of client and supplier.

2.6 The purpose of these strategic stocks as a buffer against international crisis might limit their availability, however. The Government would have to take stock of international circumstances - in the Gulf, for example - before it decided whether to seek to release strategic stocks.

Reaction of the Market

2.7 The view of the Department of Energy is that there is in principle enough refining flexibility in the UK and overseas to meet the demand for extra HFO to maintain maximum oilburn. It is unlikely that the additional demand would have significant effects on the market for crude, where extra demand might be .35 million barrels per day, compared with UK production of 2.3 million barrels per day and OPEC output of 17.5 million barrels per day. At least over the next half year or so, such an increase in demand might actually help to counter underlying weaknesses in the market.

2.8 The effect on the HFO market merits more serious attention. Demand for HFO would tend to grow as a strike went on, as industries which were equipped to switch from coal to oil did so. This might increase eventual total UK demand for HFO by perhaps a further 60,000 tonnes per week; a significant

increase, though relatively modest compared with that arising from the CEGB's activities. Estimates of the effects of increased UK demand on HFO prices are inevitably speculative. Best available estimates are that a move to maximum oilburn might produce peak prices of up to $250 a tonne, compared with $180 at present; and that the price might stabilise somewhere between $200 and $230 a tonne.

2.9 The view of the Group was that, in spite of the likely price effects and assuming no major curtailment of supplies for external reasons, the market could be relied upon to meet any difference between the CEGB's needs for HFO and what the oil companies could supply from within their own systems. The world market is used to responding to changes in demand and, although an initial market adjustment could have unwelcome price effects, there is a world over-capacity at the moment for producing HFO.

2.10 The Group considered, however, that it was desirable to ensure if possible that excessive price effects were avoided. Not only could there be serious implications for bulk energy users, if high increases occurred and were passed on to consumers, but price increases in the HFO market might engender an atmosphere of crisis which would not be favourable to the Government's aims. At the cost of some flexibility, the use of one company as an agent for the acquisition of supplies for the Thameside power stations might help to mitigate price effects by avoiding competitive purchasing by a number of CEGB suppliers. The Board are discussing this possibility with Shell and others. A more effective measure might be a maximum price which the CEGB should stay below in buying HFO, though it is not possible to say precisely beforehand what that figure should be. Inevitably, a maximum price might have some effect on the ability of the CEGB to move immediately to maximum oilburn.

Phasing

2.11 Phasing the move to maximum oilburn could have some small effects on overall endurance, but would have advantages in addition to moderating the market effects. In particular, it could allow the CEGB and the oil companies to make the logistical and production arrangements necessary to maintain maximum burn in an orderly way at the outset of a strike. Phasing up to maximum burn over a period of one month would in theory involve the loss of about one week's endurance. This is, nevertheless, the CEGB's current planning assumption,

forming part of the Board's arrangements to achieve the objective of 6 months' endurance.

Conclusions

2.12 The Group concluded that it was likely to be worthwhile in the event of a miners' strike to phase the move to maximum oilburn over a period of up to one month, given the logistical and production advantages for the oil companies; the need to moderate so far as possible the impact of maximum oilburn on the HFO market; the relatively small cost in terms of endurance; and the likely scope for reducing that cost by beginning the move to maximum burn before a strike began. Decisions on the timing and phasing of oilburn would need to be taken in the light of levels of coal stocks; international circumstances and implications for the availability of strategic stocks of HFO; and the state of industrial relations in the coal industry and other industries where sympathetic action might be a possibility. The fullest consultation with and guidance to the CEGB would be essential on a wide range of matters, including the level of any maximum price for HFO within which the CEGB should operate and the timing of the move to maximum oilburn.

III. POSSIBLE ACTION ON STOCKS

The Options

3.1 The Group considered that the only effective options for action to enhance the ability of the Board to move and maintain maximum oilburn involved expansion of HFO stocks.

3.2 Action at short notice could fill gaps which might otherwise occur early on in a period of maximum oilburn because of the uneven distribution of CEGB stocks in relation to consumption. Two options considered by the Group were:

a. filling storage at the Fawley refinery to provide 80,000 tonnes, equivalent to one week's consumption, at a cost of £10 million and with a lead-time of four weeks;

b. oil purchases for early delivery to Thameside: 100,000 tonnes at a cost of £12 million with a lead-time of two weeks.

The CEGB have put action in hand on both these options.

IV SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

4.1 Maximum oilburn would involve an increase in CEGB consumption of HFO from a winter average of 60,000 tonnes per week to about 350,000 tonnes per week (Section I).

4.2 Market changes in recent years mean that there would be production and logistical difficulties for the CEGB's suppliers in a move to maximum oilburn, but there would be good prospects that oil to keep power stations at maximum burn should be available from normal sources given ordering times of 3-6 weeks (2.1 - 2.2).

4.3 Net costs of oilburn might be about £20 million a week and would lead to significant increases in bills if passed on to consumers (2.3).

4.4 Current CEGB stocks of heavy fuel oil are in principle equal to three weeks' consumption at maximum oilburn, but are not evenly distributed in relation to demand. To move rapidly to maximum oilburn it might be necessary either to draw on strategic stocks (which would have implications for EEC obligations), to have greater recourse to the spot market, or both. The availability of strategic stocks would depend on the international situation at the time (2.4 - 2.6).

4.5 Maximum oilburn would be unlikely to affect the market for crude oil. It would however be likely to increase the market price of HFO to a degree which could be significant but which would probably be tolerable. It would be desirable to ensure as far as possible that the effect on the market was not such as to produce excessive price effects or to engender an atmosphere of crisis which did not favour the Government's aims. Price effects would be reduced to some degree if one company was used by the CEGB as sole agent for the acquisition of supplies on the spot market. There would be a more significant impact on price effects if the CEGB were to stay below a specified maximum price in buying HFO. It would probably be desirable to move to maximum oilburn over a period of one month in order to minimise perturbation of the market (2.7 -2.11).

4.6 The CEGB have in hand more limited short-term arrangements to fill early gaps in existing stocks by increasing storage at Fawley and by making purchases on the spot market for early delivery to Thameside power stations (3.1 - 3.2).

