



File

BRIEFING FOR PRIME MINISTER'S QUESTIONS
UNPUBLISHED ARTICLE ON NCB ACCOUNTING PROCEDURE

Line to take

The article remains unpublished because the authors agreed, at a meeting with the NCB last Thursday, to review its contents.

2 As I have said before, the NCB required support of £1.3 billion last year. This is no accounting fiction. I wish it were.

3 The Board fully accepts that management decisions on pit closures should not be based on a single accounting document - that has never been their practice.

Background

4 There were exchanges in the House on the subject of the unpublished Accountancy article in both Prime Minister's Questions and during discussion of Business of the House on 6 December. Also on that day NCB Board members and officials met the authors of the article and issued the attached press statement the following day.

5 Also attached is a copy of the unpublished article and comments made on it to the authors by the NCB.

Department of Energy
10 December 1984

NCB ACCOUNTING METHODS AND PIT CLOSURES

TEXT OF NCB PRESS STATEMENT ON 7 DECEMBER

NCB members and the Board's Director General of Finance yesterday met the authors of an article for Accountancy magazine. The Board explained how the authors had misunderstood the Board's accounting and decision making procedures and drew attention to factual inaccuracies.

The authors, who regretted that the original article had been circulated by Accountancy magazine before the Board had an opportunity to discuss it with them, readily agreed to review the contents of their article.

The Board expressed their willingness to discuss with the authors their revised article.

COMMENTARY

NCB accounts – a mine of mis-information?

Arguments about the economic viability of individual pits are at the heart of the coal dispute. Yet the fundamental accounting information used in public debate is gravely lacking

Tony Berry, Teresa Capps, David Cooper, Trevor Hopper and Tony Lowe write:

The current problems in the National Coal Board are likely to cost everyone in Britain a great deal, not least in terms of higher electricity prices and/or tax. Accounting and finance are central to the dispute about uneconomic pits and pit closures. Yet little public attention seems to have been paid to the underlying accounting reports that identify pit profit and loss. Careful scrutiny of such accounts, however, produces the conclusion that they fail to form an adequate basis for informed management decisions. While we are not in a position to identify whether these documents are used for pit closure decisions, the information contained in them is used in public justification for such decisions.

The standard accounting statement for pits – the 'F23' – is, as far as can be ascertained, used for making budgets, projections of pit profit and loss in the future and, more importantly, to justify decision-making, at least in public debate. Its decision-making rationale cannot therefore be ignored. Yet for this purpose, as will be shown, the F23 is fundamentally flawed.

First, though, a word of caution. We wish to distance ourselves from the political arguments about the management's 'balance sheet' attitudes or the social costs/benefits of employing miners. Decisions in any intelligently run business may be made on the basis of general business strategy and assessments of future market opportunities, and industrial relations implications may be important. Our concern, however, is to focus on the financial and economic rationale for decision-making and the extent to which the routinely produced accounting statements form an adequate basis for such decisions. The source material for our analysis is all publicly available, either in the NCB's Annual Reports and Accounts or in the Monopolies and Mergers Commission (MMC) Report on the NCB of June 1983 (Cmd 8920).

Given that the MMC criticised the NCB for not producing pit or area balance sheets, it is ironic that the NCB has been accused of having a 'balance sheet mentality'. For the F23, the major planning and control document, is a profit and loss account. (A pro-forma F23 is shown as Appendix 3.9 in the MMC Report (Vol 2, pp 56-57).

The F23 may be used for control purposes but does not provide a sensible basis for pit closure decisions or public debate on them, for the following reasons:

1. Given the interdependence within the industry, the energy sector (eg oil, gas, the CEGB) and other nationalised industries (eg BR and BSC), there are major problems in determining a fair and reasonable figure for proceeds for the NCB in general, and individual collieries in particular.
2. The accounts are prepared on an absorption basis. It is exceedingly difficult to appraise the relative contribution of a pit (let alone a production face within a pit) as such information is not collated on an ongoing basis. Emphasis is instead concentrated on profit/tonne and unit costs. Given many costs appear fixed, volume is encouraged at a time of over-production.
3. Partly as a consequence of the design of the accounts,

allocation of budgeted production is crucial to profitability, because 'over-production' is penalised, unit costs are affected and, to a degree, volume determines some of the overhead charges.

