

PO - CH / NL / 0098

PART B



Alex  
Lawson

PART B

**SECRET**

(Circulate under cover and  
notify REGISTRY of movement)

PO CH/NL/0098  
PART. B.

PO CH/NL/0098  
PART. B.

Chancellor's Papers on  
Electricity Privatisation 1987

Begins: 2/10/87

Ends: 15/12/87 (CONTINUED)

THIS FOLDER HAS BEEN  
REGISTERED ON THE  
REGISTRY SYSTEM



**DRAFT**

24/9/87.

Policy Study No.87

CURRENT CHOICES

good ways and bad to privatise electricity

Allen Sykes and Colin Robinson

CENTRE FOR POLICY STUDIES

8 Wilfred Street, London, SW1E 6PL

1987



## THE AUTHORS

Allen Sykes is a managing director of Consolidated Gold Fields PLC. A graduate of L.S.E. in economics, finance and accounting, he spent five years as a business economist with Unilever before joining RTZ in 1960 as Head of Project Evaluation. He worked on the planning, organisation and financing of numerous large mining and energy projects culminating in the Channel Tunnel project in the early 1970s. Subsequently he moved to the City and worked on a major North Sea gas gathering project, as Willis Faber's finance director and as senior adviser to international companies, banks and governments. He remains a senior adviser to a large North American electrical utility and coal mining company. In the early 1980s he undertook a major review of the electrical supply industry for the Electricity Council. His many papers and books include The Finance and Analysis of Capital Projects with A J Merrett. He is a founder of both the British and Canadian Major Projects Associations.

Colin Robinson is Professor of Economics, Head of the Department of Economics at the University of Surrey and Director of the Surrey Energy Economics Centre. Before his appointment at Surrey he spent eleven years as a business economist, mainly in the oil industry. He is the author of numerous books and papers on the economics of and policy towards the fuel industries. A member of the Secretary of State for Energy's Advisory Council on Research and Development in Fuel and Power, he is an adviser to several companies in the energy and mining industries.

Both authors write this paper in their personal capacities.



## ACKNOWLEDGEMENTS

In producing this paper we have had the generous help and advice of many friends, colleagues and associates from the international mining and energy industries, especially from Britain, Canada and the United States. We particularly wish to thank A J Merrett who developed the competitive privatisation option that we are recommending. We are also indebted to Alex Henney, on whose work in *Privatise Power*, published by the CPS in March 1987, much of Chapter 6 is based. The opinions expressed are, of course, our own.

Support toward research for this study was provided by the Institute of Policy Research

The Centre for Policy Studies never expresses a corporate view in any of its publications. Contributions are chosen for their independence of thought and cogency of argument.

ISBN 0-000000-00-0

© Centre for Policy Studies, month, 1987

Printed in England by G. Donald & Co. Ltd [address]



## CONTENTS

Foreword	<u>Page</u>
1. OBJECTIVES OF ESI PRIVATISATION	1
2. COMPETITION, REGULATION AND SOME SPECIAL ISSUES	9
2.1 The Scope for Competition in Electricity Supply	9
2.2 Gains from Competition?	10
2.3 Regulation	12
2.4 Safety, Environmental Protection and Other Functions of Government	14
2.5 Nuclear	15
2.6 Security of Fuel Supplies	15
2.7 Size of the Industry	17
2.8 Problems of Transition	17
2.9 Coal and the ESI	18
2.10 Scotland	18
2.11 Conclusions	19
3. PROBLEMS OF NUCLEAR POWER	21
4. RELATIONS WITH THE COAL INDUSTRY	24
4.1 Government Policy	24
4.2 The "Joint Understanding" with British Coal	24
4.3 QUICS	25
4.4 Privatising and Liberalising Coal	25
5. LESSONS OF FOREIGN EXPERIENCE	28
5.1 Public Ownership and Centralised Control: France and Italy	29
5.2 US Private Utility Model	31
6. PRIZES OF PRIVATISATION	33
6.1 Economic Benefits	33
6.1.1 The Cost Structure of Generation	33
6.1.2 Coal Costs	34
6.1.3 Nuclear and Other Fuel Costs	35
6.1.4 Labour Costs	35



	<u>Page</u>
6.1.5 Materials and Services	36
6.1.6 Capital Cost Savings	36
6.1.7 Total Economic Benefits	37
6.2 Government Receipts from Sale of the ESI	38
6.3 Impact of Privatisation on the Cost of Power	39
7. CRITERIA, ECONOMIC AND POLITICAL, ESSENTIAL AND DESIRABLE	41
7.1 The Manifesto Commitments	41
7.2 Making the Criteria Explicit	42
7.3 Essential and Desirable Criteria	43
7.4 Essential Political Criteria	44
7.4.1 Absence of Serious Disruption	44
7.4.2 Assured Privatisation Within the Term of the Present Government	45
7.4.3 Minimum Risk of Serious Electoral Unpopularity	45
7.4.4 Generous Profit Participation and Redundancy Arrangements	45
7.4.5 No Foreign Control or Domination of the ESI	46
7.4.6 No Undervaluation of Assets	46
7.5 Essential Economic Criteria	47
7.5.1 Introduction of Maximum Competition	47
7.5.2 Compatibility with Competitive Coal Privatisation	47
7.5.3 Need for New Management and Corporate Shareholders	48
7.5.4 Simple but Effective Regulation of Monopoly Activities	48
7.5.5 Attractiveness to Individual and Corporate Investors	49
7.6 Desirable Criteria	49
7.6.1 Minimising the Pre-privatisation Planning Period	49
7.6.2 Minimum Period of Structural Change	49
7.6.3 Retention of the Industry Pension Scheme	50
7.7 Evaluating the ESI Privatisation Options	50
8. OPTIONS FOR PRIVATISING AS A MONOPOLY	51
8.1 The Monolithic Option	51
8.2 Monolith with Regulation in the Style of British Gas	52
8.3 Undervaluation	55
8.4 Monopoly with US Style Regulation	56
8.5 Initial Privatisation as a Monolith - but with Competitive New Generation	57
8.6 Monopoly Distributor Competing with the CEGB in Generation	62
8.7 Privatising as Integrated Regional Utilities	63



9.	OPTIONS FOR COMPETITIVE PRIVATISATION	66
9.1	The CG System and Variants	66
9.2	The Regulatory Body	67
9.3	Limits of Regulation	68
9.4	Evaluation	68
9.5	Problems of Timing	69
9.6	The Privatised Transition to Competition (PTC) Option	71
	9.6.1 Achieving Competition in Generation	72
	9.6.2 Progression Towards Competition to Supply the RDUs	73
	9.6.3 The National Grid	75
9.7	The Nuclear Sector	76
	i) The US System of Regulated Private Utilities	77
	ii) Retention within the Public Sector	77
	iii) Ownership by RDUs as 100% Debt-financed Subsidiary (the PTC Option)	77
9.8	Electricity Standards and Regulatory Commission	79
9.9	Conclusion on PTC Option	80
9.10	Privatisation Deferred to a Later Term	81
10.	CONCLUSIONS	83
	The Objectives, Benefits and Problems	83
	The Essential Criteria	84
	EPILOGUE	85

A summary guide of options

References



## FOREWORD

The present Government's privatisation programme represents the most important initiative in industrial policy in recent times. If properly executed, such a programme could significantly improve the performance of the British economy, lower industrial costs, reduce prices for the benefit of consumers and provide secure employment opportunities.

Nowhere is privatisation more needed than in the energy market where intra-industry competition exists only in oil: a market seriously distorted by the presence and influence of three (now two) nationalised corporations. The coal, gas and electricity monopolies have been dominated by producer interests, decision-making has been highly politicised and consumer interests have been given low priority.

In the few months since the Government won a third term of office, privatisation of the electricity supply industry (ESI) has been firmly on the agenda. Widespread public debate is concentrating on the advantages and disadvantages of various options. Both the Electricity Council and the CEGB have retained financial and public relations advisers to help them conduct forceful public and private campaigns to influence the Government's imminent decision. Given all that may be at stake for its senior management this effort, well funded and evidently influential, is not hard to understand. No comparable co-ordinated effort can be mounted by the private sector since those who will be most affected (in particular consumers and potential corporate investors) are too numerous and dispersed to partake with one voice in the public debate and the equally crucial private discussions with Government. Accordingly the Government may take disproportionate account of the ESI's views which are likely to favour lightly regulated monopoly (perhaps with token competition as in the case of British Gas and British Telecom).



If ESI privatisation is not to follow the precedent of gas and telecommunications then the Government must show courage and singleness of purpose. Otherwise, an opportunity to introduce competition into the electricity supply industry, and with it into the coal industry, will be lost for at least the remainder of this century.



## 1. OBJECTIVES OF ESI PRIVATISATION

### The principal objectives

Privatisation schemes can have three principal objectives, between which there are potential conflicts. They are to-:

- increase efficiency
- raise revenue for government
- widen share ownership

The second and third objectives have clearly been predominant in the government's privatisation programme so far. Revenues raised from privatisation of state corporations were about £11 billion from 1979 to 1986 and they are likely to average at least £4 billion a year over the rest of this Parliament. The numbers of shareholders has much increased in recent years, largely as a consequence of privatisation - according to an NOP Market Research<sup>1</sup> survey from about three million in 1979 to about 8 million (nearly 20 per cent of the adult population) early in 1987. Increasing efficiency, however, seems to have had a very low priority, certainly in the case of British Gas and other recent privatisations.

Improvements in efficiency can take several forms. First, goods and services may be produced at lower cost (increased productive efficiency); second, there may be a closer alignment of prices and costs (greater allocative efficiency); and third, producers may become more responsive to consumers' requirements. In general, the principal means of realising these gains is through liberalisation (the introduction of more competition). Liberalisation measures can be applied to markets for products (the markets into which a firm sells) and to markets for inputs (labour, capital and the materials and services which a firm uses).

Some gains in product efficiency may be achieved by selling the assets of previously nationalised corporations to private shareholders



(satisfying the objective of wider share ownership) - that is, provided that these shareholders form a more effective pressure group for managerial efficiency than the government - if, in other words, they introduce stronger capital market discipline. But to maximise gains in both productive and other types of efficiency it is necessary not only to sell the assets but also to liberalise markets. Liberalised markets force producers to reduce costs, partly because of the pressure of competition and partly because they no longer find political lobbying so advantageous. Monopolised markets can, by definition, provide no genuine performance standards for managers, since they lack close competitors with whom to make comparisons. Downward pressures on costs are bound to be weak and ineffective, because the system cannot provide the relevant signals.

Similarly, liberalised markets for inputs will also reduce their costs. And so, as cost savings from various sources accrue, the force of competition ensures that the bulk of such savings are passed on to consumers. Thus prices and costs are more closely aligned than in monopolised markets and allocative efficiency improves. Greater competitive pressures also normally offer consumers a wider variety of price/quality options since producers have to be more responsive to their demands than they do under monopoly.

From the viewpoint of public interest, privatisation is primarily a means of liberalising markets. There may well be political, economic and social advantages in widening share ownership, thus giving people a stake in the success of their own organisations and of the economic system as a whole. There may be legitimate reasons for the government to raise revenues through privatisation, provided it realises adequate amounts for the assets it sells. ( If it does undervalue industries on sale it will impose costs on society similar to those which are incurred when a government borrows at an excessively high interest rate). But in our view privatisation should be directed principally at improving efficiency via injecting competition into demonopolised industries.



A serious practical problem is posed by the strong vested interests which naturally oppose liberalisation. Employees of nationalised industries understandably wish to retain the advantages they derived from working for monopolies. Financial institutions and potential shareholders may also see illiberal forms of privatisation as being in their short term interests since they are allowed to participate in the profits of a monopoly. The Government may believe that more money will be raised by selling a corporation whole rather than by splitting it into competing parts. All these pressures seem to have operated in the case of British Gas and, regrettably, appear to have been the principal determinants of the form of privatisation.

An outline of the existing structure of the electricity supply industry for the benefit of readers unfamiliar with the somewhat unusual structure of the British electricity supply industry (hereafter ESI), we give below an outline description of the industry<sup>2</sup>. In Chapter 2 we explain how the privatisation principles explained above relate to such an industry.

#### England and Wales

In England and Wales, the ESI is in the hands of the following nationalised corporations which report to the Department of Energy (except for the Scottish boards, which report to the Scottish Office):

The Electricity Council, on which the CEGB and Area Boards (see below) are represented. The Council is the statutory body "...responsible for policy formulation and co-ordination..." of the industry. It has responsibilities for a number of industry-wide functions such as finance, sales forecasting, generic advertising, investment planning, monitoring tariff proposals and industrial relations. Despite its overall responsibility the Council has to rely primarily on persuasion in its relations with the CEGB and Area Boards. None of the various proposals to turn it into a strong central body for the industry (for example, in the 1976 Plowden Report) has been implemented.



The Central Electricity Generating Board (CEGB) is, by common consent, the strongest of the nationalised corporations in the ESI (in economic and political terms). It is one of the world's largest electrical utilities, owning and operating the bulk of the ESI's assets and carrying responsibility for both generation and long distance transmission of electricity. Power is sold via bulk supply points to the Area Boards.

Twelve Area Electricity Boards distribute electricity locally to all categories of consumer. These Boards vary considerably in terms of density of their network and of their mix of domestic and industrial consumers. Area Boards are the customers' main point of contact with the industry.

#### Scotland

In Scotland, the structure of the ESI is different. There are two integrated power boards which operate both the generation and the transmission and distribution systems. Southern Scotland, the more densely populated region, is served by the South of Scotland Electricity Board (SSEB) one of the distinguishing features of which is its relatively high proportion of nuclear generating capacity (responsible for over 40 % of electricity supplied). The north is served by the North of Scotland Hydro Electric Board which, as the name implies, has a large number of hydro stations, as well as some oil capacity.



The CEGB

Because of the importance of the CEGB, we give below some more details of its operations.

Table 1.1

Electricity supplied, number of stations  
and fuel consumed: England and Wales 1986-87

<u>Fuel Type</u>	<u>Electricity supplied</u> <u>% of total</u>	<u>No. of Stations</u>	<u>Fuel consumed</u> <u>million tonnes</u> <u>coal equivalent</u>
Coal	78.2	41	77.0
Oil	5.6	7	6.8
Gas (for peak power only)	-	11	-
Nuclear	16.4	10	16.2
Hydro, pumped storage	(0.2)+	9	0.0*
	100	78	100.0

\*including 4 dual-fired

+ output from hydro stations less net energy used in pumped storage.

Source: CEGB Annual Report and Accounts, 1986-87.

The CEGB, like other power generating authorities, operates a 'merit order' system which allows it to choose the stations which have the lowest operating costs - at present nuclear followed by coal - for base load demand; and thereafter to bring in those which have higher



operating costs for intermediate and peak loads. Thus the operating costs of the system (which are mainly fuel) are minimised. When a new power station is built, it will usually have low operating costs relative to other stations and so initially will be high in the merit order and supply base load power. As it ages, its position in the merit order will fall and in the end it may operate only on standby before being retired.

Nearly 80 per cent of electricity is supplied by coal stations, and another 16 per cent by nuclear power (Table 1.1). Although oil-fired stations have high thermal efficiencies, the cost of fuel oil has in recent years precluded their use even for intermediate loads. If oil prices were to stay low for a prolonged period, oil-fired stations might begin to supply intermediate or base load again. They were used extensively during the coal strike when many mothballed plants were reactivated to ensure continuity of supply. There was again some increase in oil use in 1986 when oil prices fell.

Two pumped storage systems, used to even out the daily demand curve, make an important contribution to the efficiency of the system by storing surplus intermediate power and releasing it at peak periods.