Recommendations

4.7 The Official Group

i. concludes that, although it will be necessary to overcome some logistical and production problems, existing stocks and resupply arrangements are likely to allow maximum oilburn to be achieved rapidly;

ii. recommends phasing the move to maximum oilburn over a period of up to one month to allow necessary logistical and production adjustments to be made in an orderly manner and to minimise market perturbation;

iii. recommends that the Department of Energy

a. should pursue with the CEGB the advantages of using a single oil company as sole agent for purchases on the spot market during a miners' strike;

b. should discuss with the CEGB guidelines regarding the maximum price that the Board should pay for HFO.

Cabinet Office

21 March 1984

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MISC 57(84)6

COPY NO 20

7 June 1984

CABINET

OFFICIAL GROUP ON COAL

EXTENDING POWER STATION ENDURANCE

Note by the Secretaries

The attached note by the Department of Energy is circulated for discussion at the meeting of the Group arranged for 2.30 pm on MONDAY 11 JUNE.

Signed J A J BUDD
J F STOKER

Cabinet Office
7 June 1984

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EXTENDING POWER STATION ENDURANCE

Note by the Department of Energy

1. Ministers have asked for a contingency study of the possibility of moving coal stocks from pits to power stations during the course of the coal dispute without losing production currently being secured and without provoking retaliatory action elsewhere.

2. Coal stocks at CEGB power stations are currently about 16.2 mt. The oil-fired power stations are operating to the maximum feasible extent. Supplies of coal to power stations from the Nottinghamshire and other pits still operating have averaged about 400 kt per week over the period of the miners' strike. The endurance of the CEGB system, on the basis of continued maximum oil burn, is as follows:

Continuing coal deliveries (kt/week)	endurance until
300	December
400	January
500	February

3. Useable pithead stocks of steam coal currently amount to about 15 mt, plus another million tonnes of better quality grades. (There is also 5-6 mt of coal at pitheads not yet prepared for use).) However, the effects of the overtime ban, of pit closures, and of continued operations in the Midlands and elsewhere have resulted in a maldistribution of useable pithead stocks in relation to the 19 main CEGB coal-fired sites (4 of which are remote from the coal fields):

NCB Area	Yorks	Midlands	N.E	West	S.Wales	Scotland
Pithead stocks (mt)	0.5	3.8	3.9	1.6	2.3	3.3
CEGB power stations	7	5	1	1	1	(2 SSEB)

Pithead stocks in Yorkshire are particularly low while power stations stocks in the Midlands are relatively high.

4. Formal plans for the use of servicemen to move coal were abandoned in 1979. However, studies carried out in 1981 for MISC 57 explored the possibility of using troops to move pithead stocks to power stations. Rail transport was ruled out since the rail unions could not be expected to co-operate and too few servicemen are able to drive trains. Use of road transport might involve about 4500 service drivers and the requisitioning of about 1650 tipper lorries (about 10 per cent of the national stock) to move about 100 kt of coal each day to the main CEGB coal-fired stations. This would represent one lorry arriving at each such station every 4-6 minutes with a correspondingly tight schedule for loading and unloading. Detailed feasibility studies involving the Ministry of Defence, CEGB and NCB would be needed to confirm the rate of deliveries that would be attainable in present circumstances. The maldistribution of pithead stocks mears that longer distances will need to be travelled. There is also the possible need for convoys of lorries for public order reasons; this might increase the numbers required by perhaps 30 per cent.

5. Another possibility would be to use contractors to operate the lorries. It would then be necessary to make arrangements for loading at pithead.

6. Pithead stocks of 12 mt (neglecting those in Scotland) would be sufficient for about 17 weeks' deliveries to CEGB power stations at a rate of 100 kt per day. In practice, something nearer 500 kt a week for 20 weeks or so may be the most that could be managed; and given maldistribution, this could be very optismistic. However, it is the total tonnage moved that is crucial, rather than the precise rate of deliveries. The movement of an additional 10 mt of pithead

stocks to power stations would extend endurance as follows, assuming that existing deliveries continued:

Existing coal deliveries (kt/week)	endurance extended until
300	March 1985
400	June
500	October

7. In the case where existing deliveries continued at 400kt/week, there would be almost a year in which to move 10 mt of pithead stocks, provided an early start were made. This would require a rate of delivery of only 200 kt/week on average. November is the latest date at which a start would need to be made to move all 10 mt and still reach the June 1985 end-point; deliveries of 500 kt/week would then be necessary.

8. The main difficulties that would need to be faced before a decision could be taken to employ servicemen to move pithead coal stocks are:

a. Attitudes in the pits that continue to work. Use of troops could prejudice existing production.

b. Attitudes in the power stations. TGWU members are in key positions, operating coal handling and generation plant. The CEGB management is likely to be extremely nervous of any proposal to use troops since this could prejudice the willingness of power station staff to co-operate in the burning of on-site coal stocks, thereby undermining existing endurance.

c. The public order implications. Very large numbers of pickets could well be deployed at the main coal-fired stations.

d. Political difficulties in justifying the use of troops while power station coal stocks remain at a relatively high level. It could not be claimed that there was a direct and immediate threat to electricity supplies.

e. The possibility of wider sympathetic action by other unions. Disruption of oil supplies to power stations is an especial vulnerability.

9. The chances of circumventing all these difficulties will be a matter for political judgement. In principle, moving pithead coal stocks to power stations could extend endurance very usefully. Provided existing coal and oil flows were not disrupted, it should be possible to get through next winter. However, the risks involved point to later rather than earlier decisions. A decision to move 10 mt of pithead stocks to power stations could be delayed until about November without prejudicing the endurance extention to June shown in paragraph 6.

Department of Energy
7 June 1984

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COPY NO 20

26 June 1984

CABINET

OFFICIAL GROUP ON COAL

EXTENDING POWER STATION ENDURANCE

Note by the Secretaries

Attached is a draft paper for discussion at a meeting of the Group to be arranged.

Signed J A J BUDD
J F STOKER

Cabinet Office
26 June 1984

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AND PERSONAL

EXTENDING POWER STATION ENDURANCE

INTRODUCTION

1.1 The Official Group on Coal was asked to consider the scope for extending power station endurance by moving coal stocks from pits to power stations during the course of the coal dispute without putting at risk the coal production and deliveries of coal and oil to power stations currently being achieved.