4. Not all costs included are related to current pit operations, eg subsidence, early retirement costs and Area and HQ overheads.
5. Depreciation is included, but owes more to bookkeeping convention than relevant costs for decisions. A capital charge would be more relevant, if extremely subjective.
6. Most importantly, the F23 is an historic account. Prediction of the future from the past is always capable of dispute and given the uncertain geology and lengthy developmental work underground, is certainly justified in relation to the NCB.

What follows, details the above criticisms:

The table (see following page) indicates the total *income* from coal mining, whereas the F23 statement refers to *proceeds*. While the calculation of both figures has the appearance of being both easy and objective, these characteristics are illusory, largely due to major interdependencies in the energy market.

Approximately 70% of coal output is sold to the CEGB. The price is determined by negotiation and is, to a considerable extent, arbitrary (although it has considerable impact on the apparent profitability of both organisations). For example, in the 1950s the NCB was forced to sell imported coal in the home market at a price lower than the cost of importing it. Current agreements with the CEGB price coal above the price for coal on the international spot market but considerably below the cost for oil with equivalent heat output. Further, there are considerable difficulties in using market prices as a basis for planning. For example, the volume of available coal is relatively small and subject to a number of vagaries. The volume and price of Polish coal owes as much to that country's foreign exchange problems as to the cost of production, and Poland cannot be regarded as a reliable supplier of cheap coal. The net cost in the UK of coal from Australia, South Africa and North America depends heavily on transportation costs. Changes in international freight rates dramatically affect the price of imported coal. And without large investment in coal handling facilities in British ports, it would not be possible to import coal in large volumes. Thus calculation of proceeds represents a classic example of the problems of transfer pricing between interdependent units (in this case, the NCB and CEGB). The suggestion that 'market prices' represent an objective solution to these problems ignores the contrived and volatile nature of the market for coal.

Over-production

Currently collieries are credited with a selling price based on a formula relating quality to contracted selling prices. This currently generous arrangement for marginal production, together with the low marginal costs of increasing production in the short run, leads colliery managers to believe that, in order to increase pit profitability and/or to reduce unit costs, it is desirable to maximise the volume of output. This is because proceeds are credited to saleable output rather than the coal actually sold and, as we will show below, many of the costs included in the F23 statement are usually fixed in nature (at least within the time horizons of most colliery managers).

It is hardly surprising that one outcome of these accounting treatments, and the emphasis placed on unit costs per tonne, is that in conditions of depressed demand, over-production and increasing stockpiles have resulted. The way in which proceeds are realised means that stocking issues have not been perceived as the concern of pit managers.

Around the time of the MMC investigations (we believe) the

NCB introduced a bookkeeping innovation of crediting any output greater than the pit's budgeted output quota, at a notional 'spot' price considerably below market prices (approximately £18 per tonne). This may have reduced the tendency to over-produce but it will also complicate the meaning of proceeds and colliery income.

The policy of applying notional spot prices highlights the crucial nature of the budgeted output allocation. The larger the allocation of output, the lower the unit cost per tonne, since the fixed costs of production are spread over larger volumes. And the closer the allocation of output to capacity, the less likely that the colliery will be penalised for over-production through the notional spot price. Yet the mechanisms to allocate these output levels are not formalised but seem to be based on negotiations between managers who themselves rely on assessments of the physical performances of a colliery. These informal assessments in turn affect the amount of investment in the pit, which ultimately affects physical performance.

Assessments of colliery performance thus run the considerable risk of becoming self-fulfilling prophecies: alleged high performance yielding high investment and output allocations, both of which contribute to low unit costs. The opposite consequences occur for so-called low performing collieries.

Pits are not independent units either in relation to their costs or their proceeds. For example, transfer pricing issues arise again with regard to proceeds because coal is of variable quality and is frequently mixed or blended. This mixing involves transferring coal between pits; the selling price recorded is based on the notional selling price and thereby affects the apparent profitability of the pits involved in the transfer. In addition, given that a number of geographically adjacent collieries may be mining the same coal seam, the decision as to which colliery is allocated which coal faces will affect apparent profitability.