Power stations have tended to be located near their sources of fuel. Thus the large coal-fired stations are concentrated in North Yorkshire, the Trent Valley, and the Central Midlands though there are a few stations in the Thames estuary. Nuclear stations, because of their extensive need for cooling water, are usually located on or near the coast but are not concentrated in any one region. Long distance transmission, via the "National Grid", is also operated by the CEGB.

The grid, which is a crucial element in the ESI, has to handle substantial flows of power from regions with surplus generating capacity such as the north of England and the Midlands, to the south and south east where demand is high relative to local capacity. The grid is linked to Scotland and France, allowing for exchange of electricity in each direction although, in practice, the CEGB is a net



importer of electricity from both countries. The under-Channel link completed in 1986 has a capacity of 2000 MW, equivalent to one large power station. France has low marginal costs of producing electricity as a result of its surplus nuclear capacity and exports to other European countries as well as Britain.

### Employment, Industrial Relations and Organisation

In March 1987 the industry employed nearly 147,000 people in England, Scotland and Wales, of which 48,000 were employed by the CEGB, 83,000 by the Area Boards and 16,000 in Scotland. Employment of "industrial" staff in England and Wales has declined from about 131000 in 1964 to about 69,000 in 1987, a fall of 47%. Numbers employed in other categories have also fallen significantly. These reductions in manpower have been achieved without compulsory redundancy and without the bitter disputes which have characterised other nationalised industries when required to shed labour. When major power cuts have occurred they have usually been caused by serious disruption to fuel supplies.

The ESI has enjoyed good industrial relations and has been virtually strike-free for many years. In its report on the transmission system published in June 1987 the Monopolies and Mergers Commission<sup>3</sup> commended the achievements of the industry and unions in improving industrial relations. The main unions in the industry - the EEPTU, NALGO, GMBATU and the Electrical Power Engineers' Association (part of the Engineers' and Managers' Association) have "moderate" tendencies. Their enormous industrial power has not been abused.

The CEGB has recently altered the structure of responsibility from a series of self-contained local regions carrying out all activities, to a system whereby operations are divided into four categories, each run by a different operating division. Evidently it desired to streamline both non-technical and technical support now that power production is concentrated in a few large units, and to strengthen the corporate management and the decision -making of the business as a whole.



### Plan of the Paper

The rest of this paper shows how the privatisation principles set out on page 00 above can be applied to the complex industry whose structure has just been outlined. Chapter 2 brings out a number of specific issues which need to be addressed in injecting competition into the ESI. Chapter 3 describes the particular problems of the nuclear industry. Chapter 4 discusses the very important relationships between the ESI and the coal industry. Chapter 5 draws useful lessons from overseas. Chapter 6 deals with the gains which may be expected from privatisation. Then in Chapters 7, 8 and 9 we turn to the main questions which have to be answered - what criteria should be used in assessing privatisation plans and how do the various options stand up to such an assessment? Chapter 10 summarises the conclusions we reach.



## 2. COMPETITION, REGULATION AND SOME SPECIAL ISSUES

If electricity supply is to be privatised in a form which will bring substantial benefits, competition is essential for the reasons given in Chapter 1.

Liberalising electricity supply, however is not straightforward. Some of the difficulties are inherent in all efforts to denationalise industries which have been in state hands for many years and have developed the habits which go with state ownership. But there are special problems identified below which practical schemes for electricity supply privatisation must resolve. Some of them have been raised as obstacles to privatisation by those who support continued nationalisation. They are discussed briefly in this chapter which ends with a list of issues which need further discussion.

### 2.1 The Scope for Competition in Electricity Supply

Parts of the present electricity supply industry are "natural monopolies". That is, they are activities which can more efficiently be organised under single ownership than under competition. Local distribution is one such activity where competition in digging up roads, laying cables and supplying electricity to small (mainly household) consumers would be unlikely to be efficient. Possibly, changes in distribution technology may eventually allow such competition to develop but at present the arguments seem to be against it. Similarly, a long distance transmission network for transporting electricity is, with existing technology, a natural monopoly activity. If natural monopolies are privatised, some form of supervision is normally required, as explained below, to avoid the abuse of monopoly power.

Apart from distribution and transmission, the rest of the present electricity supply industry is potentially competitive and could, therefore, be liberalised to reap the benefits summarised in Chapter



1. Peripheral areas of activity of the present industry, such as sales of appliances and electrical contracting, are already in competition with the private sector. Much more important, the generation of electricity (amounting to 70% of all ESI costs) is not naturally monopolistic. There could and should be competition in such generation, in order to give a choice of sources of supply to larger customers and to local distributors of electricity.

In privatising and liberalising electricity supply, therefore, the aim should be to:

- a) introduce competition into generation;
- b) separate long distance transmission from generation so that there is an independent "common carrier" network useable by competing generators, (including manufacturing companies with surplus power to sell). An independent transmission network, open to all potential users on identical terms, is vital if a competitive generating industry is to develop;
- c) separate local distribution from both generation and transmission.

The industry would therefore consist of competing generators, a long distance transmission network and a number of local distributors of electricity.

## 2.2 Gains from Competition?

The general case for competition is stated in Chapter 1. What gains would be likely to arise if electricity generation became competitive? Let us start from the apparently plausible case, frequently made by employees of the ESI, that the existing structure already minimises costs by its use of a "merit order" (see Chapter 1). Thus, they contend, competition can bring no improvements and might indeed be wasteful.



Such arguments embody a common and basic misconception - that centralised management and size can be equated with efficiency. The merit order used by the CEGB, a system similar to many used elsewhere in the world, will come close to minimising current operating costs. But fuel costs (about half generating costs) are determined to a large extent by a competition-restricting agreement (see chapter 4 ) to purchase British coal. Labour costs (over 10% of generating costs) are determined primarily by long-term agreement with unions with great monopoly power. In other words, operating costs of individual stations are the outcome of a monopolised regime, as also are the capital costs of existing power stations (nearly 25% of generating costs, including return on capital). Capital costs are irrelevant in operating the merit order, since they are sunk and so unavoidable: but they are a major determinant of total costs. There is little incentive to spend capital wisely in monopolistic conditions.

Often the main charge which can be levelled against monopolies is not that they directly exploit consumers by making large profits but rather that they are inefficient because they lack the incentives to cut costs. Inefficiency is particularly likely when the monopolies are in state hands, and so decisions are highly politicised. If electricity generation became a competitive industry, its costs would be reduced compared with those of its monopolistic past, and the bulk of any reductions would be passed on to consumers because of the force of competition. Larger consumers would benefit directly, since they would have a choice of supplier and prices should therefore fall. Lower electricity costs for industry would have beneficial effects throughout the economy. But smaller consumers should also gain more directly, provided regulation of distributors is so designed as to ensure that lower generation costs are passed on.

In suggesting that there are considerable inefficiencies in the ESI which could be greatly reduced by a liberal form of privatisation, we are not blaming the management and other employees of the industry. Present cost levels are products of the environment in which the industry exists, for which successive governments are primarily responsible. If the environment is non-competitive, management has



insufficient incentive to spend time seeking cost reductions. If it is both non-competitive and politicised the problem is so much worse; it may well be more rewarding to keep on the right side of influential politicians and civil servants rather than to be determined minimisers of costs.

Introducing competition into such an industry and reducing politicisation would be bound to give a new impetus and new incentives to existing management, as well as attracting new managers into it. Instead of arbitrary performance standards being imposed by civil servants, real performance standards would be set by competitors. Thus management would be much more efficient. And liberalisation in the product market would spill over into the markets for the ESI's inputs. It seems very unlikely, for instance, that the "Buy British" policies for plant and equipment which have existed in the past and have inflated capital costs would survive the introduction of competition in power generation. No doubt manning levels would decline also. As Alex Henney has pointed out in his *Privatise Power*<sup>4</sup> (Chapter 2), both the costs of power station construction and the levels of manning appear to be substantially higher in Britain than in other countries. And, of particular importance, there would be downward pressure on the price of the ESI's principal input - coal, which accounts for about one third of the ESI's costs - where a "Buy British" policy has also been in operation. The Joint Understanding (see Chapter 4) which supports the British coal industry by imposing extra costs on electricity consumers, would not be tolerated by generating companies in competition with each other. It is, indeed, at last coming under scrutiny by the CEGB in the light of criticism of its cost levels. We comment further on the relationship between the ESI and the coal industry in Chapter 4; and in Chapter 6 attempt to quantify some of the gains from injecting competition into electricity generation.

### 2.3 Regulation

In the cases of both long distance transmission and distribution (but not generation) some form of supervision ("regulation" for short) would be required to avoid the abuse of the monopoly power inherent in



these two activities. Regulation could take several forms. One would be public ownership so that the government, as now, acted as the regulatory authority; or there could be regulatory bodies established specifically to supervise private transmission and distribution companies; or local authorities could own or regulate distributors; or there could be a system of franchising companies to operate the transmission network or local distribution for specified periods after which the franchise could be renewed or changed.

Experience in other parts of the world suggests that regulation is never very satisfactory. However, the present situation is much worse since, in effect, it involves regulating (by nationalisation) the whole of an industry, only 30% of which, as measured by costs is naturally monopolistic. Regulation should be minimised by confining it strictly to those activities where there seems no alternative. An advantage of privatising electricity using the principles outlined above is that the scope of regulation would be considerably reduced compared with the present regime. The regulatory problem would be brought out into the open, and much confined.

Because of the presence of natural monopolies within the ESI, we devote some attention in Chapter 9 to an appropriate method of regulation. We believe that Britain should avoid the excesses of the US method, which is more and more questioned in the US itself. We believe also that apparently simple formulae -such as the  $RPI - X + Y$  used to determine maximum prices for smaller gas consumers after privatisation - should be avoided. The gas formula has already led to a dispute between British Gas and its regulator, Ofgas. In a more complex industry, such as the ESI, the results would probably be even worse. We therefore make suggestions for a regulatory regime which should avoid the worst effects of cost-plus mechanisms, and provide management with incentives to improve efficiency.



#### 2.4 Safety, Environmental Protection and Other Functions of Government

Supporters of nationalisation sometimes claim that public corporations are necessary guardians of the public interest in such matters as safety and environmental protection. In practice, there is little evidence that nationalised industries have a better record in such matters than private companies. There are certainly many complaints about the effects of their activities on the environment and on people. It is also likely that imposition of "public service" functions on nationalised corporations causes confusion of management objectives.

Be that as it may, in a liberalised market guardianship of the public interest is clearly a matter for government. One advantage of liberalisation is that it would bring into the open certain matters with which government should be concerned, but where at present the responsibilities between nationalised corporations and central government departments are ill-defined and split. Controlling the effects of air pollution from power stations and minimising the unsightliness of large buildings are obvious examples. Dealing with such "external costs" - for example, by ensuring that the polluter pays for his or her actions - is properly a function of elected government, and would clearly need to be so in a liberalised market.

Other functions which government would need to perform in a such a liberalised market include the maintenance of safety standards (which need not be diminished in any way), and establishment of the regulatory bodies needed to supervise the non-competitive parts of the ESI. A particularly important function of government would be to ensure that the industry did not revert to a monopolised structure. Thus, in a liberalised electricity supply market the functions of government would change. No longer would there be constant interference in the running of the industry, but in this freer market government would have the vital and more traditional role of protecting the public and the natural environment.



## 2.5 Nuclear power

The existence of a considerable nuclear capacity is a much-quoted obstacle to privatisation. Nuclear power provides nearly 20% of the electricity generated in Britain (though over 40% in Scotland). Ten nuclear power stations are operated by the CEGB and two by the SSEB. Nine are relatively small and aging Magnox reactors: the other three are Advanced Gas Cooled Reactors (AGRs). Both Magnox and AGR are British designs. Five new AGRs are in various stages of construction or commissioning, and should be in operation by 1988. Considerable technical problems and construction delays have been experienced with the AGRs, and there have also been technical difficulties with the Magnox reactors which will probably begin the process of decommissioning in the 1990s. Permission has recently been given for the construction of Britain's first PWR reactor at Sizewell B and the CEGB is contemplating a second PWR at Hinkley Point. The nuclear industry poses special problems for privatisation which are set out in Chapter 3; solutions are described in Chapter 9.

## 2.6 Security of Fuel Supplies

Electricity supply is a very large consumer of fuel (see Chapter 1) as well as a supplier of energy to consumers. Disruption of fuel supply is therefore a danger against which it must guard. Would that danger be greater after privatisation?

In practice, the security of the ESI's fuel supplies should be better than it has been in recent years. As explained in Chapter 4, successive governments have forced the ESI to depend on British Coal, thus denying it the opportunity to increase security by diversifying its sources of supply (which is the relatively cheap way of enhancing security which a commercial organisation would normally adopt). The industry has therefore had to take extremely costly action - such as building up very large stocks of coal and other materials when it feared coal strikes in Britain, and running oil-fired power stations during strikes. Because of this forced dependence, the monopoly powers of British Coal and its workforce have been strengthened.



Thus strikes and threats of strikes have almost certainly been more frequent than they would otherwise have been and their consequences have been more feared<sup>5</sup>.

Government policy has had another curious effect. Because of the monopoly power of the coal industry - which governments themselves acted to increase - nuclear power has been seen as a means of diversifying the ESI's fuel supplies. Thus governments supported an expansion of nuclear power in Britain which, though not as rapid as in extreme pro-nuclear countries such as France, was almost certainly faster than the private sector would have been prepared to finance. Whether nuclear power is, in reality, a means of improving security of supply is highly debatable. It does provide another source of fuel for the ESI which, given recent policies of coal support, may have seemed desirable. But nuclear power suffers (rightly or wrongly) from serious problems of public acceptability. Consequently, there is an ever-present danger that existing nuclear stations in Britain might have to be de-rated or even shut down and that new building might cease because of an accident in another country, possibly with an unrelated type of reactor. Thus, a high proportion of nuclear power in an electricity supply system can make for insecurity rather than security. In any case, an obvious alternative is to change the coal support policies which have been the prime cause of such insecurity in Britain.

A privatised ESI, with competition in generation, would have a strong incentive to provide its own security of fuel supply, primarily by a policy of diversification. There is a case (which would apply whether the industry is nationalised or privatised) for some additional government provision by comparatively low cost means, such as holding excess stocks of coal and oil, to meet emergencies. Government might also want to support some nuclear power generation beyond what private generating companies would be willing to install, but whether such action would promote security or insecurity is an open question.



## 2.7 Size of the Industry

The size of the ESI is sometimes regarded as an obstacle to privatisation. The assets of the industry (in the whole of Great Britain) on a current cost basis are around £45 billion. However, most commentators assume that the market value of those assets is substantially less - between £10 and 20 billion seems to be a common guess. In principle, we reckon that the market value is well below current cost, since the absence of competitive pressures has almost certainly resulted in over-investment. The very low rates of return in the ESI compared with the private sector lead us to the same conclusion; the target for the ESI is a annual return of 2.75 per cent on net current cost assets and it achieved a return in 1986-87 of just below 3.2%. It may be that these apparently low rates of return are a consequence of an artificially high value placed on the assets of the industry. However, there are such inconsistencies among the various financial targets the ESI is supposed to meet (the ex post required discounted rate of return of 5 per cent on new capital, its external financing limit and its annual return on net assets) that firm conclusions are very difficult to draw. What one can say for certain is that electricity privatisation could ask the capital markets to swallow a very large amount indeed. Handling needs to be more judicious than before.

