



pa

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

Tim Lankester Esq  
Private Secretary  
No 10 Downing Street  
LONDON SW1

14 May 1981

*PM has seen.*

*Dear Tim,*

MONOPOLIES AND MERGERS COMMISSION REPORT ON CEGB

The MMC's Report on the CEGB is expected to be published next week. I understand that the Department of Trade will be consulting you in the normal way about publication arrangements.

On the content of the Report, my Secretary of State thinks that the Prime Minister may find it helpful to see the attached copy of his letter to Mr Biffen of 30 April. Mr Howell has in fact now written to the Chairman of the CEGB, who received a copy of the Report on a personal basis at the beginning of this week, to seek his urgent comments on the Commission's various recommendations and, in particular, proposals for improvement in the Board's investment appraisal procedures. Mr Howell plans to issue a short press Statement to this effect once the Report has been published.

He will consider in the light of the Board's response whether any formal directive under the Competition Act is needed. (S.12(3) of the Act provides a power to require the Board to prepare a plan for remedying adverse effects where a body is found to be pursuing a course of action against the public interest).

The Prime Minister also asked Mr Howell yesterday for a copy of the MMC Report, which request I have passed on to John Rhodes.

*Yours ever,*

J D WEST  
PRIVATE SECRETARY



01-211-6402

The Rt Hon John Biffen MP  
Secretary of State for Trade  
1 Victoria Street  
London SW1H 0ET

30 April 1981

*Acc John*

MONOPOLIES AND MERGERS COMMISSION REPORT ON THE CEGB

I am writing to give you my initial reaction to this major Report. I have not been able to consult the Chairman of the CEGB since he has not yet received the conclusions of the report.

I attach at Annexes A and B a summary of the Commission's main conclusions and of their major recommendations. Most of the latter require comment and action by the industry.

The Commission commended a number of aspects of the Board's operations;

- a) the system of revenue cost control is sophisticated and well-documented
- b) cash management is competent
- c) internal audit is pursued effectively
- d) proper attention is given to the disposal of surplus land
- e) contract negotiations are skilfully pursued.

In its day to day business the Board is shown to be efficient and generally operating according to well thought out procedures.

The Commission show concern in three main areas;

- i) forecasting of electricity demand
- ii) investment appraisal technique
- iii) purchasing policies, both of fuel and of power plant.



### Forecasting

The industry are criticised for over-optimism in the past, particularly about economic growth, but the Commission find that current forecasting methodology reflects the lessons of the past, and that, given the state of the art, it is sound. I shall nevertheless wish to discuss this finding with the industry when I am able to do so; the latest Electricity Council forecasts still look optimistic.

### Investment Appraisal Techniques

The Commission's criticism here is directed particularly to the appraisal of nuclear power stations. It falls into two main parts;

- a) doubts about the basic assumptions (fuel costs, construction costs and times)
- b) the need for a fuller treatment of sensitivities (showing the combined effects of adverse changes in a number of assumptions as well as the effects of individual changes).

The Commission have dramatized this criticism by their finding that the Board's appraisal methods constitute a course of conduct which, in the terms of the Competition Act 1980, operates against the public interest.

The Commission suggest that the economic case for Heysham II may have justifiably reinforced the strategic case for the order. They also state that a large programme of investment in nuclear plant is proposed on the basis of investment appraisals which are seriously defective and liable to mislead.

These are serious criticisms. But there are points to be made on the other side. For instance, a wide range of sensitivities was explored in the appraisal of Heysham II, and it was possible to gain from these a clear impression of the effect of delay and cost escalation. (The Commission were not of course privy to the conclusions of last year's CERS study on the wider reasons for going ahead.) There is another point. My nuclear policy statement of December 1979 made it clear that future nuclear ordering would depend on electricity demand and the performance of the nuclear and plant industry; each station will be fully appraised.

Nevertheless, the findings of the MMC report on this point will attract wide public attention, and will be seen by many (and in particular by opponents of nuclear power) as calling into question the economic basis for nuclear power station orders. Opponents will make much of this at the Sizewell B public inquiry expected next year. Confidence in our nuclear power policy will be undermined.



3

Against this background, the finding that the Board's investment appraisal procedures operate against the public interest will require careful public handling, as will the Commission's criticisms in this general area. As I understand it, the finding may have been framed to enable me to use the powers under the Competition Act, should I so wish, to require the Board to produce plans for improvements. When I am in a position to take this up with the Board, I shall of course be looking for early proposals for improvement; I shall consider in the light of these whether a formal direction under the Act is needed.