The figure for proceeds in the F23 pit profit and loss account could, therefore, include coal which has been sold, transferred to other collieries, produced within the output allocation but not sold, and produced above the allocation but not sold. Each category may be credited with different prices.

We have not analysed all components of colliery costs - for example, we have avoided the discussion as to whether wages and wage charges (in 1983/84 representing some 42% of total colliery costs) are fixed or variable, and what the costs to the nation are of employing men in coal mining as this depends on the assumed alternatives to employment in coal mining. Instead we have focussed on cost interdependencies and the allocation of costs to pits. These issues are crucial in assessing the meaning of the suggestion in the NCB annual report that in 1983/84 the average cost per tonne was £46.31 and those in the MMC report that in 1981/82 'there were collieries where costs were over £100 per tonne' (p 167) and 'the financial impact (on both profit and loss account and cash flow) of the worst 5% is understated in Table 8.4 (which showed a loss of £166m)' (p 169).

The second-largest component of average costs is the charge for materials and repairs. Such a cost category might be assumed to represent variable costs of consumables used in coal getting. Elements such as timber, adjustable supports and belting may indeed vary with the rate of extraction and be avoidable if coal production is stopped at a particular pit. However, materials and repairs include charges for the hire of Area plant pool equipment. Charges are intended to apportion costs of this equipment in relation to usage at the specific pit. The MMC criticised the basis of the charge, suggesting that it did not reflect an economic charge as no allowance was made for interest or profit.

Plant pool charges illustrate cost interdependencies between pits. The charge is, in effect, an allocated share of central costs. Rental charges are likely to depend on the usage of the equipment and it is therefore probable that the charge to a pit will be dramatically affected by the actual or budgeted usage of the equipment at other pits. Further, the closure of a pit will not, in the short run, reduce the total costs to be allocated but could result in a greater share of costs being allocated to each of the remaining pits. In the event of a pit closure similar consequences of higher charges for surviving pits could occur with allocations involved in 'other operating expenses' and Area and national overheads.

Many textbooks discuss the advantages and disadvantages of marginal and full costing in decision-making. While there are undoubted benefits to full costing, it is generally agreed that marginal costing is more appropriate for decisions such as the closing of pits. Items in the mining operating statement such as mining contract work, power, heat and light and salaries and related expenses at the colliery level, are all likely to disappear, even in the short run, if a colliery closes. These items comprised under 8% of the total costs in 1983/84.

On the other hand, the remaining items in the table are unlikely to alter directly with changes to the level of production at a specific pit.

No doubt a proportion of the 'other operating expenses' would be avoided if a pit closed. This item includes transport charges, rents and rates, insurance, dirt disposal and coal stocking. But it also includes surface damage costs, central coal preparation plants, Area survey costs, pumping, closure expenses and early retirement and redundancy costs, most of which will not be reduced even in the longer term by a pit closure. Indeed it is these items, most particularly the cost of surface damage and voluntary early retirement and redundancy

Coal mining operating statement

Collieries	1984			1983		
	Amount £m	Per tonne saleable £	Total cost %	Amount £m	Per tonne saleable £	Total cost %
Saleable output						
		m tonnes			m tonnes	
		89.9			104.3	
Turnover	3,642			3,954		
(Decrease) in stocks of finished goods	(76)			(10)		
Other operating income	5			12		
Value of production	3,571	39.70		3,956	37.95	
Operating grants	-	-		4	0.03	
Total income	3,571	39.70	-	3,960	37.98	-
Costs						
Wages, including allowances in kind	1,290	14.35	31.0	1,436	13.77	33.6
Wages charges	483	5.37	11.6	489	4.68	11.4
Materials and repairs	858	9.54	20.6	909	8.72	21.2
Mining contract work	11	0.12	0.3	11	0.11	0.3
Power, heat and light	188	2.09	4.5	199	1.91	4.7
Salaries and related expenses	122	1.35	2.9	125	1.20	2.9
Other operating expenses	571	6.35	13.7	503	4.83	11.8
Overheads and services	313	3.48	7.5	319	3.06	7.4
Depreciation	330	3.66	7.9	286	2.75	6.7
Total costs	4,166	46.31	100.0	4,277	41.03	100.0
Operating (loss)	(595)	(6.61)	-	(317)	(3.05)	-

Note: The saleable outputs shown above exclude tonnage extracted in the course of capital roadway development.