## 2.8 Problems of Transition

A common and much-neglected problem in proposals for radical reforms is that of transition to the ultimate structure. The present state of affairs may be clear enough; it may also be possible to see where one would eventually like to be. But how to move to that more desirable state is a problem which deserves specific attention. We are here dealing with an industry which, like coal, has been nationalised for forty years and was under various forms of government supervision before that. The ESI is very large, and very complex in the sense that it is a mixture of natural monopolies and naturally competitive activities. It is tempting simply to argue that the industry should be broken up and competition introduced into generation. But to sell the ESI at its proper price and to introduce the degree of competition which is eventually desirable cannot be done at one stroke of the pen.



Consequently, Chapter 9 is devoted to practical suggestions for an intermediate stage so that the industry can progress towards competition without intolerable disruption.

## 2.9 Coal and the ESI

As shown above, coal is the ESI's biggest input. The two industries are very closely linked. The CEGB takes 95% of its coal from British Coal and over 70 per cent of British Coal's sales are to power stations. To some extent, these high proportions are a function of collusive agreements such as the Joint Understanding (see Chapter 4). Nevertheless, even without such arrangements, the ESI is likely to take the bulk of its coal from British sources in the foreseeable future as we explained in *Privatise Coal*. Given the degree of interdependence between British Coal and the ESI, one issue which cannot be shirked is whether it is desirable to privatise one industry without the other (see Chapter 4).

## 2.10 Scotland

The privatisation of the two integrated Scottish utilities (NSHEB and SSEB) can of course be handled quite separately from that of the ESI in England and Wales, the former being the responsibility of the Scottish Office and the latter of the Department of Energy. It is always open to the Government, however, to have a single privatisation plan for the whole of Britain (including of course Northern Ireland, which this paper does not cover). We have not attempted to take into account such political considerations.

Whichever option in England and Wales is adopted it would be quite possible to maintain the separate existence of the two Scottish Boards. Different treatment for Scotland would not cause significant distortion. If, however, any of the options for England and Wales, particularly those which introduce competition, would give Scotland benefits unobtainable under the present structure, then Scottish consumers are likely to prefer such a scheme. In any case it is desirable that any regulatory arrangements encourage free trade in



electricity between all the utilities in Britain. It is also desirable to have similar regulatory regimes where possible. Finally, if special arrangements are needed for nuclear power, the position of the nuclear power stations of the SSEB needs to be considered. If they were taken away for inclusion in a British nuclear power grouping (see Chapter 9) the SSEB would be very short of generating capacity.

### 2.11 Conclusions

This review of the issues in privatising electricity supply suggests that many of the arguments of those who oppose privatisation are ill-founded. It is perfectly possible to achieve efficiency gains through competition in generation, even though the rest of the industry would probably need to be subject to some form of regulation. Safety standards should be unaffected and environmental protection standards should, if anything, improve. The security of the ESI's fuel supplies should also improve.

Nevertheless, there clearly are several issues which need further discussion. In particular:-

How should nuclear power generation be organised and how should decisions be made about the need for new capacity? (Chapters 3 and 9)

What should be the relationship between the ESI and the British coal industry? Should both be privatised? (Chapter 4)

What lessons can be learned from overseas? (Chapter 5)

What would be the gains from privatisation? (Chapter 6)

What criteria should be used to evaluate alternative privatisation schemes? (Chapter 7)

How should one judge schemes which privatise the ESI as a monopoly? (Chapter 8)



Given the objective of more competition in generation, how can a smooth transition be arranged? (Chapter 9)

These matters are discussed in the rest of the paper. Our conclusions are set out in Chapter 10.



### 3. PROBLEMS OF NUCLEAR POWER

Three major problems about nuclear power must be faced. The first is that private companies might be unwilling to buy the early Magnox stations and the ill-fated English AGRs, though they might be prepared to invest in the Scottish AGRs whose operating experience has been better. If it is, incidentally, true that existing nuclear plants are virtually unsaleable, it is a serious indictment of past nuclear programmes and questions the claim that centralised planning of generating capacity is best. The second problem, related to the first, is that private companies might not be willing to build new nuclear capacity. Finally, would public opinion tolerate private ownership of nuclear power stations? Each of these matters is considered below.

Ownership carries with it enormous obligations in the event of an accident or failure. Furthermore, decommissioning costs which will soon fall due on the old Magnox reactors are likely to be very large (though also very uncertain, since there is little comparable experience). According to Press reports<sup>6</sup>, the CEGB estimates the future cost of operation and decommissioning at £6 billion against projected revenue over the remainder of their working lives of £7.5 billion. Most of these costs are likely to relate to decommissioning; and, these costs being so uncertain, it is not impossible that the Magnox stations would be worth nothing at all to a potential purchaser, and indeed might well be deemed a liability.

Construction of new nuclear power stations also presents major problems. The record of building AGRs in Britain has been little short of disastrous. Budgeted costs and construction periods have often been vastly exceeded. The Dungeness B station is still not fully operational 21 years after construction begun, whilst according to the Monopolies Commission the average cost overrun on AGRs has been over 100% in real terms.



Although it is possible that the private sector could improve on this performance, it is by no means clear that future nuclear power stations would be regarded as economic propositions. If the Sizewell Inquiry's comparison of conventional and nuclear power generation costs is reworked with the prevailing, lower world coal prices, and a more realistic, higher discount rate, then the nuclear option no longer appears to be cheaper than coal.<sup>7</sup>

It is almost inconceivable that any private sector organisation could or would assume the risks of building or operating a nuclear power station in Britain. However, the May 1987 Conservative manifesto incorporated the twin aims of a privatised electricity industry and the development of abundant, low cost nuclear generated electricity (see Chapter 7). These two objectives appear to be inconsistent. If the government is serious in its intention to transfer the ownership and management of the industry to the private sector then it should be prepared to accept the private sector's commercial judgement, even if this results in no more nuclear construction for the present time.

If for reasons such as national security the Government still wishes to ensure further nuclear development it is likely to have to assume full financial responsibility. No matter what form of privatisation is adopted, from monopoly to maximum competition, it is improbable that any new nuclear power stations would, for the time being, be built on commercial grounds.

Despite its manifesto endorsement of nuclear power, the Government should ask itself whether the national security argument still holds good. When first put forward in its first term of office, oil prices were high and rising, while British coal was expensive and at risk from industrial action by the miners. Now oil is cheap and plentiful and coal much cheaper. Privatising coal on liberalised lines would lower costs much further, increase security of supply and, even with generous redundancy payments to displaced miners, would be cheaper for



Government than a nuclear power programme. Moreover, as explained in Chapter 2, it is very uncertain whether a high proportion of nuclear capacity in an electricity supply system really does increase security of energy supplies. A privatised electricity supply industry would have a strong incentive to ensure the security of its fuel supplies by diversifying sources of supply - for instance by building coal import facilities, buying natural gas and possibly by increasing imports of electricity from France.

Because their operating costs are so much lower, nuclear power stations once built will always be able to undercut fossil fuel power stations. Thus they will always be employed on continuous base load operations all of their lives, regardless of whether they are publicly or privately owned. Consequently, if for security or other reasons the Government decides that more nuclear power stations should be built, albeit at much greater capital cost than fossil fuel stations, the profitability of privatised electricity companies would be reduced. The Government needs to think further about the evident conflict between its objectives of privatising electricity supply and promoting nuclear power.

The final issue is whether public opinion would allow nuclear power to be in private hands. That is a question on which it is difficult to comment since the answer must surely depend on the regulatory and safety regime. If the private sector were willing to manage and build nuclear stations, no doubt it would be possible to devise the necessary safeguards. As argued in Chapter 2, there is in general no reason to believe that public corporations are better guardians of the public interest than are private companies. We comment further on this matter in Chapter 9.



#### 4. RELATIONS WITH THE COAL INDUSTRY

For many years, governments have interfered with the fuel purchasing decisions of the ESI. Since one of the main benefits from liberalising the industry will come from the liberalisation of the market for its fuel inputs, we begin by describing the present situation.

##### 4.1 Government Policy

The CEBG has long been required to buy almost all its coal from British Coal (formerly the National Coal Board) and the policy of successive governments has been to favour domestic coal as the principal fuel for power generation. Under the terms of the present Joint Understanding with British Coal, the CEBG is allowed to use only small amounts of imported coal and of coal from the tiny and heavily restricted private sector. The tax on fuel oil and severe limitations on the use of natural gas for electricity generation on the grounds that it is a 'premium fuel' have also favoured the domestic coal industry. The government's use of the ESI as a backdoor means of pursuing energy policy and social objectives has clearly increased electricity prices to consumers.

Governments have condoned the "Joint Understanding", which is a competition-restricting agreement between the CEBG and British Coal on which we commented in *Privatise Coal*. This agreement attempts to introduce indirect import competition to offset the effects of the CEBG's inability to purchase coal in the cheapest market. Another scheme which tries to offset these effects is QUICS. The two schemes are described briefly below.

##### 4.2 The "Joint Understanding" with British Coal

The original Joint Understanding covered the five year period up to March 1985 and provided that the CEBG would use its best endeavours to take from the (then) NCB "all suitable coal up to a total of 75



million tonnes a year" provided NCB prices rose at no more than the rate of retail price inflation. It has subsequently been changed several times but the general intent is the same.<sup>8</sup> In its latest version, it provides for the CEBG to take 95 per cent of its coal (at least 70 million tonnes a year) from British Coal. The agreement is not published but it is known that there are three price tranches. In March 1987 the basis was 50 million tonnes a year at a price of £46.88 per tonne, of which 12 million tonnes was at a lower price related to the cost of imported coal (£29.50 per tonne) and another 10 million related to the going price of oil. The aim is to introduce indirect import competition by relating the lower price tranches to the prices of imported coal and oil.

Over the life of the agreement (four years) the proportion of coal in the highest priced tranche is due to reduce progressively to 40 million tonnes and the middle tranche will increase to 20 million tonnes. The agreement is subject to periodic renegotiation.

#### 4.3 QUICS

In response to complaints about high industrial electricity prices, in October 1986 the Qualifying Industrial Consumers' Scheme (QUICS) was introduced to encourage the consumption of coal-generated electricity by high load factor industrial users. 4 million tonnes of coal a year is being provided by British Coal - according to the CEBG "at prices close to those on the world market" - and used to give rebates to companies on average of about 6 per cent.<sup>9</sup>

#### 4.4 Privatising and Liberalising Coal

The Joint Understanding and QUICS are open acknowledgements that British electricity consumers are disadvantaged by the policy of limiting CEBG coal purchases almost entirely to British Coal.

Arrangements such as the Joint Understanding give no genuine choice of supplier and they distort decisions about fuel use and about where to site power stations. They are no substitute for real competition.



We argued in *Privatise Coal* that two actions should be urgently taken to benefit coal and electricity consumers. The first is to start construction of a large coal import terminal. No legislation would be required so there need be no delay. Competitive pressure on British Coal would then significantly increase. Whether or not a substantial increase in coal imports actually occurred, British Coal would be forced to behave as one competitor in a wider market. Coal costs and prices would be reduced to the benefit of coal and electricity consumers.

The second desirable action is to privatise the coal industry, establishing competition among different sources of British coal supply. In *Privatise Coal* we made detailed proposals on how this might be done and estimated the likely gains. The bulk of these (possibly amounting to £1 billion a year by the mid-1990s) are in lower prices to consumers. Since such a high proportion of coal is sold to the ESI, electricity consumers stand to gain a great deal from coal privatisation. Similarly, if coal is not privatised a large part of the potential gains from electricity privatisation will not be realised. Electricity customers would benefit from better management and reductions in equipment costs and labour costs under any scheme of electricity privatisation; but they could well forego the reductions in the price of the ESI's major input which coal privatisation would stimulate. Possibly coal prices for power generation would be significantly lowered simply by abolition of the Joint Understanding (which, as we have said, may not be able to survive electricity privatisation). But, to realise the full benefits from liberalisation of the ESI, coal must be liberalised too by means of privatisation.

Another cogent argument in favour of privatisation of coal is that otherwise the ESI may be under-valued on its privatisation. Potential investors in a privatised ESI will inevitably form expectations about the future structure of the coal industry; because of the close relationship between the two industries, this is essential in order to place a value on the ESI. If the Government does not express an



intent to privatise coal, investors may guess that a state coal monopoly, supported by the ESI, will remain. If that is their view, they will without doubt look askance at investing in the ESI, with the result that the industry will be unnecessarily undervalued. If the Government believes that it is not possible to embark on coal privatisation at the same time as ESI privatisation, at least some statement of intention, outlining the form and the timing of coal privatisation, should be made so that potential investors in the ESI are well-informed.

Nothing could show more clearly that the Government was serious about putting the interests of consumers first than its allowing the CEGB to start building a new coal terminal - immediately.



## 5. LESSONS OF FOREIGN EXPERIENCE

Different countries have adopted different ESI structures. These range from the monolithic publicly owned systems of Britain and France, through the diversified public and privately owned systems of Germany and Sweden, to the predominantly privately owned systems of the US and Japan. The systems of regulation of electricity prices are similarly diversified and range from control by government fiat in France, detailed legal regulation in the US, to diverse informal methods of regulation in Germany.

All these systems have the common characteristic of having provided widespread access to an assured supply of electricity. This is hardly surprising given that these countries have also conferred extensive if not total monopoly powers on the industry, either nationally or regionally, thus providing a basis for virtually unlimited funding of investment. The comparative efficiency of these various structures in other respects is very difficult to determine given the dependence of such comparisons on exchange rates and the extent to which, in such countries as France and Britain, government has incurred great costs in supporting nuclear power and, in the case of Britain, supporting the coal industry, too. One other single characteristic, however, appears common throughout all these structures. It is what might have been expected from an industry in which production predominates and on which such extensive powers of funding have been conferred - endemic overinvestment and excess capacity.

The US system, as one which has been established for over half a century on a predominantly private sector basis, is evidently one which should be considered for Britain. In what follows, therefore, we briefly review the systems obtaining in other countries before looking at the US system. The broad conclusion which emerges is, however, that none of the existing bases of private sector power supply would appear either practicable or - in the case of the US system - desirable as the basis for privatisation in Britain. The German and Swedish mixed public and private systems have evolved over time within a general political consensus in a manner that could not



be duplicated by a breakup of the British ESI in a far more polarised political context. The Japanese system is dependent on the exceptional Japanese corporatist culture. The US system, however, is fundamentally that of regional monopolies operating within an extremely costly and politically contentious regulatory framework which results in an essentially "cost plus" basis of supply.

#### 5.1 Public Ownership and Centralised Control: France and Italy

France and Italy have dominant utilities accounting for nearly all electricity supply, production and distribution. If the CEBG and Area Boards were privatised either as one company or in their present forms, they would remain similar in structure to the French and Italian industries. The new power generation company would, however, in either case be the largest privately owned utility in the world and be unique in having a private monopoly covering an entire country. Other large private utilities with local monopolies, e.g. in the USA and Japan, operate in a heavily regulated regime where no one company has control over the whole country.

Mixed public and private ownership and decentralised control in Germany and Sweden examples of countries that operate their ESIs in a decentralised manner include Germany and Sweden. Both have a variety of types of power utility and mixed public and private ownership.

Germany's electricity industry is decentralised, even though the degree of public ownership and influence is still large. There are many electricity utilities ranging from large, integrated systems engaged in all activities to distribution companies which buy in all their power; most of the generation and distribution, however, is in the hands of the twelve largest companies. Many of the enterprises have mixed capital where there is a majority public sector stake and the remainder is private capital. It is, in effect, a disaggregated public sector industry organised along regional lines. Although there is interchange of power between these regions, there is no nationally co-ordinated transmission grid.



There is a strong element of local and federal government involvement throughout the industry, particularly in regulatory control. The Lander (regional governments) and local councils both partly own and regulate the industry in their regions. Regulation is quite light. All domestic tariffs are in principle free from state restrictions but are subject to the Cartel Law.