1.2 This paper:

- describes the current levels of coal production and delivery;
- illustrates the effect which increased coal deliveries to power stations would have on power station endurance;
- sets out the physical and logistical constraints on increased movement of pithead coal stocks;
- discusses the industrial relations risks and the implications for public order;
- proposes a preferred course of action for consideration by Ministers.

1.3 Except where it is clear that Scotland is included, the figures in this paper apply to England and Wales. Scotland, where circumstances are materially different from those in England and Wales in that no National Coal Board (NCB) pits are working, is discussed at Annex A.

PRESENT PRODUCTION AND DELIVERIES

2.1 Coal production in Great Britain has in recent weeks normally been running at around 750,000 tonnes, although the level from week to week has varied depending on the incidence of public holidays and the pattern of annual holidays at particular pits. Production from deep mines has been around 450,000 tonnes and that from open cast sites around 300,000 tonnes.

2.2 Weekly deliveries have normally been at a level not far short of weekly production, ie around 700,000 tonnes. Leaving out of account some coal delivered by means other than road and rail and some small deliveries in Scotland (see paragraph 3 of Annex A), the pattern has been broadly as follows:

thousand tonnes weekly

	Deliveries to CEGB power stations	Deliveries to other customers	Total
By rail	200-300	50-60	250-350
By road	200	150	350
Total	400-500	200	600-700

It should be noted however that the level of rail deliveries to other customers (ie principally to major steelworks) and to a lesser extent to power stations has recently been affected by sympathetic action by the rail unions. To some extent (notably in the case of steelworks) any reduction in rail deliveries can be offset by increased road deliveries.

ENDURANCE: EFFECT OF INCREASED DELIVERIES

3.1 The effect which increased coal deliveries would have on power station endurance (assuming maintenance of maximum oilburn) is as follows:

Weekly coal deliveries to CEGB power stations

(thousand tonnes)

410	(recent average rate)	mid-January
500		early February
600		[ ]
700		[ ]

3.2 As and when coal production at the NCB's deep mines increases the first priority will be to ensure, as at present, that it is all immediately delivered to appropriate customers so as to avoid the effort and costs of double handling. Deliveries to CEGB power stations already involve however a small amount of draw down of pithead stocks (80,000 tonnes a week) at the Midlands pits producing coal. The remainder of this paper is concerned with examining how far power station deliveries might be increased by increasing the draw down of pithead stocks.

PHYSICAL AND LOGISTICAL CONSTRAINTS

Amount and distribution of pithead stocks

4.1 Usable GB pithead stocks of steam coal amount to about 15 million tonnes. There are also 1 million tonnes of coal which are of a quality better than that required for power stations and which would normally be reserved for premium customers. There are a further 5-6 million tonnes at pitheads which would require washing, crushing, or both before they could be used.

4.2 Power station endurance depends on the 19 main CEGB coal burning stations listed in Annex B. The extent to which pithead coal stocks could in practice be used to supply these stations depends in part on how far distant the power stations are from the coalfields and the distribution of

pithead stocks among the coalfields. 4 stations (Didcot and the 3 Thameside stations) are remote from the coalfields. The distribution of pithead stocks among NCB areas is as follows:

NCB Area	Yorks	Midlands	N.E.	West	S. Wales
Pithead stocks (million tonnes)	0.5	3.8	3.9	1.6	2.3

4.3 It should be noted that pithead stocks at pits currently working (in Nottinghamshire, Derbyshire, Leicestershire, the West Midlands and Lancashire) are around 4 million tonnes. In these areas where all or most pits are working there are 9 major coal fired stations, two of which however (Ratcliffe and High Marnham) have high stocks since they have received the bulk of rail deliveries since the strike began. 6 stations are in solidly strike bound areas (Aberthaw in South Wales, Blyth in the North-East and 4 in South Yorkshire).

4.4 Considerations of coal quality (ie the need to blend coals of inferior quality with better grades prior to use in power stations) also have an effect on the logistics of supply. These considerations apply particuarly in the Midlands and Western Areas which account for around 5.5 million tonnes of usable stocks.

Delivery capacity

4.5 In normal times coal deliveries to power stations are virtually all by rail through the "merry-go-round" system of rail links between pits and power stations. Each train carries about 1000 tonnes, the equivalent of 50 tipper trucks (usually of 20 tonnes capacity). Weekly coal deliveries in excess of 1.5 million tonnes are possible by this sytem. There are however industrial relations constraints which make it difficult to increase rail deliveries above

the present rate of 200-300,000 tonnes a week; there is indeed a major effort by the rail unions to stop these deliveries.

4.6 As the table in paragraph 2.2 shows about half the coal now being delivered, both to CEGB power stations and to other customers is by road (around 350,000 tonnes a week). Although this is a considerable increase over normal road deliveries of coal, it is thought that the national fleet of tipper lorries is large enough to accommodate additional road deliveries of the order of at least 500,000 tonnes a week, even allowing for the fact that it would probably be necessary, in the interests of public order, to arrange deliveries by convoy. The constraint would be likely to be the readiness of contractors and their drivers to be deterred by secondary industrial action (for example picketing and blacking). Experience at Ravenscraig, Orgreave and elsewhere suggests that many contractors and drivers are not so deterred.

4.7 If contractors and drivers were deterred by secondary industrial action, Ministers might wish to consider whether they wished work to be done on the possibility of using Service drivers. Formal plans for the use of Servicemen to move coal were abandoned in 1979. It has been the Government's policy that no contingency planning for the use of Servicemen in the current dispute should be carried out. Without prejudice to that policy, the results are available of studies carried out in 1981 for the Official Group which suggest that, in order to move about 500,000 tonnes a week to the main CEGB coal fired stations, it might be necessary to requisition about 1650 tipper lorries (about 10 per cent of the national stock) and involve about 4500 Service drivers. The requisitioning would have to be done under the Emergency Powers Act 1920 and Ministers would have to be satisfied that the threat to the essentials of life from an interruption to electricity supplies was sufficient to justify invoking the powers. If Ministers were to decide to consider further the possibility of using Servicemen, detailed feasibility studies involving the Ministry of Defence, CEGB and NCB would be needed to confirm the rate of deliveries attainable in present circumstnaces. In addition, the claims of prior commitments of Service manpower would have to be considered in assessing the numbers of men who could be made available.