The above forms part of the Coal Mining Operating Statement from the NCB's 1983/84 Annual Report and Accounts. While individual collieries vary in their proceeds and costs per tonne, the table provides an average for these across all collieries and uses almost the same account classification as the F23.

COMMENTARY

costs, which have, according to the MMC, been rising most rapidly in recent years.

The cost of surface damage for the NCB as a whole rose from £132m to £230m between 1983 and 1984. This implies an allocation of £2.73 per tonne of deep-mined coal in 1984. Yet this cost does not relate directly to current (or indeed future) production but is an allocation of costs arising out of past production. As the annual report indicates (p 50) 'uncertainty exists about the future level and nature of the claims and the effect, if any, on these accounts cannot at this stage be assessed'. But it is clear that the closure of any pit will not affect past subsidence.

The exact allocation of costs for early retirement and pit closures cannot be identified from the table. However, the MMC indicates that for 1981/82, it amounted to 83p per tonne. Yet these costs are not related to current production and are likely to be increased if capacity is reduced! From such information as we can glean from published sources, it is clear that at least £3.56 of the £6.35 'other operating expenses' are fixed, and this does not include any allowance for the possibly fixed nature of central coal preparation facilities, survey costs and pumping of water from pits (both current and abandoned).

Overheads and services are 7.5% of unit costs and comprise Area and Headquarters-related costs. These costs, which are allocated on the basis of net operational expenditure, output and manpower, have also risen in real terms in recent years. Yet these too are largely fixed costs for the colliery and will not be significantly reduced by a pit closure decision.

Finally, depreciation represents 7.9% of average annual costs. This charge includes fixed assets at the pit (but only since the reconstruction of fixed assets in 1973), equipment in the plant pool and write-downs of equipment due to colliery closure. Depreciation of assets at the pit is not affected by closure; the original cost would merely be written off at a quicker rate! It is, of course, unlikely that these assets would have significant resale value.

The depreciation charge is indeed a sunk cost and does not relate to actual rates of extraction. All depreciation rates depend upon subjective judgements, such as size of reserves left, or bookkeeping rules, eg maximum periods of write-off, or judgements of what constitutes capital or revenue. For example, we understand major drivages are capitalised whereas lesser ones are not. Whatever, depreciation is a spreading of historical cost which

may have little relevance to future decisions. It would be of considerable relevance, however, to include an interest charge for the use of fixed assets. This was not done at the time of the MMC report but recent comments by Mr Butler, the NCB director general of Finance, suggest that the NCB is introducing a capital charge. Of course, given the limited sources of NCB finance (it borrows predominantly from the Treasury, not commercial sources) the rate charged would be contentious, as would be the value placed on the assets used by a specific colliery.

Clearly, what is relevant is the future rather than the past - that is, estimates of capacity, associated costs and net cash flows. However, these are not the accounts produced for public scrutiny. Inevitably such estimates rely on judgement and are capable of being challenged. Yet might not such assessments, given their crucial national importance and their inherent uncertainty, be much improved by wider public debate? Recourse to historical cost statements of dubious validity carries the danger of misleading rather than enlightening the current debate over the future of the coal industry. Take just one example - the suggested closure of Cortonwood Colliery which precipitated the current strike. In 1981/82, the MMC indicated that its receipts were £44.3 and its operating costs were £50.5, resulting in a loss of £6.2 per tonne (approximately £1.7m in total). Yet if we assume that the fixed-cost element (represented only by other operating expenses, overheads and depreciation) in that year was approximately the same proportion of total costs as in 1984, then 23.1% of the unit cost of £50.5 would not be avoided by the decision to close Cortonwood. That mine would, at least in 1981/82, have contributed £5.5 (£44.3-£38.8) per tonne to NCB operating performance.