A regional system based on the Area Boards would be possible in Britain, but would require strict and detailed regulation. While many European ESIs are organised on regional lines, it is common for local government to be involved in ownership and monitoring of the industry. The levels of local government in Britain do not have the same status and authority as those in other European countries and the present government is unlikely to wish to increase their power. Another drawback of the regional system is that it seriously reduces or curtails the possibilities for introducing competition.

The industry in Sweden has a number of features of interest in the context of privatisation. The system is an intermediate stage between full public and largely private ownership. About half of the electricity is supplied by the state utility, Vattenfall; 20 per cent comes from municipal utilities and 30 per cent is generated by the private sector. Vattenfall buys power from a variety of private generators but, in addition, these companies may rent capacity on the trunk line system which is then used as a common carrier. Thus, the state retains control of the national grid (which has natural monopoly characteristics, and would otherwise need to be closely regulated) and a significant portion of the generating capacity, but preserves many of the efficiencies and benefits that are available from market-led systems.

Both Vattenfall (though state-owned) and the local authority companies are expected to operate like private companies and to compete with the private sector, earning a return on their investment. Because other companies enjoy full access to the grid, a genuine market in power can operate, both for short term and longer term sales. Domestic and industrial tariffs are not directly regulated; but disputes about tariffs can be referred to cartel offices which can instruct a utility to alter them. A mixture of competition and co-operation keeps prices low.



## 5.2 US private utility model

Some 85 per cent of the electrical power of the US is produced by privately owned utilities which hold local monopolies on the production and distribution of power. Let us consider this option and what lessons can be learned from the US experience.

In outline, the utilities are subject to detailed state, county or municipal legislation covering every aspect of their operations - tariffs, investment, profitability. These regulations are enforced by a process of public hearings before local Public Utilities Boards (PUBs) where the latter typically consist of political appointees. The PUBs are empowered to force the utilities to absorb costs deemed to result from inadequate diligence and prudence, but, subject to this, the utilities are allowed to recover all their costs including a return of around 15 per cent net of tax on their equity, on an historic cost basis.

The advantages of this model are, first, that it limits the exploitation of the monopoly power it confers, by preventing the monopolies from making a return greater than 15% on their equity. It has, however, historically been ineffective in limiting the exploitation of the monopoly by means of overinvestment to increase total profits. Second, the system does check some of the grosser and more evident exploitations of monopoly in order to support unwarranted levels of costs or salaries.

The US system, however, has very serious political and economic disadvantages:-

- i) The frequent, lengthy and highly publicised PUB hearings are a convenient forum for all sorts of radical agitation (anti-private sector, environmentalist etc). This, in a self re-inforcing process has led to ever tighter regulation and extreme politicisation.
- ii) The quasi-judicial form of regulation is extremely costly, with the consumers paying both the costs incurred by the utility and by the regulatory bodies.



- iii) The overall net economic benefit the system is small because of the inherent ineffectiveness of the judicial review process when applied to highly complex economic issues; the politicisation which sometimes works unjustifiably in favour of politically powerful utilities, and the fear that refusal to meet the utilities' demand for rate increases will lead to these critically important local monopolies being cut off from the capital markets. In consequence, the utilities effectively operate on a "cost plus" basis. The major exception is investment in nuclear power stations where a combination of the utilities' poor management and pressure from anti-nuclear lobbies has forced the utilities to absorb substantial costs.
- iv) The predominant impact of regulation is on investment. Until the 1980s the main effect was over-investment since, as long as all the risks of overruns and excess capacity could be passed on to the consumer in higher rates with acquiescent PUBs, the 15 per cent net regulated return represented a risk free opportunity to invest. This seems to have been a major factor in overinvestment in nuclear power in the '60s and '70s.

In the 1980s the main effect of the regulatory system has been to impede new investment in response both to pressure groups which oppose almost any form of investment, and to consumer groups who oppose new investments as likely to inflate the cost of power. Therefore almost no new large scale plants have been ordered.

It must be expected that all these problems would arise if Britain adopted the US system. They might well be exacerbated by transitional problems (e.g., variations in power rates, deficiencies in service) and the publicity arising from the novelty of the proceedings.



## 6. THE PRIZES OF PRIVATISATION

This chapter illustrates (so far as an outside observer can) the benefits to the economy and sales proceeds to the government from the privatisation of the ESI. It draws a great deal on the excellent examination of the efficiency of the ESI by Alex Henney in his CPS paper 'Privatise Power'. Our estimates cannot be precise; they can only indicate the orders of magnitude of benefits and sales proceeds.

Privatisation schemes differ considerably in their ability to realise economic gains. In particular, the more monopolistic the system and the less the competitive pressures, the smaller the gains which are likely. For purposes of the analysis, competition - without which the benefits outlined below will not be realised - is assumed to be introduced very soon, so that by the end of five years a number of benefits will have materialised.

### 6.1 Economic benefits

#### 6.1.1 The Cost Structure of Generation

Let us first examine the generating industry's cost structure to establish a base from which gains can be achieved. Table 6.1 is an estimate of the CEGB's costs for 1987/8, assuming no change from 1986/7 in the amount of electricity generated. This incorporates a reduction in coal prices from the average of £44.6 per tonne in 1986/7 to £42.5 per tonne, as seems likely under the current terms of the "Joint Understanding".



Table 6.1

<u>CEGB's estimated costs 1987/8</u>	
<u>£million</u>	
Coal	3300
Other Fuels	<u>1000</u>
Total Fuels	4300
Staff	880
Materials and Services	850
Rents, Rates, etc.	<u>250</u>
Operating Costs	6280
CCA Depreciation	1120
CCA Profit before interest and tax	<u>800</u>
	8200

Source: derived from CEGB Report and Accounts, 1986-87

Because the industry is so capital-intensive, depreciation and profits account for nearly one-quarter of the total annual costs of the CEGB. Fuel accounts for two-thirds of the costs of generation (excluding depreciation and profits), with coal alone at over fifty per cent.

#### 6.1.2 Coal Costs

By far the largest gains are likely to come from a reduction in fuel costs. As shown in *Privatise Coal* the sharp reduction in costs possible if coal is privatised and competitive is unlikely to be realised unless the ESI is privatised in a way which gives rise to a number of competitive generation companies. If the industry still faced a dominant buyer (the CEGB) the future of privatised coal would be very difficult indeed. If, as we argue in *Privatise Coal*, the average price of coal supplied to the CEGB by a privatised British coal industry could be reduced to £35 per tonne (18% less in real terms than now) with further reductions subsequently, the cost saving would be at least £600 million a year.



It might appear unnecessary to privatise British Coal; enough merely to remove import restrictions and to build import facilities (see Chapter 4). But any attempt to increase British imports very much would probably cause a considerable increase in the price of traded coal, thus reducing the potential gains. Moreover the replacement of British-produced coal by imports might entail large offsetting costs of support for the British coal industry and its workers. Privatisation of electricity on a basis which allowed the privatisation of coal would enable the £600m to be realised by reducing the costs of British coal to the level of imports (without too much of this gain being lost through these consequential effects).

#### 6.1.3 Nuclear and Other Fuel Costs

For the purposes of this evaluation we have not assumed that the costs associated with nuclear energy can be reduced, should the nuclear stations be privatised (although cost benefits might well be achieved from opening up these activities to commercial pressure). Nor have we assumed any change in the price of oil supplied to power stations.

#### 6.1.4 Labour Costs

Manpower accounts for 13-14 per cent of operating costs. Though numbers have been cut in recent years, manning levels are considerably higher than in most comparable industries overseas.<sup>10</sup>

For a 2000MW coal station, a recent OECD report<sup>11</sup> suggests that CEEB manning levels may be nearly double the average, and 25 per cent higher than the next highest. It should certainly be possible to run a privatised industry with much greater labour efficiency. Our assumption - that manning levels could be reduced by one quarter without any adverse effect on efficiency - is probably conservative. Even so, this would save £200-250 million a year.



At present the CEGB's generating activity employs roughly 44,000 people. A reduction of one quarter in their numbers would require 10,000 - 12,000 redundancies or early retirements over the next few years - say, 3,000 - 4,000 a year, of which natural wastage should account for a large proportion. At worst, even if the full reduction could only be achieved by redundancy with generous compensation, the sums involved would be comparatively small. If, for example, the average redundancy compensation was £20,000 the total cost would be £200 - £250million spread over several years. Set against potential proceeds from flotation of £16 billion or more, this sum would be easily affordable.

#### 6.1.5 Materials and Services

This category also accounts for 13-14 per cent of operating costs. More efficient use of materials and services (together with a more commercial approach to purchasing) should enable a 20 per cent cut in their cost to be achieved. Rent and rates, the other remaining cost, is a small amount which should be little affected by privatisation.

#### 6.1.6 Capital Cost Savings

The OECD study previously cited indicates that the cost of building power stations in Britain is nearly two-thirds higher than in continental European countries. One of the major sources of cost reduction in the long term would be the more efficient use of capital. At present no less than 23% of the wholesale price of electricity is accounted for by capital charges in the form of depreciation and profit (page 00 above). Given adoption of a more commercial and cost effective approach to power station building, both the amount of capital required and the costs of servicing it would be much reduced.



The size of these cost savings is, however, difficult to estimate since it requires a forecast of the CEGB's capital spending into the far future. A conservative order of magnitude can be arrived at as follows. The capital spending of the CEGB is currently around £800 million a year. Let us assume that this remains constant in real terms (rather than substantially increasing with the major construction programme now getting under way), and that a 25% greater efficiency could be achieved. This would constitute a cost saving of £200 million a year. The present value of these savings over the long term future would be £2.5 billion, assuming an 8% real discount rate.

#### 6.1.7 Total Economic Benefits

In total, competition should reduce operating and capital costs by around £1,200 million per annum within say five years of its introduction (see Table 6.2). This represents a long term saving in present value terms of around £11 billion at an 8% real discount rate. It should be noted that this is based on the conservative assumption that there are no savings to be made in distribution. Over and above these, further benefits realised from the privatisation of coal might well total about £3.9 billion, comprising the present value of cost savings additional to those included in the table below.

	<u>Cash Savings £m</u>		
	<u>1987/8</u> (Estimated)	<u>1992/3</u>	<u>% Change</u>
Coal	3300	2700	-18
Other Fuels	1000	1000	-
Staff	880	650	-26
Materials and Services	850	680	-20
Rent & Rates	250	250	-
Capital Spending	800	600	-25
	-----	-----	-----
Operating Costs plus Capital Expenditure	7080	5880	-17



## 6.2 Government receipts from sale of the ESI

The benefits outlined above are those which should accrue to the British economy as a whole. Over and above this, the Government will receive sales proceeds to compensate it for the right to the future cash flows which it would be giving up.

The sales price of the ESI is primarily dependent on the profits which the privatised industry would expect to make. Also to a degree it will depend on the predictability of the regulatory arrangements. In general the Government has a clear choice between maximising the sales price and lowering the price of electricity. The higher the price the less the potential for privatisation to reduce electricity prices. Indeed if it attempted to set that price too high no reduction in electricity prices might be forthcoming at all.

Let us assume however, that the government policy will be to sell the ESI for a sum consistent with there being no change in the price of electricity in the immediate future. In previous privatisations, British Telecom was sold on a price/earnings multiple of 9.4 and British Gas on one of 9.7. Supposing that the price earnings ratio for the ESI was similar, table 6.3 shows the possible proceeds based on historic cost profits for the year ending March 1987. Note that we are assuming that all the CEGB's generating assets are privatised both nuclear and non-nuclear. (No account has been taken of the decommissioning costs of the Magnox nuclear stations, nor of any separation of the grid from the generation assets.)

### Possible Sales Proceeds England, Scotland and Wales

	£m		
P/E ratio	10	11	12
Equity Proceeds	9,000	9,700	10,350
Debt Proceeds (Net*)	7,700	8,300	8,900
Total	16,700	18,000	19,250

\*The table assumes 50% of the industry capitalisation would be debt and the net number shown is after deducting existing third party indebtedness.



On these assumptions the total value from the sale of the ESI (debt + equity) would range from £16 billion to £19 billion.

### 6.3 Impact of privatisation on the cost of power

It has been frequently claimed by the opponents of privatisation that, because private investors require a higher rate of return on investment, the cost of electricity will be higher. This is erroneous both in logic and in fact.

The error of logic lies in the failure to recognise that the higher rate of return looked for by private investors arises from their absorbing some of the risks - such as those arising from poor investment decisions and excess capacity - which would otherwise be borne by consumers. It would, indeed, be perfectly possible to raise private finance for the privatised ESI as 100% debt finance at the government's borrowing rate, if the ESI consumers were obliged as at present to meet all the risks by simply paying more for power as these risks materialised. In other words the higher return required by the private sector must be offset against the gains to consumers arising from the private investor taking some of the risk after privatisation; so the chance of future price increases as a result of cost overruns, etc. is correspondingly reduced.

The error of fact is to suppose that the costs of power from the existing ESI system would go up if privatisation produced no cost savings. This is not so, because the assets will almost certainly be sold at such a price as to give the investor a commercial rate of return if the price of electricity stays as it is. In other words the Government will probably choose to set the sale price of the existing system at a level which ensures no increase in electricity prices, any other policy being politically unacceptable. If this is so whatever scheme is chosen, then holding power costs at their current levels will set an upper limit on the maximum proceeds the Government can obtain. Nevertheless there should be a considerable reduction in costs after privatisation.



Additions to the existing generating system are another matter. These assets would have to be acquired by the privatised company at their full current cost of construction. Even so construction costs should be substantially reduced compared with those which would have been incurred by the CEGB. This, combined with savings in operating costs, should more than offset the higher rate of return being sought, even if one disregards the offsetting gains from the sharing of risks by the investor.

In sum, while many real problems do confront electricity privatisation, higher priced electricity is not one of them.



## 7. CRITERIA; ECONOMIC AND POLITICAL, ESSENTIAL AND DESIRABLE

### 7.1 The Manifesto Commitments

Privatisation has been a major achievement of the present Conservative Government, and is being widely copied abroad. Its general merits - the application of economic and commercial pressures for efficiency, the depoliticisation of decision taking, the elimination of the burden on public sector financing, and the enhancement of consumer and investor interests at the expense of unreasonably comfortable arrangements for those who work in the industry - are set out in our opening chapter. Indeed the general merits of privatisation may appear too well known to require elaboration. Unfortunately it is not true that any form of privatisation will secure most of the possible benefits, nor that particular forms differ but little from one another in desirability. With the unsatisfactory experiences of privatising British Gas and British Telecom, as lightly regulated, private sector monopolies, it is apparent that the form in which an industry is privatised is crucial. Some forms of privatisation may indeed be inferior to public ownership, and poorly planned and executed privatisation schemes may become serious economic and political liabilities.

Agreement is therefore necessary on the criteria for privatising the ESI. Unfortunately, the main source document, the Conservative election manifesto 'The Next Moves Forward' is almost silent on the reasons for electricity privatisation. The single sentence on the subject states 'Following the success of gas privatisation, with the benefits it brought to employees and millions of consumers, we will bring forward proposals for privatising the electricity industry subject to proper regulation.' The benefits of electricity privatisation seem to be regarded as self-evident. The only clue about criteria may be inferred from the subsequent paragraph urging the general merits of competition for the economy as a whole, where it is stated 'Competition forces the economy to respond to the needs of the consumer. It promotes efficiency, holds down costs, drives companies



to innovate and ensures that customers get the best possible value for money.' Presumably this forceful justification of the merits of competition is meant to apply, inter alia, to electricity privatisation.