Loading and unloading capacity

4.8 Lifting coal from stock involves considerably more handling than loading new-wrought coal. Handling and loading of stocks at the pits would normally be done by NCB employees: work necessary for their reception at the power stations would be done by CEGB employees. It is possible in principle for coal from stock to be loaded for transport by road even at pits the production from which is normally moved by rail. It is possible also for power stations normally supplied by rail to take road deliveries. Concurrent road and rail deliveries to power stations would however compete for limited unloading faciltiies. Even if road deliveries could be substantially expanded without prejudicing existing rail deliveries, therefore, the combined capacity for movement of coal by road and rail at any one time might exceed the capacity of the power stations to take deliveries. An increase in road deliveries would also involve increased handling of coal at the power stations, often involving a change from the usual pattern of work for the CEGB employees involved in unloading.

Overall assessment of physical and logistical constraints

4.9 Taking account of the physical and logistical considerations set out in paragraphs 4.1 to 4.8 above, it seems likely that the maximum volume of pithead coal stocks which it would be feasible to move during the course of the dispute would be some 10 million tonnes and that the maximum feasible rate of delivery would be 500,000 tonnes a week. Delivery of the full 10 million tonnes would extend endurance to June 1985. This could be achieved by either:

- a delivery rate of 200,000 tonnes a week starting in July; or
- a delivery rate of 500,000 tonnes a week starting in November.

INDUSTRIAL RELATIONS AND PUBLIC ORDER CONSIDERATIONS

Industrial relations

5.1 In considering the scope for increasing deliveries of pithead coal stocks it is necessary to assess the risks of the following possible adverse consequences:

in relation to the miners

- industrial action at pits currently working normally
- inhibiting a return to work at other pits
- increasing the extent, and violence, of picketing

in relation to railwaymen and other transport workers

- increased sympathetic action affecting existing coal and oil deliveries to power stations

in relation to power station workers

- a refusal to handle deliveries at the increased level
- possible refusal to handle coal deliveries at the existing level
- possible withdrawal of cooperation from measures to prolong power station endurance, including maximum oilburn.

5.2 Some of these contingencies have a lower degree of probability attached to them than others. One important factor is the attitudes of the unions and workers involved. At one extreme it now seems unlikely that increased deliveries from pithead stocks could be exploited by the NUM in a way which would bring the Nottinghamshire miners out on strike. At the other extreme the rail unions, who have already made strenuous efforts to curtail existing

deliveries to power stations, might be able to exploit a major effort to lift pithead coal stocks in a way which would stop rail deliveries completely. Power stations workers come between these two extremes. At some sites (for example the Fiddlers' Ferry power station) TGWU members have from the outset of the strike been unwilling to handle new coal deliveries although they have cooperated with the CEGB in other respects. At many other sites, particularly in the Midlands, power station workers have raised no objection about handling new rail borne or road borne coal deliveries. There has also been no difficulty so far with power station workers over maximum oilburn. Power station workers have the ability to affect power station endurance much more directly than any other group of workers. The risk of provoking a loss of cooperation on their part must therefore be assessed particularly carefully.

5.3 The risk of an adverse reaction is also dependent both on the scale of any effort to move pithead stocks and on the extent to which it might involve any conspicuous change in normal working. There would for example be particular difficulty in bringing workers into strike-bound pits to load the pithead stocks, a task which would normally be done by miners. Similarly unloading tipper trucks at power stations normally served by rail deliveries would require abornormal working by power station workers. Finally the use of Service drivers rather than private sector contractors and drivers would sharply increase the emotional temperature. The risk of an adverse reaction is lowest where the pits involved have been working normally, where there has already been some discreet lifting of pithead stocks and where the power stations involved are not in striking areas.

Public order

5.4 An attempt to move pithead stocks up to the maximum physical and logistical limit (as outlined in paragraph 4.9 above) would have serious implications for public order. The two major operations involving road delivery in the strike so far are those at Ravenscraig where the maximum feasible weekly lift was thought to be about 20,000 tonnes and at Orgreave

when the maximum weekly lift was about 8,000 tonnes. In both locations and particularly in the last week of the Orgreave operation the police faced very heavy and violent picketing. An attempt to shift pithead stocks from a large number of pits, some in strike bound areas, to perhaps 19 major coal fired stations, some of which would also be in strike-bound areas would inevitably place major strains on the police. There would be an additional difficulty in that the distances involved would in many cases be greater than at Ravenscraig and Orgreave. The public order problem would be greatest if the maximum rate of delivery (500,000 tonnes a week) were to be attempted. This would be the equivalent of about 25 operations on the scale of Ravenscraig or about 60-70 operations on the scale of Orgreave. The lower rate of delivery referred to in paragraph 4.9 (200,000 tonnes a week) would be more manageable but would need to be sustained over a much longer period (up to 11 months rather than 7 months) and would need to start very quickly. Even this lower rate of delivery could involve major problems of public order if it involved securing access to pits and power stations in strike-bound areas. If Ministers were to decide that the NCB and CEGB should be asked to organise a significant movement of pithead coal stocks there would need to be confidential consultations with the Association of Chief Police Officers to ensure that the additional demands on police resources (together with those involved in protecting miners going to work and in ensuring suppplies to steelworks) could be met and to permit planning at the localities concerned.

SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

6.1 The Group's conclusions and recommendations can be summarised as follows:

i. There would be worthwhile benefits to endurance in increasing the present rate of coal deliveries to power stations (400-500 tonnes a week of which some 80,000 tonnes is from pithead stocks).

ii. Taking account of physical and logistical constraints only it would be theoretically feasible to move 10 million tonnes of pithead stocks to power stations, either at a rate of 500,000 tonnes a week from November or at a rate of 200,000 tonnes a week from July, thus prolonging power station endurance to June 1985.

iii. There are however serious industrial relations risks in attempting to move as much as 10 million tonnes of pithead stocks. Although coal production in Nottinghamshire would be unlikely to be affected, existing rail borne coal deliveries to power stations might cease and there might be some withdrawal of cooperation by power station workers.

iv. Road borne coal movements on this scale would cause major problems of public order, particularly if pits and power stations in strike-bound areas were involved.

v. The industrial relations risks and public order problems would be less if the operation was confined to the 4 million tonnes of pithead stocks at those pits working normally and to the major coal fired power stations outside the strike-bound areas.

vi. The NCB and CEGB in consultation with BR and road contractors are already seeking to maximise coal deliveries to power stations, making day to day judgements of what might be feasible without risk of adverse consequences, and are drawing on pithead stocks discreetly.

viii. It is therefore recommended that the most practicable way of increasing power station endurance with mimimum risk to existing coal production and deliveries and minimum strain on the police would be to build on what the NCB and CEGB are doing already, with the objective of moving to power stations the bulk of the 4 million tonnes of pithead stocks in the working pits by the end of the year. This might involve an increase in the weekly rate of delivery from pithead stocks from 80,000 to about 200,000 tonnes a week and would increase endurance, on current assumptions, from mid-January to [ ].