#### Purchasing Policy - 1) fuel

There are sensitive points here, and much potential for embarrassment. The Commission conclude that;

- a) costs have been higher than they might have been because the CEBG have not been able, mainly for reasons of Government policy, to take full advantage of import opportunities;
- b) the customer may face an even faster rate of increase in electricity prices unless the Board's capacity to import can be increased;
- c) the knowledge that they might be prevented from importing coal has affected the Board's approach to planning for imports.

The Commission raise questions about NCB costs, closure and pricing policies. They state that the CEBG know no more about NCB costs than they can glean from the Report and Accounts.

The Commission conclude that fresh thought should be given to the objectives of nationalised industries which trade largely with each other; and that if it is considered in the national interest that high cost coalfields should remain open in the medium term, this might be better done by adjusting the financial objective of the NCB than by raising the price of coal. They add that there is a danger that present coal pricing policies may make nuclear power appear to offer an economic advantage which it might not have under a policy of LRMC pricing for coal.

Much of this is pertinent to electricity costs. However, the question of imports is still under discussion in the tripartite context, and remains highly sensitive. For the immediate future CEBG is being encouraged to 'buy British' and NCB is negotiating to cut current imports to the irreducible minimum.

The Commission recommend that the Board seek to improve the terms and extend the duration of the CEBG/NCB understanding; we should take the line that this is for commercial negotiation.



Purchasing policy ii) Power Plant and Power Station Construction;  
Power Plant

The Commission note that Governments have in the past asked the Board to help the UK plant industry, and that the Board has incurred extra costs thereby. They suggest that if the Government wishes facilities to be established in the UK to manufacture PWR components, this should not necessarily be at the expense of the electricity consumer.

The Commission note that the Board has traditionally pursued a 'buy-British' policy for plant. They raise, as did the Select Committee on Energy, the question of some element of international competition for future UK power plant orders.

It is likely that some major items of plant can at present be procured more cheaply abroad than from British industry. Cheaper plant would improve the economics of new stations and make it easier to defend new orders in the face of slack electricity demand: it would also make a modest contribution to reducing electricity costs.

On the other hand, the consequences for parts of the UK industry could be severe.

I think some element of overseas competition should be seriously considered. My reply to the Select Committee on Energy should state our attitude on this; my officials are in touch with Keith Joseph's in that connection.

The Commission say they are impressed by the results obtained by the Generation Development and Construction Division at Barnwood by insisting that contractors adopt improved quality assurance procedures for the manufacture of power station equipment.

Power Station Construction

The Commission generally endorse the Board's current policies to improve performance:

- a) moving from reimbursable to lump sum contracts, with incentives and a "key-date" procedure.
- b) setting up site management groups to monitor and harmonize industrial relations policies and practice (especially bonus payments) across all contractors
- c) working for a national agreement for large sites
- d) completing the design phase before sanction for site work is given
- e) replicating plant wherever possible.



They also approve Barnwood's practice of making exacting checks of contractors' designs, and its attention to the detail of costs, specifications and performance.

#### General

There are a number of other points in the Report which I shall wish to take up with the Board as soon as I am in a position to do so. I propose to handle these in separate correspondence, bringing in other Departments as appropriate.

#### Public Handling

This is the immediate question. I suggest that a fairly short statement should be made on publication, of which the main elements would be:

- i) welcome this major study, noting that the Board are judged to operate with competence and proficiency in many areas;
- ii) note also that serious criticisms are made of the Board's investment appraisal methods. The Government is seeking comments and proposals from the Board with a view to improvement;
- iii) these criticisms do not however call for fundamental changes in the government's nuclear strategy; the government's attitude will be stated in the response to the Select Committee on Energy's nuclear Report;
- iv) the decision to proceed with Heysham II (and Torness) was based on strategic as well as economic considerations;
- v) the Commission have made a number of other recommendations which will be discussed with the Board.

On the need for greater transparency of nationalised industry (and especially NCB) costs, we should say that this will need to be considered in the context of general nationalised industry policy, and that the Commission recognise that the point is one for government i.e. political decision.

The CEGB themselves are of course likely to produce a robust response to many of the Commission's strictures when they are able to do so.