The manifesto also revealed, however, that not all the important decisions on electricity supply would be left to a privatised ESI. It supports nuclear energy as supplier of low-cost electricity, stating that to depend on coal alone '.... would be short-sighted and irresponsible' and that it is the Government's intention '.... to go on playing a leading role in the task of developing abundant, low-cost supplies of nuclear energy....'. In short, privatisation of the ESI would be circumscribed by a continued Government commitment to further 'abundant' supplies of nuclear generated electricity.

As the Government has not yet set out its reasons for electricity privatisation save in the briefest and most general terms, and has referred only to the criteria of introducing more competition and to its commitment to 'abundant' nuclear energy, it is necessary to set out our own views on essential criteria. Otherwise no evaluations of and comparisons between privatisation schemes are sensible.

## 7.2 Making the Criteria Explicit

Chapter 2 discussed the broad objectives of privatisation schemes and potential conflicts between them. In assessing the various privatisation proposals, however, explicit and more detailed criteria are needed.

There are many different interest groups who will be affected by electricity privatisation: for example, the Government, senior ESI management, other staff of the industry, its unions, power plant manufacturers, the construction industry, the coal industry, the nuclear industry and potential investors. The criteria used and the weight assigned to each criterion will vary according to the group concerned (and within a particular group, too).



There are also two very large dispersed groups - taxpayers and electricity consumers - almost identical in membership but not necessarily with the same interests in privatisation; since an individual may have one view about a privatisation proposal in his role of taxpayer, and another in his role of electricity consumer.

In the light of this diversity of interests, the criteria which could be used are very numerous. The ones which we take - necessarily a personal selection - include some "political" criteria which the Government is likely to have in mind. We have chosen economic criteria on the basis of "national interest" rather than those of appeal to particular lobbies. Not everyone will agree with our criteria, given that not everyone stands to gain from ESI privatisation (though the gains should be sufficient to compensate any potential losers). However, by making the criteria explicit it is possible for readers to see how our conclusions have been derived. Might those sectional interests who press for particular forms of privatisation not do well to follow this example?

### 7.3 Essential and Desirable Criteria

There are six essential political criteria which we believe the Government is likely to use in assessing privatisation schemes for the ESI; five essential economic criteria if ESI privatisation is to be demonstrably in the national interest and to appeal to consumers and investors; and several desirable criteria by which options should also be judged. In order to be explicit, in Chapters 8 and 9 we consider each option against the criteria. Any acceptable option must meet all the essential criteria. Options which pass this test can then be ranked by how well they score in meeting the desirable criteria.

Any acceptable option must meet all of them - or at least preserve the possibility of their eventual satisfaction. This latter point is most important. For once a formerly nationalised industry is privatised it is almost impossible to alter its structure for many years.



Prospectuses on which huge sums have been raised can be written only if rules are clearly written in advance, and designed to be scrupulously adhered to. A government which breaks such agreements lays itself open to legal action; and undermines public support for subsequent privatisation issues. In practice a government has to live with the consequences of any large act of privatisation for a very long time indeed. That is why, if for whatever reason the Government cannot privatise the ESI satisfactorily this term, it is better to defer the measure until such time as it is possible to complete within the lifetime of a single Parliament.

#### 7.4 Essential Political Criteria

##### 7.4.1 Absence of Serious Disruption

No government could contemplate changing the structure of a such a basic industry as electricity if disruption in the supply of power seemed likely to ensue. None of the serious privatisation options is, however, likely to fail this test. The problem of providing reliable electricity supplies is daily met and daily overcome in every major Western country as a matter of routine. Yet the belief is voiced in Government circles and by some private individuals that real danger of disruption exists unless the industry either continues in public ownership, or is privatised as a monopoly. Independent British and international technical opinion lend no support to such an idea. The Government should put just one question to the ESI on this critical matter: 'Can the ESI suggest adequate technical arrangements to avoid disruption for each of the most likely privatisation alternatives?'

If the answer is yes, the "problem" disappears. If the answer is no, then the Government should take advice from British and international power engineering consultants of repute. They will be reassured.



#### 7.4.2 Assured Privatisation Within the Term of the Present Government

Privatisation of the ESI requires government vision, courage and energy. It is not a measure which a government would like to introduce in the second half of any political term, particularly as the benefits may not be immediately forthcoming. For these and other reasons we assume that the Government hopes to privatise the ESI during the first half of its present term. Further, it will wish to do so in a form which minimises the chances of subsequent renationalisation (for instance by dividing the industry into parts and involving a large number of investors on terms which they would not like to be reversed by a subsequent government). Thus there is pressure on the Government to proceed immediately with ESI privatisation. Speed, however, may be the enemy of choosing the best schemes which may require more time for evaluation and implementation. In practice we assume that the Government's choice is either to complete electricity privatisation well before the run up to the next general election or else to postpone it to a subsequent term.

#### 7.4.3 Minimum Risk of Serious Electoral Unpopularity

Privatisation schemes which neglect the interests of consumers can do serious political damage. If consumers came to resent the prices or service of previously nationalised industries, privatisation would become an electoral albatross. After the experience of British Telecom, the Government will be advised to seek measures which minimise this risk.

#### 7.4.4 Generous Profit Participation and Redundancy Arrangements

The Government will want the support of management, workers and unions. Those who leave the industry through redundancy or early retirement must be treated generously to secure their support and



to meet the understandable loyalty to ex-colleagues of the majority staying with the industry. Equally those who stay in the industry will need to look forward to a more attractive future than they would have had under continued nationalisation (for instance, by means of profit and capital incentives -- although pay increases will need to be earned through increased productivity).

#### 7.4.5 No Foreign Control or Domination of the ESI

The capital sums which the Government can expect to raise from the ESI are huge - probably more than from any other industry which has been or may be privatised. Any scheme must be within the capabilities of capital markets. Without special measures or more parts of the ESI might come under foreign domination. This is not necessarily a matter for regret, since new management expertise is needed to realise the industry's potential. But in political terms the Government is unlikely to welcome foreign control. The sensible compromise, to the extent that corporate investors are involved in the industry (which we judge to be likely and indeed essential under the more attractive privatisation options) is to encourage consortia with strong minority foreign representation. This, rather than the banning of foreign corporate investors, would assist the Government to realise the highest achievable proceeds from the industry consistent with the other essential criteria.

#### 7.4.6 No Undervaluation of Assets

The Government will clearly wish to achieve the highest price it can for the assets it sells. That price will, however, depend on the form of privatisation (see Chapter 6).



## 7.5 Essential Economic Criteria

The distinction between political and economic criteria is in part artificial. What is certain, however, is that unless the essential economic criteria are met investors and business will not make ESI privatisation a success. One of the worst outcomes for the Government would be to choose a scheme of privatisation on political grounds only to find that it failed through insufficient attraction to investors.

### 7.5.1 Introduction of Maximum Competition

This is particularly important since it is to competition that we must look for the major efficiency gains in a privatised ESI (see Chapters 1 and 2). Any option which fails to introduce competition where appropriate will fail to satisfy consumers in the medium to long term (and may well seriously damage the Government's credibility). Virtually all independent commentators urge the need for significant injections of competition if privatisation schemes are to bring economic gains. It is also the only criterion made explicit in the May 1987 Conservative Election manifesto.

### 7.5.2 Compatibility with Competitive Coal Privatisation

Chapter 3 explained the interdependence of the ESI and British Coal. Unless both industries are privatised, both with the introduction of maximum competition, then the improvements in efficiency which we suggest should be the paramount purpose of privatisation, cannot be achieved. Investors will be deterred from investing in privatised coal unless there is real competition in the buying of coal for electricity generation. Similarly, investors will be less interested in electricity privatisation if an unreformed coal monopolist provides all but a token amount of coal requirements. Indeed, investor interest could be so reduced as to force the Government to abandon ESI privatisation.



### 7.5.3 Need for New Management and Corporate Shareholders

Commercially orientated management backed by powerful shareholders is essential if privatisation is to achieve its potential economic benefits, and not prove an economic liability. This requirement arises for the following reasons. First, while the public is accustomed to accept the shortcomings of nationalised industries with resignation, it is less tolerant of a newly privatised industry, particularly if it seems that inferior service is being offered in order to reap higher profits. Second, the managerial requirements of a privatised industry are much more exacting because of the formidable problems of transition to competition and maintenance of standards of service within strict cost limits.

The process of competition should ultimately provide higher management standards. But it may take too long, given the immediate demand by the public for better service and the risk of failure in any attempt by existing management to secure the transition to competition.

### 7.5.4 Simple but Effective Regulation of Monopoly Activities

Transmission and distribution are natural monopolies (see Chapter 2) which will need to be regulated. (Generation will not need regulation provided sufficient competition is introduced). But long distance transmission must become a common carrier system open to all generators of electricity power, existing or prospective, whatever their size. It is also essential that any distributing company or bulk customer should be able to buy electricity from nearly any British power station without penalty.



### 7.5.5 Attractiveness to Individual and Corporate Investors

ESI privatisation must be attractive to enough British individual and corporate investors. This implies a well designed privatisation scheme with a clearly specified form of regulation with a predictable impact on earnings. The transitional and the long term structure will be equally important. Schemes which secure the co-operation of managers, workers and unions will also enhance the attractiveness of the ESI to potential investors. Finally, it will be necessary to promise enough stability of transitional earnings for investors to be ready to pay appropriate values for what they are buying. All of these matters are addressed in subsequent chapters when discussing the individual options.

## 7.6 Desirable Criteria

Over and above the seven essential political criteria and the five essential economic criteria, several further desirable criteria deserve attention.

### 7.6.1 Minimising the Pre-privatisation Planning Period

The period of planning uncertainty before privatisation should be as short as possible, for the benefit of management, staff and suppliers to the industry. Not, of course, that it is desirable to reduce the planning period to the point where an inferior privatisation option is chosen. Certainly, the period of uncertainty will exist up until the point where legislation is introduced (commonly expected to be October 1988); and even beyond as the ESI privatisation bill passes through Parliament).

### 7.6.2 Minimum Period of Structural Change

In moving from its present nationalised state to a competitive industry a period of transition is needed. Management and workers will have to be assigned to the different parts of the



new structure. The assets and, of course, the liabilities and contingent liabilities of the restructured parts, will have to be identified and allocated in order to permit prospectuses and other legal documentation to be drawn up. This said, it is highly desirable that the period of structural change (that between privatisation and the ESI settling down in its permanent form) needs to be kept to a minimum.

### 7.6.3 Retention of the Industry Pension Scheme

Some pension arrangements have serious effects on management and labour mobility. The ESI pension scheme should probably be kept in existence to retain the confidence of all in the industry and to ensure that pensions are portable between the privatised companies. At the time of privatisation the pension scheme should be fully funded, albeit with the right of the Government to recapture any overfunding which can be shown to exist after say 7 to 10 years. The proposed Electricity Standards and Regulatory Commission (see Chapter 9) could be charged with overseeing the scheme, which is one of the largest in Britain.

## 7.7 Evaluating the ESI Privatisation Options

In the next two chapters the major options for privatisation are identified and analysed against the essential political and economic criteria and the desirable criteria outlined in this chapter. The results are summarised in Table 9.1. Chapter 8 covers the various monopoly options. Chapter 9 covers both the competitive options and the case for 'doing nothing yet' to the ESI.



## 8. OPTIONS FOR PRIVATISING AS A MONOPOLY

There are four serious options to consider, each of which has superficial attractions; one in particular is backed by the formidable publicity apparatus of the CEGB.

- i) Privatisation as a monolith.
- ii) Initial privatisation as a monolith with new power stations open to private ownership.
- iii) Establishment of integrated regional utilities.
- iv) Establishment of a distribution monopoly competing with the former GECB in new generation.

In each case regulation (whether of the rigid U.S. method or of the more discretionary British method) would be needed to prevent abuse of monopoly power. Only the best variant of each option is evaluated.

### 8.1 The Monolithic Options

The first option is to privatise the present ESI in England and Wales as a single unit. The second option is to privatise the CEGB (including the national grid) and the distribution utilities (the Area Boards) separately, to produce a monolithic generation and transmission utility and a monolithic distribution utility. In economic terms there is little difference between these options. A monopoly distribution utility would be virtually the sole customer for the CEGB (excluding only a few bulk supply contracts to major users such as British Rail) and the CEGB would be the only supplier of consequence to the distributing monopoly. So let us consider only privatisation as a single unit (the 'monolith'). This would create a unified ESI for the first time. The present structure has 12



independent Area Boards and the independent CEGB, all loosely co-ordinated by the Electricity Council (see Chapter 1). The CEGB would inevitably dominate the new 'British Electricity'; and the private monopoly would if anything be even more dominant than the present ESI.

The third variant of monolithic privatisation is to privatise separately each of the 12 existing Area Boards, and also the CEGB. This would merely perpetuate the present dominance of the CEGB, yet generation is the one area of the ESI where real competition is possible. This third option has no advantages compared with the other two. It will not be considered further.

#### 8.2 Monolith with Regulation in the Style of British Gas

This option of privatising the ESI in essentially its present form would need a government agency to exercise discretionary control over the price structure to avoid abuse of monopoly power. Such control might adopt a formula similar to that for British Gas, where the total cost of fuels purchased is passed on to consumers, while other costs can be increased in line with the retail price index subject to a discretionary deduction - the 'x' factor - for what the government or its agency deems to 'reflect improvements in efficiency'. The 'x' factor (which obviously gives wide discretionary powers) was initially set at 2% a year in the case of British Gas.

This option has some clear advantages. It would be easy to understand, to describe in a prospectus, and fairly easy to finance. If financed in one single operation then, at say £16 billion to £20 billion, it would impose a serious strain on capital markets. But finance could easily be raised in tranches over 4 to 5 years. Financed in stages and with simple restrictions, there need be no risk of foreign control or domination of the ESI.



Privatisation as a monopoly could also be completed more quickly than most other options, and certainly within the first half of the present parliamentary term. The proposal also has the advantages of precedent, and acceptability (or the chance of it) by the industry's unions and management. Thus with token concessions to competition (as outlined below) it may be regarded favourably by decision makers who take the short term view.

A possible final advantage of monolithic privatisation in some eyes is that the Government might sidestep many of the difficulties of handling present and future nuclear power stations as discussed in Chapters 3 and 9. The present senior CEGB management, committed as they are to building PWR reactors, could use the financial strength of the monolith to continue this programme regardless of its economic merits, as in the past. Thus it might be possible to honour the election manifesto commitment to provide 'abundant' if not cheap nuclear power.

But the disadvantages of monolithic privatisation outweigh the advantages. In particular it does nothing to bring about the possible economic benefits of privatisation. No competition would be introduced at all. Furthermore, there would be little if any introduction of senior management. For reasons explained below the method of regulation, while superficially simple, would be ineffective. In essence, this option would attempt to achieve by a limited form of regulation what the virtually unlimited powers vested in direct public ownership have failed to achieve in almost half a century, namely to establish competitive standards of cost effectiveness. Moreover, it would require regulation of the whole industry, instead of only parts of it.

It may be argued that any form of privatisation is better than a nationalised structure in that it enables government to subject the privatised industry to pressure for greater efficiency from its shareholders, which could be increased by use of its discretionary control over the price structure in order to restrict profits. For many reasons such pressure would not work.



First, such a huge industry would have widely dispersed shareholding and thus be virtually immune to direct shareholder pressure. It would also be immune from takeover. It may be objected that it would be little bigger than BP, with a present market capitalisation of around £20 billion, which is widely regarded as a well run company. Size, therefore, need be no barrier to shareholder pressure for efficiency. The point is valid if the company concerned is subject to effective competition. The international oil industry is highly competitive, but a monolithic ESI would face no direct competition. Moreover, ESI shareholders, if past privatisations are any guide, would mainly comprise:-

- i) a huge number of individuals with relatively small stakes (purchasing on the attractive terms usually offered to household customers); and
- ii) a wide spread of institutional shareholders who would, in total, probably have half or more of the shares.