This example is not intended to be definitive (and indeed is subject to numerous assumptions about whether costs at Cortonwood behave similarly to the average costs in NCB collieries). But it does indicate the difficulty of informed public debate about pit closures on 'uneconomic grounds'. The question remains about how 'uneconomic' is defined, from whose perspective and over what period.

Tony Berry, Teresa Capps and Trevor Hopper are lecturers at the Manchester Business School, Sheffield University, and Manchester University respectively. David Cooper is Price Waterhouse Professor of Accounting and Finance at UMIST. Tony Lowe is Professor of Accounting and Financial Management at Sheffield University.

NCB CRITIQUE OF UNPUBLISHED ARTICLE

Proposed "Accountancy" Article

Statement made at a meeting with Professor Lowe and his colleagues at Hobart House on the 6th December, 1984

1. Firstly, can I say that it is not the intention of myself or my colleagues to suppress valid criticism about the Board's procedures - this would be wrong. If there are proposals for improvements that can be put forward we would as always welcome them.

2. Our concern when we read the article was that it contained major misunderstandings and inaccuracies, and, therefore, its publication in that form could not be helpful to us, to the authors or to The Institute of Chartered Accountants in whose official journal it was intended to be included.

3. In any case, we had understood that we would be consulted upon any publications arising from the research work in North Derbyshire Area. This understanding had been honoured in the past and it would be helpful if Professor Lowe and his colleagues could confirm that this is the procedure which would be followed in the future. (they did confirm that this was their intention and regretted that the system had not been complied with on this occasion)

4. I now propose to make a few general comments which will be followed by a more detailed statement on some aspects of the article from Mr. Butler. I hope that we will then be able to have a discussion and to decide how we should proceed.

5. The broad implication of the article is that the F23 Colliery Profit and Loss Account is a flawed document and that in that form it is used for all major management decisions.

a) It is not correct that the F23 or any single document in any single business organisation can be designed to be used for all management purposes.

b) The F23 is designed within the accounting conventions used to provide a meaningful representation of results which is mainly used for accountability purposes. This allows:

(i) Trends of results and performance at a Colliery to be seen over periods of time.

(ii) Comparisons of actual results at a Colliery with the operating budget which is prepared in the same format and by the same accounting conventions.

(iii) It will of course, indicate those Collieries where unsatisfactory results are being obtained and where a further in-depth review of likely performance in the future is required.

6. The article implies that because of the high proportion of fixed costs at a Colliery, that many of these continue to be borne by the Industry, even when a Colliery has been closed. This is in fact not the case. Our experience indicates that within twelve months of closure, the fixed element of costs at a Colliery has reduced to something like 20%. The amount and the timing of the reduction varies somewhat depending upon the amount of salvage work that it is thought worthwhile to undertake. By the end of two years, we find these costs have reduced to 7%, and the average
/on-going

going figure is about 3%. This mainly represents work which has to be undertaken to protect the surface and any installations that remain and in some cases also there is a need for continuing pumping of water in order to protect neighbouring Collieries that are still at work.

We also take vigorous action throughout the organisation to ensure that central and Area overheads are reduced to keep them in line with the continuing level of overall activity. I think this can be best demonstrated by remembering that when the Board was established in 1947, its structure below Headquarters level was 9 Divisional Boards and 50 Areas. When the Divisions were disbanded, a few years ago, the structure comprised 17 Mining Areas, they have now been reduced to 12 Mining Areas.

7. The article makes no reference to Colliery Action Programmes. You must have seen these during your work in North Derbyshire Area. They are rolling 18 month programmes which are revised quarterly, dealing with the future prospects in respect of output, manpower, coalfaces, capital projects and all underground developments. These are a major part of the decision making process.

8. You have made no reference in the article to the Colliery Review Procedure. You cannot fail to be aware of this, again from your visits to North Derbyshire and also from the great deal of publicity that it has recently received. This very detailed review of all aspects of the Colliery is carried out in respect of every activity in the Board, at least quarterly. When an activity is in difficulty in-depth reviews are undertaken of its market prospects, of its production potential, of its capital needs and of its likely forward financial results. This is the major procedure whereby decisions about the future of individual activities are taken, and as I said there is no reference to it in the article.