In view of their special interest I am copying this letter to the Chancellor of the Exchequer and the Secretary of State for Industry, and also to Sir Robert Armstrong.



MMC REPORT: MAIN CONCLUSIONS

The MMC was asked to examine five areas of the CEGB's activities:

A. Internal cost control and project control systems

- (i) The CEGB has a sophisticated and well-documented system of revenue cost control. Internal audit is pursued effectively. The Board's Cash management is competent. Procedures for approving capital spending are well-defined and properly observed. Costs of work in progress are properly monitored. Contract negotiations and claims under contracts are skilfully pursued by well-qualified staff.
- (ii) The merit order based system of marginal costing is an appropriate method of cost minimisation. The Board has an effective operational planning system. The procedures for short-term planning of generation are effective in monitoring security of supply at a cost consistent with good management.
- (iii) Industrial relations are generally good. Output per head has increased, but in recent years the Board's labour costs have been rising faster than the national average.

B. Management Information Systems

- (iv) The Board's main management information system provide adequate information for operational control and functional management control. But there is a need to bring together information across all resources.

C. Purchasing Policies and Stock Control

- (v) The CEGB should aim to improve the terms and increase the duration of the understanding with the NCB.
- (vi) The exclusive dealing arrangement with British Rail should be abandoned. The CEGB should put greater pressure on BR, though the terms negotiated, to reduce its costs.
- (vii) The CEGB should seek to negotiate better terms for the purchase of uranium. The Board should also seek better cost information from BNFL as regards the latter's investment projects. If a PWR programme is undertaken, the CEGB should seek competitive tenders from ENFL and abroad.
- (viii) The Board should develop operational research studies and more advanced methods of stock control. The Regions should systematically record the number and percentage of prices challenged on single tender contracts, together with prices asked and prices to be paid, and then compare the results. Increased use of standard designs owned by the CEGB is encouraged to permit competitive tendering for, and reduced holdings of, spares.
- (ix) The Commission implies that the Board's "buy British" policy has increased costs to consumers.

/D.

CONFIDENTIAL



CONFIDENTIAL

D. Management of Plant Maintenance

(x) Maintenance at power stations is well-managed and the effect of programmes for plant maintenance has been to increase plant availability, though the Commission make some recommendations for improvement (eg on quality assurance procedures).

E. Planning and Appraisal of new investment

(xi) The esi should review the generation security standard. (c.f. the Select Committee's recommendation that the Government should review security of supply standards).

(xii) The Board should develop an internally consistent view of future domestic and imported coal prices and availability.

(xiii) The Board's basic estimate of net effective cost should be a central estimate; their present assumptions are too optimistic as regards cost of plant, construction times, and, as regards new AGR plant, output rating and availability.

(xiv) The Board should develop its sensitivity analysis, and present outcomes associated with central estimates of all the relevant determining variables. This would lead to a more dependable assessment of the economic case than was presented for Heysham II.

Overall, the Commission finds that the Board's appraisal of new investment is seriously defective and liable to mislead, and, in this respect, its course of conduct operates against the public interest.

F. Ability to carry out proposals within the cost and time estimated

(xv) There are still weaknesses and failings on power station construction sites, although some important progress in site labour relations and productivity has been made recently. The CEGB should seek to introduce a model agreement for use on its sites, while no national agreement exists.

(xvi) NNC should act as the CEGB's agents in procuring plant for the nuclear island at Heysham II. It is doubtful whether there is any way that the risks associated with construction can be removed from the CEGB's shoulders.

(xvii) For the future, there should be unified control over the execution of nuclear power projects. The Commission believe that this was the Secretary of State's intention when he spoke of NNC assuming "total project management responsibility".

G. Other matters

(xviii) Demand charges in the BST should be based on the Board's plans for development over the next 10-15 years.

(xix) There should be more effective consultation between CEGB and Area Boards on tariffs so as to improve cost messages.

/(xx)

CONFIDENTIAL



CONFIDENTIAL

- (xx) The Government should give fresh thought to the objectives set for the nationalised industries which deal largely with each other. It would seem wrong that the electricity consumer should pay the costs of keeping high-cost coal-fields open in the medium-term.
- (xxi) Costs have been increased by the ordering of power stations ahead of need at the request of Government.