Neither of these groups would be able and willing to exert significant shareholder pressure. In practice, the new ESI board would be almost autonomous.

Second, the complexities of an industry in which a high proportion of costs is governed by investment decisions mean that standards of efficiency are not readily ascertainable. Any management could contend that higher standards were simply not attainable. Third, since security of supply depends on huge and continued investment - the privatised ESI could exert very great political leverage indeed by claiming that its required levels of profit were essential for the maintenance of such investment.

A government agency would need quite extraordinary determination if it tried to reduce profitability through control of the rate structure, thereby risking a slow down in investment. These considerations would



have even more force if the privatised industry were saddled with the multi-billion pound investment requirements of the nuclear power programme. Nor can it be expected that any future Labour Government, with its likely dependence on the ESI unions, would try seriously to use its discretionary control over prices in order to impose higher standards of efficiency.

Past privatisations have been based on minimal regulation using simple formulae. But this would not remain the basis of regulation for the ESI for very long. Over 20% of present generating costs are accounted for by capital charges (depreciation, interest and profit), costs which will vary greatly with the rate of capital investment and inflation. The regulators would find themselves confronted with a dilemma familiar to their U.S. counterparts. On the one hand refusing to allow such charges to be passed on to consumers risks inadequate capital investment; on the other hand automatic acceptance of such charges produces over investment in order to justify greater profits. Ultimately the Government would be driven to impose U.S. style regulation with all the economic and political difficulties outlined in Chapter 5.

### 8.3 Undervaluation

This is an undoubted hazard. Almost all the twelve privatisations to date which created new publicly quoted companies have opened at a premium to the offer price after the first day of trading - only Britoil and Enterprise Oil failing to do so. For example, British Telecom and British Gas traded at premia of 33% and 9% respectively to the fully-paid price. The premia to the partly-paid price were much larger (86% and 25% respectively). Other privatisation issues have also been at substantial discounts. If only from the sheer size of an ESI issue - up to perhaps £20 billion, even if phased in over 4 to 5 years - a large undervaluation seems probable.



Many uncertainties would stem from any discretionary element in the system of regulation, giving rise to longer term losses to the Exchequer. The extent to which the monopoly attempted to exploit its market power, and the counter extent to which successive governments and regulators succeeded in preventing it, would determine the return to investors, who would consequently look for a risk premium higher than that which would obtain with the more formalised regulated systems in the U.S. This would certainly be true of sophisticated institutional investors who are likely to be in the majority.

But one of the worst disadvantages of monolithic privatisation is that it would be incompatible with privatising the coal industry on a competitive basis. Thus the greatest opportunity to reduce ESI costs would be missed, and two of the largest British energy industries would remain unreformed and inefficient.

To sum up, monolithic privatisation in this form would freeze Britain's largest company (in terms of British sales and assets), into a form which was non-competitive, non-accountable and non-economic: a corporatist structure which would combine shareholder and union support in resistance to change. The consumer would not be pleased.

#### 8.4 Monopoly with US Style Regulation

The US private regulated utility system, as described in Chapter 4, is essentially a cost-plus system giving a fixed rate of return on the historic cost value of assets. The system is well defined legally, and clearly understood in the financial markets (though obviously far better in the US than in Britain). Thus, uncertainty about its operation, so marked in the discretionary regulatory systems described above, would be lessened, which should remove one possible source of undervaluation.



In other respects, however, this option would fail all the criteria for efficient privatisation. It would not inject competition. No new management would be introduced, and the system would effectively operate on a cost-plus basis and then only by means of very costly regulatory procedures. Existing levels of costs would tend to be frozen, and there would be the additional costs of regulation.

It would also be almost impossible to prevent the regulatory process becoming - as in the US - an arena for endless enquiry and debate on every aspect of power generation, specifically on the need for and type of new generation capacity. By adopting this scheme the Government would create a publicly-funded forum for agitation against private sector enterprise and for the wilder forms of environmentalism. Dissatisfaction among consumers with monolithic privatisation (already experienced under British style regulation), would almost certainly find a loud and continuous platform .

This option would therefore fail all the essential economic privatisation criteria and most of the essential political criteria.

#### 8.5 Initial Privatisation as a Monolith - but with Competitive New Generation

There would be strong opposition to privatising the ESI as a monolith, not least because it would stand in the way of the development of competitive sources of new generation. Hence the ESI and its political supporters have canvassed a variant on monolithic privatisation which holds out the prospect of the gradual introduction of competition in power generation. Given the Government's desire to continue with a nuclear programme, the shortness of time before it chooses a privatisation scheme, and the appearance of introducing competition which it has, this scheme is no doubt being seriously considered.



The proposal purports to address a major problem of any ESI privatisation (see Chapter 2) - transition from monopoly to competition in electricity generation. The interim "solution" which has been suggested<sup>12</sup> is to privatise the existing generation system as a single unit but to introduce competition in stages by permitting private companies to compete to construct and own power stations, and to sell power from the 12,000-13,000 MW or so of new capacity (about 20 percent of existing installed ESI capacity) which may be started before the end of the century. Private companies would presumably enjoy access on fair terms to the transmission network, and be able to sell their power to the public. If the Area Boards were sold as separate companies these and bulk commercial consumers would constitute their market.

This scheme has many features in common with the previous option; so our comments are limited to evaluating the differences. Advantages are few; and disadvantages are shared with the previous monolithic option, with the exception that there is some prospect of competitive generation. But is this prospect realisable or significant? And can it overcome the otherwise unacceptable drawbacks of monolithic privatisation?

Now, this scheme at least gives the CEGB a political opportunity to welcome talks about new private power generation which it has hitherto discouraged; talks are reported to be in progress with several private promoters whose combined schemes could generate 1500 MW<sup>13</sup>. Sources of power are said to include imported coal, low grade waste tip coal and waste heat. This appears to be a prudent change of heart by the CEGB.

Then again, the CEGB now seems willing to contemplate some independence for the national grid whereby the latter can arbitrate between the CEGB and any private producers (including presumably the SSEB with its surplus generating capacity which it seems it was discouraged from selling to the CEGB before the miners' strike)<sup>14</sup>. Could this be another major change of stance? Hitherto the CEGB has insisted on being the sole guardian of the national grid. Under the



threat of losing its independence it may be willing to sacrifice the lesser part of itself to try to preserve the greater. Therefore, we assume, in evaluating this proposal, that there would be an independent transmission system (probably regulated as a natural monopoly). There would be little prospect of effective competition if the transmission network remained in the hands of the CEGB, any more than there has been under the 1983 Energy Act.

Third, new generation, and of course replacement generation, could be provided either by allowing the CEGB to compete with private promoters (assuredly CEGB's preference), or by allowing private companies exclusively to quote for all new generating capacity. Under either choice the CEGB could be left responsible for new nuclear capacity.

Like monolithic privatisation, this scheme could proceed quickly, involve minimal transitional problems and avoid risk of foreign domination. Moreover, it should not upset management and unions. It has the further, delusively attractive advantage of offering some competition and immediate business prospects for the SSEB and private power promoters, lobbies which the CEGB must prefer to have on their side.

In some industries provision of free entry might quite quickly introduce genuine competition. By this means a state monopoly might even be undermined without privatisation. If, for example, new capacity could quickly be brought into operation and the original monopoly had no special advantages relative to new entrants, liberalisation without privatisation might well work. In electricity supply, however, neither condition is fulfilled; so it is improbable that this proposal would introduce any competition worth the name in electricity generation. Certainly the long time lags in planning and building new power stations (7 years or more) would postpone the emergence of any competition. Moreover, the incumbent would have overwhelming advantages - for example, its size and its relationships with the power plant manufacturers which it has supported.



The new generation planned by the CEGB for the rest of this century is shown below:

<u>Stations</u>	<u>MW</u>	<u>Type</u>
Fawley	1800	Coal
Plymouth	1800	Coal
West Burton	1800	Coal
Killingholme	1800	Coal
Thames Side	<u>1800</u>	Coal
Sub Total	9000	
Sizewell B	1175	Nuclear
Hinckley C	1175	Nuclear
Other PWR	<u>1175</u>	Nuclear
Sub Total	3525	
 <u>TOTALS</u>	 <u>12525</u>	

Source: CEGB Annual Report and Accounts 1986/87 plus our estimates.

These huge stations (costing about £1.5 billion each at 1987 prices) might only be economic if operated on base load.

Before a plant was built in this environment, any new investor would need a long term power contract from customers - on most exacting terms given the very heavy market risks (on top of the risks deriving from all the cost uncertainties) which have surrounded the building of generating plant in Britain.

The new CEGB, on the other hand, could accommodate any pattern of demand, provide security of supply and require far less stringent contract terms; since it could supply power from a system which enjoys a greater diversity of customers. Even without recourse to overt cross subsidisation, the new CEGB would be at an overwhelming advantage in the very limited market for large industrial loads.



In theory, this advantage could be redressed by making the new CEGB play the part of customer, and requiring it to sell the new power as part of its output. The trouble is that this process could easily result in the provision of merely token competition, as the former CEGB would be determined to preserve its effective monopoly. As with US regulated utilities, such potential competition is easily negated by the purchaser (i.e. the new CEGB) imposing conditions of availability of power, security of supply and price which only it, using its huge system of diversified plant and fuel sources, can afford to meet. Also, implementation of the power contract over the years would be dependent on the purchaser's exercising fairness and goodwill. Would this be forthcoming? That is another formidable risk.

Finally the new CEGB could use its immense powers of cross-subsidisation whenever it chose to bid for any new power station. Formal bars to this practise would be unenforcable. Bidding relates to the cost of power several years ahead; there are no objective means of determining that a successful bidder has quoted unrealistic costs which would require subsidising. Even with very strong regulation along US lines, cross subsidisation could only be proved by expensive enquiry when stations are operational several years later - and could not possibly be checked by the light forms of regulation so far practised in Britain.

If, therefore, competition was to be at all genuine the CEGB could not be allowed to bid to build power stations. Even so competition would only advance at the slow pace of new non nuclear construction. (The difficulties of private sector capital being used for new nuclear stations are dealt with in chapter 9). Thus, on the best of interpretations, and assuming that the policy was rigorously upheld by the 2 - 3 successor governments which will be in office up to the turn of the century, at most 10% of installed capacity would be in new private hands by the year 2000. Most of this could, as we have shown, only function as a tame supplier for the new CEGB. The monopoly would



be effectively intact. Few of the potential economic benefits would be realised. And, above all, the continuing domination of the British coal market by the former CEGB would preclude coal privatisation.

#### 8.6 Monopoly Distributor Competing with the CEGB in Generation

This is an option recently proposed by the Electricity Council<sup>15</sup>. It purports to introduce countervailing power against the former CEGB, and at the same time to bring competition into generation. These advantages are illusory. A distributing monopoly could not, in the foreseeable future, be other than overwhelmingly dependent on the new CEGB: obliged to pay up whatever price the regulatory system permitted. Even if all non-nuclear stations were built by other organisations, the CEGB would still in fifteen years' time be responsible for over 90% of power. The distributing monopoly would, therefore, be powerless to challenge the CEGB's terms or to impose upon it higher standards of efficiency.

Only if the distributing monopoly built and operated stations more efficiently than the new CEGB (thereby inducing the latter to adopt higher standards) could 'competition' in the building of new power stations be of economic benefit. But the distributing monopoly and the new CEGB are sister organisations in their managerial origins. With no new management and operating from positions of unassailable monopoly strength, why should they be more efficient than the former ESI?

The regulatory problems would be even more intractable since the regulator would have to adjudicate on the rival claims of the two organisations to build the new non-nuclear stations. Electorally, this option might well be a greater liability than the single monopoly. The unwieldiness of this structure, and the additional layers of costs would soon lead to public dissatisfaction and hasten the date at which both were subject to US style regulation.



### 8.7 Privatising as Integrated Regional Utilities

Under this option a number of vertically integrated regional utilities (henceforth called IRUs) would be created which would combine ownership of both power stations and distribution, a structure similar to the South of Scotland Electricity Board, which is widely judged to be more responsive to consumers than the ESI in England and Wales. The IRUs would effectively be regional monopolies since, apart from a few bulk customers, all other consumers, and particularly households, would depend entirely on the IRU of their region.

Common to all the IRU variants is the need to have the national grid as a separate, independent and regulated entity. It could remain in public ownership. But it would be more responsive to consumer demand and to the needs of power supply if privatised and regulated. It would be a common carrier with fixed terms and act as the common link between the IRUs and bulk consumers. It would have a statutory duty not to discriminate between any users. Its independence would ensure that electricity was traded economically between the IRUs, thus preserving a measure of generating competition and allowing reserve capacity to be shared. Indeed, it could and should have full powers to run a merit order system much like the present one. With some £4 billion of assets, consisting for the most part of transmission lines, and an assured income, the national grid would not be hard to sell.

The IRUs could take a number of shapes. They could be based on the existing Area Boards in England and Wales. Or new regions could be formed. It would be most practical if the existing Area Boards were used as building blocks, in order to speed the planning period, and to avoid disruption. But there is nothing sacred about the present number of twelve Area Boards. Eventually, it might well be better to amalgamate them into six boards of broadly comparable size, if thereby economies of scale in power generation would be achieved.



One problem in setting up the IRUs would be how to break up the CEGB and allocate the existing power stations so that each IRU had enough generating capacity for its own needs (a practical problem on which we comment later). Another difficulty is that existing nuclear power stations cannot easily be incorporated in this regional structure. Few IRUs would want to adopt the existing ones, and even fewer would be likely to want to build new ones. Thus the present nuclear stations would have to stay within the public sector, with the resultant base load power sold on equitable terms to the IRUs. Future nuclear stations, unless subsidised, would be unlikely to be built, except possibly under co-ownership schemes. Problems of nuclear stations are treated more fully at the beginning of Chapter 9, though most of the comments apply equally to the IRU option.

The IRU option has some advantages. It could lead to more responsiveness to consumers than the present ESI. It would also decentralise generation and could be financed in stages, either by selling IRUs in sequence or, better, by selling them all at once but with staged payments. This should be within the capacity of financial markets and thus avoid foreign control or domination. By creating a number of potential purchasers for coal, it would also permit the privatisation of coal.

This scheme, however, would fail even more of the criteria for efficient privatisation than the other monopoly options. First, it is extremely unlikely that it could be completed within the term of the present Government. Allocating the generating assets to the IRUs would be an extremely complex and technical task which could be accomplished only with the wholehearted co-operation of management and unions. CEGB management would certainly oppose the option, and union agreement to the transfer of the members to new companies would occur, if at all, only after very lengthy negotiations and very substantial improvements in pay and conditions.



Reorganisation would be very expensive; and there would be no offsetting efficiency gains from the introduction of competition. No simple regulation of the British Gas type could be used for the IRUs; since the economics of each would vary depending on the amount of generation for which they were responsible and the extent of the new construction which they would have to undertake. As in the US the utilities would have to be allowed enough profit to finance their building programmes. This in turn would raise all the problems which have arisen with this system in the US; for example, precisely what rate of profit should they be allowed, what conditions of efficiency must be fulfilled, (and most important of all) how to prevent the utilities over-investing in order to secure the investment-related profit? And this in turn raises the problem of how to allocate the new building programme between utilities, each anxious for the additional profit and scale of activity which such building would bring.

Almost inevitably, under this option governments would be driven towards the US system of regulation discussed in Chapter 4, despite its high cost, ineffectiveness and political contentiousness.