9. Similarly, there is no reference in the article to the whole complex planning and accountability procedures of the Board. We have as you must know, ten-year National Planning exercises for the output of Collieries, five-year geological plans for each Colliery, five year projections of results for Areas, annual budgets for Areas and Collieries and quarterly accountabilities for Areas and Collieries. This again forms a major part of the Board's decision making mechanisms.

10. I hope that I have in these introductory remarks been able to demonstrate to you that the Colliery F23 is not used for the purposes which the article implies.

F. B. Harrison

Summary of points made to Professor Lowe and Professor Cooper
of Sheffield and Manchester Universities and their colleagues
at a meeting on 6th December

The title and some of the statements made in the article, particularly the opening paragraph are highly contentious and not, we believe, supported by an objective analysis.

There is a substantial implication throughout the article that the National Coal Board use the historical profit and loss account (F23) as a basis for future decision making and without recognising the need for identification of any fixed cost element within total costs of a colliery which will not immediately be saved upon closure of the colliery. The Board point out that the main purpose of the F23 is that of an accountability document by which the monthly and annual results of the colliery can be compared with budget and previous periods and upon which accountability with management can be based. It is only one of a considerable number of sources of information upon which future management decisions will be based. Decisions regarding the future will take account of likely changes in the geology of coal reserves yet to be mined, changes in the market environment, changes in cost levels due to wage negotiations etc. and also the improvement which might be available from capital expenditure. All these matters are taken into account in planning the future of any colliery and assessing its future financial performance .

Reference is made in the article to the "illusory" characteristic of the F23 proceeds due to major interdependencies in the energy market. We would make the following points in response:

The NCB's price to CEGB is based not as suggested on arbitrary negotiations but on a careful competitive stance whereby we aim to ensure that cost of coal delivered to power stations is substantially in line with the cost which would have been incurred by CEGB if they were to transport imported coal to the power station locations, e.g. Trentside or Thameside. We adopt a similar stance of comparability with imported coal prices in our negotiations with industrial customers whilst prices to BSC are fully aligned to the cost of imported coking coal. It is true that the cost of imported coal depends heavily on transportation costs and also, for that matter, on the valuation of the dollar against the pound, but we maintain that these considerations are no different to those which any commercial organisation must take into account when setting their pricing policy.

It is stated in the article that over-production has resulted from the policy of crediting proceeds to the F23 on the basis of saleable output rather than coal actually sold. The Board's accounting in this respect is fully in line with the accounting standard and coal put to stock is credited to revenue at a value representing the lower of cost or net realisable value. As coal stocks increased above 20m tonnes for the industry as a whole, it was recognised that a policy of establishing net realisable value relating to coal prices obtained on the inland market placed too high a value on the economic worth of such stocks and in the Board's 1981/82 accounts, as stated in the accounting policy note 14, the value of coal stocks in excess of 20m tonnes was based on net realisable value relating to the current export realisations. At March 1982 the net export realisations was £25 per tonne but by March 1984 due to deterioration of the export market this value has fallen to £20 per tonne.

This policy of valuing excess stocks in relation to export prices was designed to achieve the twin objectives of both placing a true economic value on coal put to stock and also giving a disincentive to managers to continue to maximise the output of coal where the costs of doing so were higher than the true value of the coal. It was therefore designed to meet the specific criticism levelled in your article.

Later in the article you refer to the "book keeping innovation" of crediting output greater than the pits budgeted output at a value of £18 per tonne. The £18 per tonne valuation was that which was placed upon output surplus to requirements when the 1983/84 budget was framed. As set out above, the final accounts for 1983/84 were based on a valuation of £20 per tonne related to all net increases in coal put to stock in that financial year. The purpose was to motivate managers to reduce output in an efficient way by cutting out high cost elements (faces or districts) of colliery output where production was not financially viable. We have very little evidence that this policy led to a general suppression of output across the board in a way which would have caused an increase in unit cost per tonne as indicated in the article. Your fear that any such increase would have affected the amount of future investment in a pit and would therefore give rise to a considerable risk of becoming self fulfilling, is quite groundless. As we have said above, all assessments regarding investment will relate to estimates and projections of the future performance of a pit calculating the net benefit which will arise from such investment to ensure that it is financially viable. At the most, a loss shown in an F23 acts as an alarm signal to indicate that prospects for the pit clearly need some examination.