SECRET AND PERSONAL

SCOTLAND

1. Following a recent review of their endurance position, the SSEB have advised the Secretary of State for Scotland that they are confident that, under present circumstances, they can match the endurance of the CEGB system throughout the coming Winter and, at the same time, continue exports on the interconnector at their present level. This is subject to the relatively trouble free operation of all the non-coal fired plants in Scotland. In addition there could be temporary curtailment of exports if there were unexpectedly high peaks of demand caused by abnormal weather conditions. As in England, the Scottish endurance position depends on freedom of interruption to oil supplies.

2. Total NCB coal stocks in Scotland amount to some 3.3 million tonnes. The bulk of this is held at the following four locations:-

		Tonnes
Bilston Glen (Deep Mine)	-	550,000
Monktonhall (Deep Mine)	-	550,000
Westfield (Opencast)	-	1,200,000
Blindwells (Opencast)	-	600,000

The balance is stocked at a number of NCB opencast sites. There is no up-to-date information held centrally on coal stocks at the various relatively small privately owned opencast sites in operation in Scotland.

3. Opencast coal production has continued in Scotland at roughly its normal level during the miners' strike. At NCB sites production is estimated to have been almost 700,000 tonnes. At these sites the workforce made continued production conditional upon coal being stocked, rather than delivered to industry or the electricity boards. It is clear however that, throughout the dispute, some coal supplies have been reaching industry and there have been arrangements for exceptional treatment to be given to schools, hospitals and cases of hardship. Some of these have been met from pithead stocks and some have been supplied

from NCB opencast production. But, despite heavy picketing, the more important sources of supply have been privately owned opencast mines and imports; comprehensive figures on the delivery levels in Scotland are not available.

4. Consideration of the feasbility of moving NCB coal stocks to power stations has concentrated on the four major locations listed above. At the maximum, an operation based on road transport might be capable of shifting 1,500-2,000 tonnes from each site to the nearest coal-fired power station in a 12 hour working day, equivalent to about 50,000 tonnes per week. Round the clock working would not double the figures, but might increase them to around 75,000 tonnes per week. The use of rail transport instead would roughly double these rates of stock movement though, because of loading and unloading problems, road and rail could not be used in conjunction. These delivery rates compare with normal winter weekly delivery rate to Scottish power stations of about 100,000 tonnes.

5. The existing level of SSEB coal stocks, and their overall endurance position, are such that an attempt to obtain deliveries from NCB stocks would not be justified at present, and would carry the considerable risk of forfeiting the co-operation of workers in power stations.

Scottish Office
19 June 1984

Location of 19 major coal fired power stations

Remote from coalfields (4)

Didcot	Oxfordshire
West Thurrock	Thameside
Tilbury	Thameside
Kingsnorth (partially oil-fired)	Thameside

In strike-bound areas (6)

Aberthaw	South Wales
Blyth	Northumberland
Ferrybridge	Yorkshire
Drax	Yorkshire
Eggborough	Yorkshire
Thorpe Marsh	Yorkshire

Others (9)

West Burton	Nottinghamshire
Cottam	Nottinghamshire
High Marnham	Nottinghamshire
Ratcliffe	Nottinghamshire
Willington	Derbyshire
Drakelow	Warwickshire
Rugeley	Staffordshire
Ironbridge	Salop
Fiddlers' Ferry	Merseyside

SECRET

SECRET AND PERSONAL

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5 July 1984

CABINET

OFFICIAL GROUP ON COAL

EXTENDING POWER STATION ENDURANCE

Note by the Secretaries

Attached is the Group's report, revised to incorporate points raised during discussion at the MISC 57(84)4th meeting on 29 June. It was submitted to Ministers on 4 July.

Signed J A J BUDD
J F STOKER

Cabinet Office
5 July 1984

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EXTENDING POWER STATION ENDURANCE

INTRODUCTION

1.1 The Official Group on Coal was asked to consider the scope for extending power station endurance by moving coal stocks from pits to power stations during the course of the coal dispute without putting at risk the coal production and deliveries of coal and oil to power stations currently being achieved.

1.2 This paper:

- describes the current levels of coal production and delivery;
- illustrates the effect which increased coal deliveries to power stations would have on power station endurance;
- sets out the physical and logistical constraints on increased movement of pithead coal stocks;
- discusses the industrial relations risks and the implications for public order;
- proposes a preferred course of action for consideration by Ministers.

1.3 Except where it is clear that Scotland is included, the figures in this paper apply to England and Wales. Scotland, where circumstances are materially different from those in England and Wales, is discussed at Annex A.

PRESENT PRODUCTION AND DELIVERIES

2.1 Coal production in Great Britain has in recent weeks normally been running at around 750,000 tonnes, although the level from week to week has varied depending on the incidence of public holidays and the pattern of annual holidays at particular pits. Production from deep mines has been around 450,000 tonnes and that from open cast sites around 300,000 tonnes. Most of the deep mine production has been moved to customers but the NCB has so far not been able to move the bulk of open cast production.