A final disadvantage is that the IRU option not only fails to meet most of the essential political and economic criteria, but also creates so many new monopolies that it stands even less chance than the other monopoly options of any later restructuring in order to meet those criteria (that is if a government were later to decide to inject more competition).



## 9. OPTIONS FOR COMPETITIVE PRIVATISATION

The options so far considered suffer from disadvantages so serious that it would be a grave mistake for the Government to adopt any of them. The Government should either choose a scheme which introduces early competition, or else use this Parliamentary term to study the problems more thoroughly and prepare for competitive privatisation later. This chapter assesses schemes to introduce competition, and the option to 'do nothing yet'.

The first competitive option was outlined in *Privatise Coal* and has been urged by others (including Alex Henney in *Privatise Power*). It keeps generation and distribution separate, and breaks up the CEGB into units which compete to supply regional distribution utilities (which we will henceforth call RDUs). This is the 'competitive generation' option, or 'CG'. The second option is original to this paper; it was created and developed by A J Merrett. It has the same aim as the first option but would be introduced over a transitional period with safeguards built in to ensure competitive generation. At the start RDUs would own the new CEGB in partnership. Over the years they would sell off blocks of power stations to form a number of independent generating companies in competition with one another. The National Grid would be independent from the beginning of privatisation. We have called this second option the 'Privatised transition to competition' (PTC).

Let us discuss the CG option first in its most satisfactory version.

### 9.1 The CG System and Variants

The CG system recognises that generation is inherently competitive; and that distribution and transmission are naturally monopolistic, needing to be regulated to prevent abuse of power. But distribution, although it is a monopoly activity whether at local, regional or national levels must be in multiple ownership. Otherwise the



competing generating companies would be facing a monopsonist (sole buyer), rendering them unattractive to private investors. And distribution must be in private ownership, too. If the RDUs were publicly owned, generating companies would believe that they were facing a de facto monopsonist.

Finally, the National Grid would be independent of both generating companies and RDUs. It would link generating companies and other power sources (e.g. France) to all electricity customers, and be open freely to all users on equal terms. Like the RDUs, it must be regulated; unlike them, it could either remain in public ownership (albeit strictly regulated by an independent regulatory agency), or be privately owned. The case for preferring private ownership is that it could function at least as well in the private sector, and might attract a higher quality management, some of whom might with advantage have international experience of large transmission systems.

## 9.2 The Regulatory Body

All the competitive privatisation options would need an regulatory body which we will call the 'Electricity Standards and Regulatory Commission' (ESRC). It would have Commissioners in whose appointment the Government, all sections of the ESI, and the public would have a say. As well as regulating prices, it would act as a forum responsible for disseminating information about consumption and generating capacity. It would agree the scheduling of power station shutdowns for maintenance. It would set safety margins for reserve capacity (the Commissioners being the final arbiters on grounds of national security); and indicate when these margins were in danger of being breached, and new capacity was needed - the provision of which would, however, be left to the ESI and to the natural forces of competition.

The functions of the ESRC are further considered in the context of the PTC option below.



### 9.3 Limits of Regulation

Under the CG option it would be unnecessary to regulate generation, since prices and profits would be determined by competition. RDUs could be regulated by permitting them to pass on (with certain exceptions) all capital costs and capital charges. In practice the RDUs would have only limited discretion over their levels of capital spending; American experience suggests that regulatory procedures which attempt to adjudicate how much of these costs should be passed on would be expensive and ineffective. The RDUs would, however, under their charter be required to spend capital in the most efficient manner possible.

The operating costs which the RDUs could pass on, however, would be limited to those incurred immediately prior to privatisation, subject to agreed indices of inflation. Such operating costs might best be expressed as an amount per user so that more costs in total might be passed on, as the number of users increased.

Regulation of the National Grid would essentially be on the 'cost of service' model established in the US, under which the owning company receives a regulatory rate of return on its investment - 15% in America on the equity after tax, together with all interest charges. The National Grid would be required to give fair access to all generating companies wishing to use the grid on a non-discriminating tariff.

The activities of the RDUs and of the National Grid would be subject to scrutiny by the Electricity Standards and Regulatory Commission briefly described above.

### 9.4 Evaluation

Tested against the essential political and economic criteria, the CG option achieves a score very much higher than any of the monopoly



options. It ensures ensures maximum competition and incentives to efficiency. It is the system most commonly urged by businessmen and economists who favour competition. The doubts which exist about it are mainly about the means of creating it in an effective and timely way. By introducing full competition in generating, and an independently controlled National Grid, consumers could look forward to lower power costs. Provided the ESI sales proceeds were paid for in stages over, say, 5 to 7 years (both debt and equity) the strain on the capital markets should not be great; and so risk of undervalued asset sales or of foreign domination and control would be negligible. Corporate investors with controlling shareholdings would need to be attracted to both the newly formed RDUs and the new generating companies (with perhaps 25% equity in both types of companies), in order to introduce enough new senior management to achieve the gains identified in chapter 6. Regulation of a relatively straightforward kind would be needed only for transmission and distribution.

Finally, this option is fully compatible with coal privatisation on a competitive basis. The major new coal terminal, which the Government should put in hand immediately (see Chapter 4), could be co-operatively owned by the new generating companies in whose interest it would be to seek the best value in coal purchases.

Further, retention of the ESI pension scheme would present no problems. The list of advantages is formidable.

#### 9.5 Problems of Timing

The ESI could not, however, be restructured in this way during the present Government's term of office. First, there is the complex technical task of devising a generation system based on 5 or more independent but viable generation companies each with an efficient mix of generation capacity. Even if adequate CEGB co-operation could be secured in drawing up a plan for its own demise, completion and political ratification could not take less than a year. Only then



could the extensive legal and organisational negotiations be begun, and staff recruited. Negotiation, too, with the industry's extremely powerful unions would be necessary, who might well be slow to co-operate at all in the formation of a competitive system. In so far as they cooperated they would, understandably, demand the most exacting terms for their members' new contracts of employment and operational practices. No one could say how long this could take.

The new companies would also need to establish contractual relationships with the RDUs for the offtake of power. This task would be extremely complex since the load of each RDU would need to be determined by reference to the other RDUs, the generation capacity of all 5 companies and the efficient working of the system.

The CEGB, which alone has the familiarity with the system and the necessary staff would have to undertake all these tasks. It is hard to see how they could be completed in less than 3 years.

Thereafter the final task of floating 10 companies (5 RDUs and 5 generating companies) could proceed.

Generating companies with no profit record, and an untried structure and management, could probably not be floated successfully, unless reputable corporate investors were prepared to assume controlling interests. Negotiations to this end would take many months, and by no means all would succeed. The magnitude of the shareholding, the price, the future structure of the industry (e.g. the rules to protect competition), the regulatory regime, and safeguards against subsequent unfavourable legislation would all need to be negotiated in detail before corporate investors contemplated the £1 billion or so required for a controlling investment. Cross reference to negotiations by other investors in the other new generating companies would also be required, so that investors could be sure that they were receiving at least equally favourable terms. Complex safeguards would also be needed against the possibility that, if investor interest was inadequate, a very few private companies might find themselves competing against a still formidable state-owned generating corporation.



In short this option fails on the essential political criterion that privatisation be sure of completion this term. Another route towards the same desirable end must be found. To this we now turn.

#### 9.6 The Privatised Transition to Competition (PTC) Option

The PTC scheme aims to build an initial structure which will lead within a reasonable time to competitive generation.

Generation, under control of the CEGB at present dominates the ESI. The PTC option reverses this. It places the new CEGB under the control of a number of (say, at least five) privatised regional distributing utilities (RDUs) charged with introducing competition after privatisation. In order that these RDUs have new commercial managements able to assume such a responsibility, a controlling interest (say 25%) in each one would be offered to corporate investors on the same terms as the shares are offered to the public. Such corporate investors would need to show proven capabilities in the management of comparable industries, and should, where possible, also have regional associations. It would be desirable to include overseas companies with relevant ESI experience in each consortium, in order to ensure a breadth of ideas, experience and technical knowledge.

These privately owned RDUs would be allowed by the regulatory agency to pass on all costs incurred in their purchases of power. Their remuneration however would be along the lines described under the CG option; that is, flow-through (with certain exceptions of capital costs) with operating cost increases being allowed only in line with relevant indices of inflation, and increases in the number of consumers.

RDUs would, however, be under a statutory obligation to minimise all power costs consistent with maintaining established standards of service. Discharge of these functions would be monitored by the Electricity Standards and Regulatory Commission described below.



The new CEGB (embodying the generation and transmission functions) would initially be a wholly owned joint venture subsidiary of all the RDUs, and be as near as possible 100% debt financed. It would operate on a cost-of-service basis; that is, it would have the right to pass on all its costs in the form of cost of power to the RDUs, which in their turn would have the right to pass these costs on to their consumers.

The rationale of this structure is as follows. First, any substantial equity stake by the RDUs in generation creates the problem which has bedevilled the US private utility system. American utilities have a vested interest in increasing their capital investment in order to secure greater profits from the (effectively guaranteed) returns which they are permitted on their equity investments. This, in its turn, requires detailed regulation even to attempt to check abuse. If the investment is 100% debt financed and remunerated solely on cost of service no such incentive to overinvestment exists. Second, it would in any case be extremely difficult to create an equity investment in a generation system which, as outlined below, would be a transitional privatised structure, soon leading on to one which was designed to maximise competition.

#### 9.6.1 Achieving Competition in Generation

The RDUs would, at the appropriate stage, (specified at the time of privatisation to take realistic account of the time needed to prepare for power stations sales) oblige the new CEGB to offer for sale at historic cost net asset value, say 5 or 6 representative blocks of its existing stations. Each block would have a mix of type and age of station which could be geographically dispersed. The nuclear units would be treated differently, as discussed below. The former CEGB would then buy back power from the owners on competitive long term contracts; the blocks of power stations would be sold, and the power contract awarded to whichever potential owner offered the most



favourable terms. The new owners would have complete freedom in their purchase of fuels. This should greatly encourage companies in the fuel and coal industries to bid for fuel supply contracts, and so should ensure much more competition in the supply of fuels for power generation than there is now (see Chapters 2 and 4). All new power stations other than nuclear (whether for replacement or expansion of capacity) would also be thrown open to competitive bidding on the same lines.

The new CEGB would not be allowed to bid to build non-nuclear power stations, on the grounds that it would be impossible to ensure that it did not secure the award by cross subsidisation from its established activities. Its exclusion would help quickly to build up a private generation sector.

Long term power contracts would also provide the basis for financing the purchase of the power stations largely by debt, with relatively small equity investment. In this way the number of potential corporate investors would be enlarged, as may be essential if political and economic policy restrict the extent of foreign ownership. The long term contract basis has another advantage. It is immune from the risks of subsequent regulatory impositions, leaving bidders free to pitch their bids at levels representing their perceptions of the profit and risk opportunities. This structure would also permit the new CEGB to continue to operate a merit order system.

As well as making the introduction of competition a fundamental charter requirement, the RDUs should also have direct financial stakes in the resulting savings.

#### 9.6.2 Progression Towards Competition to Supply the RDUs

With independent companies owning stations and supplying power on a financially viable basis, it would become possible to progress towards direct competition in the supply of power to the RDUs



(rather than via the new CEGB). This could develop step-by-step with the companies supplying power on long term contract to the new CEGB (by now owning only nuclear stations and acting as purchase and despatch agency for the RDUs). The companies would allocate part of their capacity to the supply of power on a competitive basis to the RDUs or direct to large consumers on whatever terms they could negotiate. This, however, could not occur until the companies were established with diversity of supply and capital base sufficient to give them material advantages over the centralised purchase system. This the sale of stations and long term power contracts would provide.

A powerful driving force would be required to ensure that the former CEGB was not obstructive, but conducted the power contract tendering objectively and promptly. This force would be provided by the RDUs and, in particular by their controlling corporate shareholders. The latter would have no vested interest in maintaining the existing CEGB structure; indeed they would have an incentive to break it up whereupon they would receive an agreed share of lower power costs, to increase their profits. There would be time for the complex technical and negotiating processes involved in the competitive system to be achieved with the minimum disruption and with privatisation already a fait accompli.

Flotation of the PTC structure within the term of the present Government should also be simpler than flotation of any other possible structure. Equity investment would be confined to the RDUs and perhaps be less than a quarter of the equity required to float the monolith structure described in the previous chapter. The whole of the generating system would be debt financed and the bonds representing this debt could be held by the Government to be sold as PSBR and market conditions dictated. Consequently costs arising from possible undervaluation of the otherwise immense equity issues would be reduced. The well-defined



regulatory structure should also eliminate uncertainties which would otherwise be a source of undervaluation. Finally the much smaller equity investment diminishes the risk that a downturn in equity markets would cause the whole programme of electricity privatisation to be postponed to another term, (if not indefinitely). This avoids a major risk inherent in all the other options.

Political advantages are also significant. Risk of disruption through attempting to force the CEGB into break-up as a preliminary to privatisation is avoided. The CEGB would retain a valuable role and scope for its expertise in its continuing control of the nuclear sector, and, in the medium term, the functions of central power purchasing, system planning and operation. Moreover, under this structure the CEGB would initially be privatised as an integral structure, albeit under the stronger and more commercially orientated management of the RDUs and their controlling corporate investors. This should reduce the risk of union militancy sabotaging a privatisation flotation based on break-up of the generation system.

### 9.6.3 The National Grid

During the planning period the CEGB would be required to separate the assets, management and staff of the National Grid so that it could be hived off as an independent entity at the time of privatisation. Thus it could ensure that any competitive sources of electricity were available to the RDUs and bulk customers from the beginning. Then, as blocks of power stations were sold off their power could be freely available, a vital requirement for generating company investors.



### 9.7 The Nuclear Sector

This is an exceptional category of investment, and necessitates exceptional measures - concerning, first, the terms on which any private sector financing might be available for the existing nuclear power stations. Ownership of these stations carries apparently very large - although incalculable - obligations which relate to the operation, possible modification and decommissioning of the stations. Their operation would involve liability for nuclear accident - a risk all but uninsurable in the commercial markets. If higher safety standards were imposed, the stations could be closed down. In the future they will have to be decommissioned. The costs are likely to be huge (see Chapter 3) and most uncertain - they depend on the environmental and safety requirements prevailing at the time.

What private sector investor could or would assume these risks? Almost everywhere in the world they are borne either by governments, or by the nuclear generating companies which can pass the costs on in full to their consumers. In the United States they are borne partly by the Federal Government and partly by consumers through the tariffs imposed by the US private utilities.

The nuclear sector also has special problems of power station construction. Cost, long lead times and the many unpredictabilities make it almost inconceivable that nuclear power stations could be built unless these risks are assumed by the Government (as in Britain at present) or in part by the consumer (as in the US). In the United States the construction of nuclear stations is in large measure a cost plus operation since, provided that a utility acts prudently and diligently, it is practically sure to recover its investment through the tariffs which it is allowed to impose.

Options, then for the privatisation of the nuclear sector are as follows:



i) The US System of Regulated Private Utilities

It was pointed out in Chapter 5 that, in the US private financing is secured only at the price of expensive regulation which generally results in a cost plus non-competitive system of operation. It is doubtful whether gains in the form of reduction in the public sector borrowing requirement would warrant the very high cost of setting up such a system of regulation.

ii) Retention within the Public Sector

This would mean that the public sector would continue to bear the burden of financing; but that the need for costly regulation would be obviated. But if nuclear power generation is to fit within a merit order system, it would constitute base load capacity (since its operating costs are relatively low). Provision would have to be made so that distributing companies were obliged to accept this power as part of their base load.