CONFIDENTIAL





## MMC REPORT - MAJOR RECOMMENDATIONS

BST (4.65 to 4.68)

- i) Demand charges should be based on the planned development of generating capacity over the next 10 to 15 years; they should be based on what the MMC call "central" estimates of Net Effective Costs (ie more pessimistic than the Board's present "basic" estimates).
- ii) There is a need for more effective consultation between the CEGB and Area Boards; this aspect of the Secretary of State's statement of July 1980 is welcomed.

Security Standards and the Planning Margin (4.67 to 4.72)

The security standard requires further study by the Electricity Council; the MMC urge that any future review should involve full consultation with representatives of consumers.

Investment Planning and Appraisal (5.134 to 5.174)

- i) The Board should devote more time and effort to developing an internally consistent view of the future prices and availability of both domestic and imported coal. In so doing, they should consult closely with the Department of Energy.
- ii) In developing estimates of construction costs for use in investment appraisal, explicit account should be taken of market conditions in the supply of major items of plant (long intervals between orders lead to unreliable estimates of the cost of new plant; negotiated tenders put prices up) and of relative price effects (tendency of power plant prices to rise faster than the general rate of inflation). The Board should adopt a larger start to finish (contingency) allowance for nuclear than for conventional stations.
- iii) The Board should improve its estimating of construction time.
- iv) Assumptions on nuclear plant performance (particularly AGR) are optimistic; a more realistic (cautious) central estimate should reflect past difficulties
- v) Presentation of investment appraisal results, both internally and externally, falls short of standards necessary to understand the robustness of NEC estimates.

As a minimum, there should be a much more thorough explanation of the results of combined sensitivity tests for outcomes which are more likely than the CEGB's "basic" Net Effective Costs (optimistic) and extremely pessimistic outcomes.





CONFIDENTIAL

-2-

But the MMC recommend the further step of reorienting the approach, presenting outcomes associated with central estimates of all variables: the CEGB regard this as planning for failure.

- vi) The Board should develop its work on the analysis and forecasting of lifetime repair and maintenance costs; this underpins estimates of the net avoidable cost of life extension. Life extension potential should be reflected in investment appraisal.
- vii) The economics of conversion of existing oil fired plant to coal firing should be reassessed as a matter of urgency.

#### Fuel procurement

- i) The Commission welcome the statement in the CEGB's annual report for 1979-80 that a modest increase in coal imports was planned for 1980-81, and that the Board was keeping under review the scope for increasing coal importing facilities.
- ii) The CEGB should seek to improve the terms and extend the duration of the understanding with the NCB.
- iii) The exclusive dealing clause on the transport of coal in the CEGB's arrangements with BR should be abandoned; the CEGB and BR should revise the price variation mechanism so as to give BR more incentive to reduce the growth of its costs and to enable the CEGB to benefit from improvements in productivity.
- iv) The Board should negotiate flexible "call-off" clauses in new contracts for uranium supply; they should press forward with diversification of uranium supply.
- v) Consideration should be given to appointing one or more CEGB representatives to the BNFL Board.
- vi) The Board should urgently provide information to BNFL on options for dealing with irradiated AGR fuel.
- vii) If a PWR programme is undertaken, competitive tenders for supply and reprocessing of fuel should be sought from BNFL and foreign organisations.

#### Manpower (10.59 to 10.68)

The Board and the unions should co-operate in securing further improvements in the efficiency with which the industry's manpower is used at all levels.

CONFIDENTIAL





CONFIDENTIAL

-3-

Power Station Construction (12.123 to 12.134)

- i) in view of uncertainty about the prospects for a National Agreement for large sites, the Board should use its recent experience at Grain and Drax to produce and establish its own model site agreement: this should be initiated before it contracts for the construction of a new power station.
- ii) In letting contracts for nuclear power stations, and in particular for the first PWR, the Board should be guided by the following principles:
  - a) it should ascertain from potential suppliers, British and foreign, whether they are prepared to bear any of the plant performance risks, and weigh this against probable cost of its own remedial action or permanently sub-standard performance.
  - b) if the main contractor is to have the limited resources NNC now has, guarantees of equipment performance should be available direct to CEGB
  - c) as many contracts as possible should be let on a firm price basis, with the Board's key date incentive system applied
  - d) contractual responsibility, and size of contract should be related to the contractor's financial resources and the risk he is willing and able to bear
  - e) there should be unified control over the execution of projects; the Commission believe that this is in line with the Secretary of State's policy for NNC as announced in December 1979.

CONFIDENTIAL