2.2 Weekly deliveries have normally been at a level not far short of weekly production, ie around 700,000 tonnes. Leaving out of account some coal delivered by means other than road and rail and some small deliveries in Scotland (see paragraph 9 of Annex A), the pattern has been broadly as follows:

thousand tonnes weekly

	Deliveries to CEGB power staions	Deliveries to other customers	Total
By rail	200-300	50-60	250-350
By road	200-300	150	350-450
Total	400-500	200	600-700

It should be noted however that the level of rail deliveries to other customers (ie principally to major steelworks) and to a lesser extent to power stations has recently been affected by sympathetic action by the rail unions. To some extent (notably in the case of steelworks) any reduction in rail deliveries can be offset by increased road deliveries. In the week ending 29 June, for example, total deliveries to power stations were expected to be of the order of 420,000 tonnes, of which 270,000 were expected to be made by road and only 150,000 by rail. It is not clear, however, how far this substitution can be carried without risking industrial relations difficulties with NUM members involved in loading lorries at working pits. Moreover, the more road transport is used to maintain existing levels of deliveries, the less capacity will be available to expand deliveries beyond the levels already achieved.

ENDURANCE: EFFECT OF INCREASED DELIVERIES

3.1 The effect which increased coal deliveries would have on power station endurance (assuming maintenance of maximum oilburn) is as follows:

Weekly coal deliveries to CEGB power stations (thousand tonnes)

300	mid-December
420 (recent average rate)	mid-January
500	early February
600	late March
700	July

These figures reflect the fact that a tonne delivered in spring or summer, when consumption is low, extends endurance by more than a tonne delivered in winter, when it is high.

3.2 As and when coal production at the NCB's deep mines increases the first priority will be to ensure, as at present, that it is all immediately delivered to appropriate customers so as to avoid the effort and costs of double handling. Deliveries to CEGB power stations already involve however a small amount of draw down of pithead stocks at the pits producing coal. This stock draw has normally been running at some 80,000 tonnes per week but has at its peak been as high as 150,000 tonnes per week. About two-thirds of open cast output is currently going to stock, mainly in those areas where the deep mines are closed. The remainder of this paper is concerned with examining how far power station deliveries might be increased by increasing the draw down of pithead and open cast stocks.

PHYSICAL AND LOGISTICAL CONSTRAINTS

Amount and distribution of pithead stocks

4.1 Usable NCB stocks of steam coal amount to about 15 million tonnes at pitheads and on open cast sites, just over 12 million of them in England and Wales. There are also 1 million tonnes of coal which are of a quality better than that required for power stations and which are reserved for domestic,

industrial and other premium customers. (There are also nearly 5 million tonnes at pitheads which could not be used without further processing: very little of this is in areas where deep mined coal is being produced and distributed, and it is unlikely to be practical to bring these stocks into use in the circumstances of a strike.)

4.2 Power station endurance depends on the 19 main CEGB coal burning stations listed in Annex B. The extent to which pithead coal stocks could in practice be used to supply these stations depends in part on how far distant the power stations are from the coalfields and the distribution of pithead stocks among the coalfields. 4 stations (Didcot and the 3 Thameside stations) are remote from the coalfields. The distribution of pithead stocks among NCB areas is as follows:

NCB Area	Yorks	Midlands	N.E.	West	S. Wales
Pithead stocks (million tonnes)	0.5	3.8	3.9	1.6	2.3

4.3 Considerations of coal quality (ie the need to blend coals of inferior quality with better grades prior to use in power stations) also have an effect on the logistics of supply. They apply particularly in the Midland and Western Areas which account for around 5.5 million tonnes of usable stocks. A full appreciation of these and other considerations arising from maldistribution of stocks would require detailed discussions with the NCB and CEGB.

4.4 It should be noted that stocks in the areas where pits are currently working (in Nottinghamshire, Derbyshire, Leicestershire, the West Midlands and Lancashire) are around 4 million tonnes. In these areas there are 9 major coal fired stations. Two of these, however, (Ratcliffe and High Marnham), have high stocks because of rail deliveries since the strike began and are thus not suitable destinations for further large quantities from pithead stocks. 6 stations are in solidly strike bound areas (Aberthaw in South Wales, Blyth in the North East and 4 in South Yorkshire).

Delivery capacity

4.5 In normal times coal deliveries to power stations are virtually all by rail through the "merry-go-round" system of rail links between pits and power stations. Each train carries about 1000 tonnes, the equivalent of 50 tipper trucks (usually of 20 tonnes capacity). Weekly coal deliveries in excess of 1.5 million tonnes are possible by this system. There are however industrial relations constraints. The highest levels of rail deliveries achieved during the strike have been in the range of 200-300,000 tonnes a week: action by the rail unions has recently reduced this rate to the region of 150,000 tonnes a week.

4.6 As the table in paragraph 2.2 shows, about half the coal delivered over recent weeks both to CEGB power stations and to other customers has been by road (around 350,000 tonnes a week). This is a considerable increase over normal road deliveries of coal and the scope for further increases is difficult to assess. There are no up-to-date figures for the national fleet of tipper lorries of the large, rigid kind needed to move coal, but the latest reliable estimate puts it in the region of 16,000 to 20,000 vehicles. There is thus likely to be plenty of spare tonnage available in principle, but it is not possible to say how much would be available in practice and how much could and would be diverted away from other industrial purposes (eg in the construction industry). The switch of iron ore deliveries at Ravenscraig and Llanwern from rail to road has also taken up some of the available capacity. Nevertheless, it is clear that the size of the national lorry fleet is likely to be a much less important constraint than the readiness of contractors and their drivers to be deterred by intimidation and secondary industrial action (for example picketing and blacking). Experience at Ravenscraig, Orgreave, Llanwern and elsewhere shows that some contractors and many drivers have not been so deterred.

4.7 If contractors and drivers were deterred by intimidation and secondary industrial action, Ministers might wish to consider whether they wished work to be done on the possibility of using Service drivers. Formal plans for the use of Servicemen to move coal were abandoned in 1979. It has been the Government's policy that no contingency planning for the use of Servicemen in the current dispute should be carried out. Without prejudice to that policy,

the results are available of studies carried out in 1981 for the Official Group which suggest that, in order to move about 500,000 tonnes a week to the main CEGB coal fired stations, it might be necessary to requisition at least 1650 of the largest types of tipper lorries (about 10 per cent of the national stock of such vehicles) and involve about 4500 Service drivers. The requisitioning would have to be done under the Emergency Powers Act 1920 and Ministers would have to be satisfied that the threat to the essentials of life from an interruption to electricity supplies was sufficient to justify invoking the powers, given the levels of stocks remaining at the time. If Ministers were to decide to consider further the possibility of using Servicemen, detailed feasibility studies involving the Ministry of Defence, CEGB and NCB would be needed to confirm the rate of deliveries attainable in present circumstances. These studies would require a good deal of work in the field and could not be done completely covertly. In addition, the claims of prior commitments of Service manpower would have to tbe considered in assessing the numbers of men who could be made available.