The article makes the point that a number of costs in the colliery F23 are of a fixed nature, and give as examples Plant Pool costs, surface damage, redundancy (VERS), Overheads and Depreciation.

- a) Plant Pool - it is agreed that the depreciation element of Plant Pool costs (the other major element is repair costs) would not be immediately saved on the closure of a colliery. On the other hand, it would enable the equipment to be transferred to a continuing pit and thus avoid the need for further capital expenditure to equip that pit. This in turn will give rise to a reduction in the overall level in depreciation borne by the Plant Pool in future years.
- b) Surface Damage - the objective of the surface damage provision is to cover the outstanding liabilities in respect of damage caused or still to be caused arising from all mining carried out up to the date of the balance sheet. In 1982/83 and subsequent years the method of calculating this provision was improved so that from that year and in subsequent years it was related to a technical estimate produced in considerable detail to assess the likely physical damage being caused by the current and previous years mining and the estimated subsidence costs which would ensue. The only part of the charge for surface damage provision which does not relate to the current year's mining therefore, is any adjustments relating to under/over estimate of the provision for past years and adjustment for inflation to bring the provision up to current price levels each year.
- c) Redundancy - The cost of voluntary early retirement which you identified at 83p in 1981/82 is reducing substantially each year due to the introduction of Redundant Mineworkers Scheme (cost borne by the government). It is a cost which continues in the event of a colliery closure but by the current year the budgeted cost was expected to be only some 36p per tonne.

4MBARTI04

Overhead Expenditure - overheads consist of costs of national headquarters, Area headquarters, Research and Development and Regional Services, e.g. Marketing, rescue, training, Scientific Laboratories and Medical Centres. A substantial part of the cost of Regional services can be varied reasonably directly according to the number of men and collieries, particularly since the wages cost of men undergoing training is a substantial part of this figure. Overheads of Area and Headquarters level vary less directly but it is the policy of the Board to ensure that overhead costs come down in line with any reduction in mining capacity. In this respect the number of Areas in the Board has reduced from over 50 in 1948 to only 12 at the present time. A policy of reducing staff numbers and costs at national headquarters by at least 5% each year has also been adopted.

- e) Depreciation - the comments on depreciation are similar to those already indicated under Plant Pool. It is true that depreciation in so far as it applies to assets which cannot be transferred to continuing collieries is a sunk cost, but what is saved in the future is the capital expenditure which any colliery continuing in operation must incur in order to equip new faces and replace worn out plant and equipment.

Generally we have found, as we indicated to the MMC (para. 8.8) that colliery operating costs reduce to 20% of the pre-closure level in the first year following closure, 7 % in the second year and 3% in the third year.

In your calculation of the contribution of Cortonwood colliery you took the loss made by the colliery in 1981/82, adding back the VERS cost for that year (83p per tonne) but also adding back the 1983/84 national averages for surface damage, overheads and depreciation. As indicated above, surface damage provision is designed to cover the total liability for past mining up to the date of the balance sheet and therefore should be sufficient to cover the full liability in respect of any colliery which closes, except adjustment for inflation. Furthermore, the national provision in 1983/84 was materially affected by the high level of provisions necessary for the Nottinghamshire Areas which have no relationship to Cortonwood. The national depreciation level in 1983/84 was also much higher than that applicable to Cortonwood since it included depreciation on major projects, e.g. Selby. As we have indicated above, we would by no means regard all the overhead and depreciation costs as fixed or sunk but even if one did make this assumption, a calculation adding back the specific figures for Cortonwood in 1981/82 would reveal that a small negative contribution of £0.20 per tonne was made by that colliery in 1981/82. However, the decision to close Cortonwood was based not on past results but on future prospects. These were materially affected by very limited and deteriorating coal reserves at Cortonwood which, at the best, will be exhausted by 1989 and become increasingly costly to work during the interim period. Furthermore, the market for the 401 rank coking coal produced by Cortonwood has deteriorated. It was no longer required by BSC and the only significant market available was to export via Immingham at very low net proceeds.

7.12.84

4MBARTI04