Loading and unloading capacity

4.8 Lifting coal from stock involves considerably more handling than loading new-wrought coal. Handling and loading of stocks at the pits would normally be done by NCB employees: work necessary for their reception at the power stations would be done by CEGB employees. It is possible in principle for coal from stock to be loaded for transport by road even at pits the production from which is normally moved by rail. It is possible also for power stations normally supplied by rail to take road deliveries. Concurrent road and rail deliveries to power stations would however compete for limited unloading facilities. Even if road deliveries could be substantially expanded without prejudicing existing rail deliveries, therefore, the combined capacity for movement of coal by road and rail at any one time might exceed the capacity of the power stations to take deliveries. An increase in road deliveries would also involve increased handling of coal at the power stations, often involving a change from the usual pattern of work for the CEGB employees involved in unloading.

Overall assessment of physical and logistical constraints

4.9 Making some allowance for the considerations of coal quality and stock maldistribution discussed in paragraphs 4.2 and 4.3, the maximum amount of stocks which might in principle be available for distribution from sites in England and Wales is unlikely to be more than 10 million tonnes and could well be less. Although the numbers of suitable tipper lorries which might be available is not precisely known, it seems improbable, taking account of the existing scale of abnormal road movements, that the maximum rate of movement of these stocks could exceed 500,000 tonnes per week. As at present, the costs of road transport would fall on the CEGB: they would be offset by the fact that the CEGB is currently spending much less than usual on rail deliveries because of the effects of the strike. The additional 10 million tonnes would extend endurance to April/May 1985. This could be achieved by either:

- a delivery rate of 200,000 tonnes a week starting in July; or
- a delivery rate of up to 500,000 tonnes a week starting in November.

INDUSTRIAL RELATIONS AND PUBLIC ORDER CONSIDERATIONS

Industrial relations

5.1 In considering the scope for increasing deliveries of pithead coal stocks it is necessary to assess the risks of the following possible adverse consequences:

in relation to the miners

- industrial action at pits currently working
- inhibiting a return to work at other pits
- increasing the extent, and violence, of picketing

in relation to railwaymen and other transport workers

- increased sympathetic action affecting existing coal and oil deliveries to power stations

in relation to power station workers

- a refusal to handle deliveries at the increased level
- possible refusal to handle coal deliveries at the existing level
- possible withdrawal of cooperation from measures to prolong power station endurance, including maximum oilburn.

5.2 Some of these contingencies have a lower degree of probability attached to them than others. One important factor is the attitudes of the unions and workers involved. At one extreme it now seems unlikely that increased deliveries from pithead stocks could be exploited by the NUM in a way which would bring the Nottinghamshire miners out on strike although there are some sensitivities even in the areas least affected by the strike which might inhibit the degree of cooperation in increased coal movement. At the other extreme the rail unions, who have already made strenuous efforts to curtail existing deliveries to power stations, might be able to exploit a major effort to lift pithead coal stocks in a way which would stop rail deliveries completely. Power station workers come between these two extremes. Many are members of the TGWU, which has resolved nationally to give assistance to the striking miners. The EEPTU and other unions in the industry has advised members to work normally, though this leaves open the possibility that they might refuse abnormal or additional work. At some sites (for example the Fiddlers' Ferry power station) TGWU members have from the outset of the strike been unwilling to handle new coal deliveries although they have cooperated with the CEGB in other respects. CEGB workers at Didcot power station have voted not to handle road deliveries, though it remains to be seen whether this will be upheld in practice. At many other sites, particularly in the Midlands, power station workers have raised no objection about handling new rail borne or road borne coal deliveries. There has also been no difficulty so far with power station workers over maximum oilburn. Power station workers have the ability to affect power station endurance much more directly than any other group of workers. The risk of provoking a loss of cooperation on their part, particularly at power stations in areas where pits are on strike and emotions run high, must therefore be assessed particularly carefully.

5.3 At the pits, as well as at the power stations, the risk of an adverse reaction is dependent both on the scale of any effort to move NCB stocks and on the extent to which it might involve any conspicuous change in normal working. There would for example be particular difficulty in bringing workers into strike-bound pits to load the pithead stocks, a task which would normally be done by miners. The risk of an adverse reaction is lowest where the pits involved have been working normally and where there has already been some discreet lifting of pithead stocks and where the power stations involved are not in striking areas. The use of Service drivers rather than private sector contractors and drivers, if it proved necessary, would sharply increase the emotional temperature both at pits and at power stations.

Public order

5.4 Experience with large scale coal deliveries during the strike so far (for example at Ravenscraig, Llanwern and Orgreave) has suggested that the implications for public order are less critically dependent on tonnages moved than on other factors. These factors include the general degree of tension in which movements take place, the circumstances which have made them necessary, the location of the sites where the coal is being loaded and delivered and the motivation of those driving the lorries, doing the loading and receiving the deliveries. They also include the resources of manpower on which the strike leadership can call for picketing and the use to which they put them. Although the largest number of pickets mustered on any one occasion has been 10,000, and although the most militant strikers are thought to be considerably fewer than this figure, astute picketing tactics could clearly pose very difficult problems at a large number of sites.

5.5 An attempt to shiftNCB stocks from a large number of sites, some in strike bound areas, to perhaps 19 major coal fired stations, some of which would also be in strike bound areas would almost certainly result in further violent picketing. There would be an additional difficulty in that the distances involved would in many cases be greater than at Ravenscraig, Llanwern and Orgreave. Attempts to achieve the maximum rate of delivery (500,000 tonnes a week) would be very visible and controversial. The lower rate of delivery referred to in paragraph 4.9 (200,000 tonnes a week) would need to be sustained over a much longer period (up to 10 months rather than 5 months) and would need to start very

quickly. The police would not have the resources to protect all the convoys, even at this lower rate of delivery, if there were well-organised and violent mass picketing at a number of sites. The difficulties would be particularly acute if access had to be secured to pits and power stations in strike bound areas. If Ministers were to decide that the NCB and CEGB should be asked to organise a significant movement of pithead coal stocks there would need first to be confidential consultations with the Association of Chief Police Officers to consider whether the additional demands on police resources (together with those involved in protecting miners going to work and in ensuring supplies to steelworks) could be met and, if they could, to permit planning at the localities concerned.

SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

6.1 The Group's conclusions and recommendations can be summarised as follows:

i. There would be worthwhile benefits to endurance in increasing the present rate of coal deliveries to power stations (400-500 tonnes a week of which some 80,000 tonnes is from pithead stocks).

ii. Taking account of maldistribution of stocks and considerations of coal quality, the theoretical maximum of stocks which it might be feasible to move is probably 10 million tonnes or less; and the maximum rate at which they could be moved is probably 500,000 tonnes a week or less. Moving 10 million tonnes would extend power station endurance to April/May 1985.

iii. There are however risks in attempting to move as much as 10 million tonnes of NCB stocks. Attempts to move coal from pits in strikebound areas would escalate the intensity of the dispute and could well widen it. Although coal production in Nottinghamshire is perhaps unlikely to be affected, existing rail borne coal deliveries to power stations might cease, oil supplies to power stations could be prejudiced and power station workers might even withdraw cooperation. All this could put existing endurance at risk. Use of Servicemen would exacerbate these dangers.

iv. Road borne coal movements on this scale would cause major problems of public order, particuarly if pits and power stations in strike bound areas were involved. The police would not be able to ensure free or safe passage for this number of convoys if there were well-organised and violent mass picketing at a number of pits.

v. The industrial relations risks and public order problems would be less if the operation was confined to the NCB stocks at those pits and open-cast sites which are working and to the major coal fired power stations outside the strike bound areas.

vi. The NCB and CEGB in consultation with BR and road contractors are already seeking to maximise coal deliveries to power stations, making day to day judgements of what might be feasible without risk of adverse consequences, and are drawing on pithead stocks discreetly.

vii. It is therefore recommended that the most practical way of extending power station endurance with minimum risk to existing coal production and deliveries and minimum strain on the police would be to build on what the NCB and CEGB are doing already and concentrate on increasing deliveries from working NCB sites to power stations outside the strike bound areas. The objective should be to increase deliveries of new-wrought coal and stocks, both deep-mined and open cast, by some 100-150,000 tonnes a week above the current average level (420,000 tonnes a week). Achievement of the higher figure would increase endurance, on current assumptions, from mid-January to early March 1985. In Scotland, the possibility should be kept under review of moving coal stocks to power stations from any pits which achieve sizeable levels of operation.

Cabinet Office
4 July 1984

SECRET AND PERSONAL

SCOTLAND

1. Following a recent review of their endurance position, the SSEB have advised the Secretary of State for Scotland that they are confident that, under present circumstances, they can match the endurance of the CEGB system throughout the coming Winter and, at the same time, continue exports on the interconnector at their present level. This is subject to the relatively trouble free operation of all the non-coal fired plants in Scotland. In addition there could be temporary curtailment of exports if there were unexpectedly high peaks of demand caused by abnormal weather conditions. As in England, the Scottish endurance position depends on freedom of interruption to oil supplies.

2. Total NCB coal stocks in Scotland amount to some 3.3 million tonnes. The bulk of this is held at the following four locations:-

		Tonnes
Bilston Glen (Deep Mine)	-	550,000
Monktonhall (Deep Mine)	-	550,000
Westfield (Opencast)	-	1,200,000
Blindwells (Opencast)	-	600,000

The balance is stocked at a number of NCB opencast sites. There is no up-to-date information held centrally on coal stocks at the various relatively small privately owned opencast sites in operation in Scotland.

3. Opencast coal production has continued in Scotland at roughly its normal level during the miners' strike. At NCB sites production is estimated to have been almost 700,000 tonnes. At these sites the workforce made continued production conditional upon coal being stocked, rather than delivered to industry or the electricity boards. It is clear however that, throughout the dispute, some coal supplies have been reaching industry and there have been arrangements for exceptional treatment to be given to schools, hospitals and cases of hardship. Some of these have been met from pithead stocks and some have been supplied

SECRET AND PERSONAL

from NCB opencast production. But, despite heavy picketing, the more important sources of supply have been privately owned opencast mines and imports; comprehensive figures on the delivery levels in Scotland are not available.

4. Coal production recently started at Bilston Glen colliery but only at very low levels.

5. Consideration of the feasibility of moving NCB coal stocks to power stations has concentrated on the four major locations listed above. At the maximum, an operation based on road transport might be capable of shifting 1,500-2,000 tonnes from each site to the nearest coal-fired power station in a 12 hour working day, equivalent to about 50,000 tonnes per week. Round the clock working would not double the figures, but might increase them to around 75,000 tonnes per week. The use of rail transport instead would roughly double these rates of stock movement though, because of loading and unloading problems, road and rail could not be used in conjunction. These delivery rates compare with normal winter weekly delivery rate to Scottish power stations of about 100,000 tonnes.

6. The existing level of SSEB coal stocks, and their overall endurance position, are such than an attempt to obtain deliveries from NCB stocks would not be justified at present, and would carry the considerable risk of forfeiting the cooperation of workers in power stations. But the position will be kept under review in the light of the level of resumed working at Scottish pits.

ANNEX B

Location of 19 major coal fired power stations

Remote from coalfields (4)	
Didcot	Oxfordshire
West Thurrock	Thameside
Tilbury	Thameside
Kingsnorth (partially oil-fired)	Thameside
In strike-bound areas (6)	
Aberthaw	South Wales
Blyth	Northumberland
Ferrybridge	Yorkshire
Drax	Yorkshire
Eggborough	Yorkshire
Thorpe Marsh	Yorkshire
Others (9)	
West Burton	Nottinghamshire
Cottam	Nottinghamshire
High Marnham	Nottinghamshire
Ratcliffe	Nottinghamshire
Willington	Derbyshire
Drakelow	Warwickshire
Rugeley	Staffordshire
Ironbridge	Salop
Fiddlers' Ferry	Merseyside