This, however, should not pose significant difficulties since a) the nuclear capacity is already operated as base load - hence no change in the operating regime is involved and b) pre-emption of about 20% of the load by nuclear would still leave 80% of power requirements to be met by the private sector.

iii) Ownership by RDUs as 100% Debt-financed Subsidiary (the PTC Option)

Under this option the nuclear sector would be owned in partnership by all the RDUs. This nuclear power company would be 100% debt financed by firm 'take or pay' contracts from the RDUs. These contracts (commonly employed in the US) require payment of the cost of service irrespective of the amount of power supplied. They are essentially a basis for financing. Such contracts in effect already exist since the CEGB charges the consumer whatever the cost of power is from these



stations. The new nuclear power company would effectively be given taxing powers. Given the unqualified right of the RDUs to pass these costs on to consumers, the risk of default by the nuclear company would be minimal. Nevertheless, the Government would probably have to provide supplementary undertakings including the assumption of full nuclear accident liability, deficit guarantees in the event of widespread nuclear shutdown and residual financing responsibility if the nuclear programme required more funding than could be obtained from the commercial markets. Since in practice the Government already has these obligations, formalising them in this manner should be acceptable.

In the past governments have reserved for themselves control over nuclear power policy and will presumably do so in the future. This could be provided for (and be seen as a quid pro quo for the undertakings referred to above) by a "golden share" giving it such policy powers.

The nominal equity of the nuclear company would be owned by the RDUs under the structure described above, which charges these utilities with the responsibility to ensure minimum cost of power consistent with security of supply. This function as it relates to the nuclear company would be limited by the Government's power of intervention on policy. Nevertheless, the distributing utilities would provide a countervailing force reflecting the consumer interest, one with considerable resources, standing - and above all independence. Given also that their reputation with the public would depend to a large extent on containing power cost increases, they would be likely to exercise their powers fully.

There is no way (short of extensive regulation) by which the RDUs could directly benefit from their stewardship over the nuclear company - the cost of service structure effectively involves a flow-through of its costs including the debt service by which it is financed. There would, however, be some advantage in ensuring that these utilities are



not influenced in the extremely costly investment decisions of the company by the prospect of direct financial benefit. As noted in Chapter 5 such motivation has had some most adverse consequences in the US.

This option is certainly the "least worst" and offers significant benefits (private financing and powerful representation of consumer interest) compared with retaining the nuclear industry within the public sector. Nevertheless, it is a pity that no genuinely competitive solution with private risk capital seems possible. The Government should consider whether the alleged economic benefits of nuclear power fully justify the support of a technology which by its sheer scale of financial and technological risk precludes such private sector investment.

#### 9.8 Electricity Standards and Regulatory Commission

Under the PTC option an Electricity Standards and Regulatory Commission would be appointed with Government, ESI and consumer representation. It would:-

- i) Ensure that historical standards of service were maintained by the RDUs and, where any significant variation was judged in the consumer interest, that the consumer shared appropriately in the benefits;
- ii) Supervise the regulatory process as it applied to the RDUs and ensure compliance;
- iii) Ensure that capacity in generation and transmission was adequate to secure reliability. If it foresaw any inadequacy, it would instruct the RDUs to invite competitive tenders for new stations. Capacity could not fall short unless demand was underestimated - which is a risk to which any system is equally exposed;.



- iv) If there were any serious breaches of the charter, the corporate shareholders in the RDUs would be obliged to surrender their shareholdings (at cost plus share of retained earnings) to other corporate investors deemed more suitable;
- v) Adjudicate on representations that tariff levels were unfair between one category of customer and another. In the event of it finding the tariff unfair it could require the RDUs to put forward alternative tariffs.

#### 9.9 Conclusion on PTC Option

The PTC option thus meets all the essential criteria. In particular, it would inject genuine competition; introduce new management, establish effective but simple regulation and provide a path to complete privatisation within the life of the present Government. Not least it also provides a basis on which the large financial burdens of the nuclear sector could be financed from the private capital markets.

It is flexible and relatively free of risk. At the very worst it might not prove possible - for a considerable time - to reach agreement with the ESI unions on implementing the competitive generation system. If so, then that would apply equally to any other option involving comparable competitiveness. Under the PTC option, however, it would at least be possible to defer the issue and return to it at a later date. This would still leave the 100% debt financed CEGB free from the very serious regulatory problems bound to arise if it was substantially equity financed. Similarly, the RDUs, having no equity investment in the former CEGB have no vested interest in maintaining the status quo, or in opposing subsequent moves towards greater competition. Indeed, they would have a sharp spur to achieve greater efficiency; the financial incentive would be strong to sell power stations to reliable purchasers as soon as possible. With strong corporate shareholders, they would be a strong countervailing force acting in the interest of consumers, in an industry which has been traditionally dominated by the CEGB.



On these grounds we hold that the PIC option (or some variant of it) is superior to any other privatisation option so far proposed.

#### 9.10 Privatisation Deferred to a Later Term

No one should assume that all forms of privatisation are superior to maintaining the status quo, least of all those forms with unnecessary or badly regulated monopoly activities. Even sensible forms of privatisation might be worse than deferral if they were inadequately thought-out or poorly designed through lack of time. Given therefore that the Government has not spent undue time planning ESI privatisation, and that margins for error are considerable, the privatisation options should be compared with maintenance of the status quo ( or at least with deferment of privatisation to a later term). We have no wish to join the chorus of vested interests urging caution and delay. All the same the case for deferral must be examined.

The clearest gain is that it gives the Government the chance to do the job properly, provided that it wins the next election. But if it does not, the chance for privatisation may not recur this century. Then there is the advantage that risk of disruption to the system is nil; but this risk is slight for any privatisation option.

Consumers might well be dissatisfied with deferral; in particular industrial consumers who would be at a disadvantage compared with their international competitors. GNP and employment would suffer accordingly. Individual consumers would also be hurt, though they might be less aware of it. But since ultimate government control would remain consumers would not be as badly off as under monopoly privatisation accompanied by unsatisfactory forms of regulation (and unsatisfactory regulation is a real possibility given the lack of British experience in this field).



~~For management and staff redundancies would be fewer, but equally pay would be lower; and there would be no profit incentives and no chance of building up capital. Then , there would be no risk of foreign ownership or domination of the ESI. Finally, since there would be no sale, there would be no problem of undervaluation. But the tendency to overinvestment would continue.~~

Deferral would fail all the essential economic criteria. Competition would not be introduced (past attempts to permit private power stations have largely failed, and could reasonably be expected to fail in future); there would be a probably fatal incompatibility with a liberal form of coal privatisation; much needed new management would not be introduced; the existing unsatisfactory form of political and bureaucratic regulation on a largely unaccountable basis would continue unchanged; and finally no opportunities would be created for individual and corporate investors. This is a damning economic score, but no worse than for most of the monopoly forms of privatisation. On the other hand, since the status quo preserves the vital option of later privatisation in a liberal form (assuming that the Government has such a scheme ready for early implementation in a fourth term) we judge that it should be ranked higher than the irreversible monopoly options.



ELECTRICITY PRIVATISATION - EVALUATION OF THE OPTIONS

Table 9.1

A. ESSENTIAL POLITICAL CRITERIA

	1	2	3	4	5	6
OPTIONS	Absence of Serious Disruption	Assured ESI Privatisation this Term	Minimum Risk of Consumer Dissatisfaction	Generous Profit Participation /Redundancy Arrangements	No Foreign Control/ Domination of ESI	No Unacceptable Undervaluation of Assets
A. MONOLITH:						
i) US Style Regulation	✓	✓	X	-	✓	X ?
ii) UK Discretionary Style Regulation	✓	✓	X	-	✓	✓ ?
B. INITIAL GENERATING MONOLITH - COMPETITIVE NEW GENERATION:						
i) CEGB Competes for New Capacity	✓	✓	X	-	✓	✓ ?
ii) CEGB Prevented from Competing:						
a) In New Capacity	✓	✓	X	-	✓	?
b) In New Capacity plus Replacement Capacity	✓	✓	X	-	✓	X ?
C. INTEGRATED REGIONAL MONOPOLIES:						
i) US Style Regulation	✓	X ?	X	✓	✓	X
ii) UK Discretionary Style Regulation	✓	X ?	X	✓	✓	? ✓
D. COMPETITIVE GENERATION Sale of Asset Blocs with Transitional Power Contracts	✓	X	✓	✓	✓	✓
E. PRIVATISED TRANSITION TO COMPETITION (PTC)	✓	✓	✓	✓	✓	✓
F. DO NOTHING YET	✓	-	? X	-	✓	✓

Key    ✓ acceptable  
       - neutral or not applicable  
       X unacceptable  
       ? Uncertain



## B. ESSENTIAL ECONOMIC CRITERIA

	1	2	3	4	5
OPTIONS	Introduction of Maximum Competition	Compatible with Competitive Coal Privatisation	Introduction of New Senior Management	Simple but Effective Regulation of Monopoly Activities	Attractive to UK Individual and Corporate Investors
A. MONOLITH:					
i) US Style Regulation	X	X	X	X	✓?
ii) UK Discretionary Style Regulation	X	X	X	X	? ✓
B. INITIAL GENERATING MONOLITH - COMPETITIVE NEW GENERATION:					
i) CEGB Competes for New Capacity	X	X	X	X	? ✓
ii) CEGB Prevented from Competing:	X	X	X ?	X	?
a) In new Capacity					
b) In new Capacity plus Replacement Capacity	X ?	X	X ?	X	X ?
C. INTEGRATED REGIONAL MONOPOLIES:					
i) US Style Regulation	X	✓	?	X	✓?
ii) UK Discretionary Style Regulation	X	✓	?	? X	✓?
D. COMPETITIVE GENERATION Sale of Asset Blocs with Transitional Power Contracts	✓	✓	✓	✓	✓
E. PRIVATISED TRANSITION TO COMPETITION (PTC)	✓	✓	✓	✓	✓
F. DO NOTHING YET	X	X	X	X	-

Key  
 ✓ acceptable  
 - neutral or not applicable  
 X unacceptable  
 ? uncertain



ELECTRICITY PRIVATISATION - EVALUATION OF THE OPTIONS

Table 9.3

C. DESIRABLE FURTHER CRITERIA

	1	2	3
OPTIONS	Minimum Period of Planning Uncertainty	Minimum Period of Structural Change	Retention of Industry Pension Scheme
A. MONOLITH:			
i) US Style Regulation	2	2	3
ii) UK Discretionary Style Regulation	3	3	3
B. INITIAL GENERATING MONOLITH - COMPETITIVE NEW GENERATION:			
i) CEGB Competes for New Capacity	2	3	3
ii) CEGB Prevented from Competing:			
a) In new Capacity	2	1	3
b) In new Capacity plus Replacement Capacity	2	1	3
C. INTEGRATED REGIONAL MONOPOLIES:			
i) US Style Regulation	1	2	3
ii) UK Discretionary Style Regulation	1	3	3
D. COMPETITIVE GENERATION: Sale of Asset Blocs with Transitional Power Contracts	1	3	3
E. PRIVATISED TRANSITION TO COMPETITION (PTC)	3	3	3
F. DO NOTHING YET	-	-	3

Key    1 is worst  
          3 is best

SUMMARY EVALUATION		FINAL RANK
Essential Criteria	Desirable Criteria	
Passes out of 11	Score out of 9	
4	7	5/6
4	9	
4	8	5/6
3	6	
3	6	
5	6	4
5	7	
10	7	2
11	9	1
3 pass 3 neutral	3	3



## 10. CONCLUSIONS

### The Objectives, Benefits and Problems

The manifesto on which the Government won its third term promised privatisation of the ESI. Given the vigorous exposition of the virtues of competition in the manifesto, the principal aim of this privatisation may be expected to be the introduction of genuine competition, to ensure maximum efficiency. Not that this has been the guiding objective in earlier large privatisation schemes. Raising funds, wider share ownership and the reduction of government involvement in business decision-taking have been given pride of place. But growing consumer dissatisfaction with British Telecom, and more recently with British Gas, puts the electoral popularity of the privatisation programme at risk. To introduce competition, improve efficiency and reduce the cost of electricity should now be the essential aims.

Savings gained by more sparing use of capital investment and by subjection of operating costs to forces of competition should within a few years amount to about £1.2 billion per annum. In addition a further £0.4 billion of annual economic gains could arise from the privatisation of coal; provided, that is, the ESI was so privatised as to create a number of generating companies in competition with one another.

About half the £1.2 billion of savings from electricity privatisation would come from reducing coal prices to import levels. Most coal for power generation would, however, continue to be supplied from British mines if coal privatisation were allowed to proceed, since costs and prices in the British coal industry would be greatly reduced.

The ESI is complicated to privatise in a competitive form since two of its parts, long distance transmission and distribution, are inherently monopoly activities. Only the third activity, generation, is capable of being made competitive, but this is far the largest part accounting for around 70% of total power costs.



Nuclear stations present a further problem, because of their large risks of operation and the immense costs and uncertainties involved in their construction. Finally, there are the problems of regulating the industry if it is privatised as a monopoly - far more difficult problems in this complex and capital intensive industry than those encountered in previous privatisation schemes.

Given the magnitude of the potential gains, we argue that it would be better to defer privatisation than to adopt a scheme which involves foregoing these benefits - since a government gets, at best, one chance in a decade to alter the structure of a basic industry. If it makes a mistake the political and economic consequences are incalculable.

#### The Essential Criteria

It is impossible to judge the five serious privatisation options which we have considered in this paper (four monopoly ones and two competitive ones) without agreement on the essential criteria. In Chapter 7 we evaluated six such essential political criteria and five such essential economic criteria. Summary tables follow, with a quick recapitulation of the options in the appendix.

From these tables, and particularly the summary evaluation column it is seen that the PTC option is the only one to pass all the essential criteria, making it the preferred choice. The CG option fails one essential criterion, but comes second. The 'do nothing yet' or deferral option comes next, because while failing many of the political criteria and all of the economic criteria, it is nevertheless superior to all of the monopoly options. Of the monopoly options, the IRU is somewhat better than the two monolithic options, but none of them scores at all well, and there is little to choose between them.



## EPILOGUE

The privatisation of electricity offers one of the most valuable economic prizes which can be won by the present Government. Savings of £1.2 billion a year are possible. And if coal was privatised in a compatible manner, even greater savings are within reach; taken together, they might amount to about £1.5 billion a year off the cost of our energy - with all that implies for industrial competitiveness, for employment, for lower inflation.

Such savings cannot be realised by any monopolistic structure which would freeze the industry's present costs and practices, in a form impossible to change without legislation years later. Simple competitive solutions, while able eventually to realise all the potential economic benefits, may be all but impossible to be put into effect within the life of the present Parliament.

What is required is a form of privatisation which will create the springboard for rapid transition to a competitive industry. One such structure has been proposed in this paper. It is possible that further review of the issues will suggest other structures which might also lead to genuine competition. But in its desire to settle immediately upon a scheme, the Government needs to be very careful not to create another private monopoly, subject only to token competition and ineffectual regulation. That would bring no benefits to electricity consumers. Dissatisfaction with telecommunications and gas sets an unhappy precedent.



## A SUMMARY GUIDE TO THE OPTIONS

### Monolithic Privatisation with British Style Regulation

This is to privatise the whole ESI as a single entity, subject to minimal regulation such as that imposed on British Gas. Absence of competition and the ineffectiveness of this type of regulation would make this option fail all the economic criteria.

Consumers would be likely soon to be dissatisfied; so it fails the political criteria, too.

### Monolithic Privatisation with Competition in New Generation

This is to privatise the ESI in its present form, subject to the discretionary type of regulation imposed on British Gas - but to allow competition in new generation. Private companies might be permitted to build new power stations, to supply the former CEGB, private consumers and public.

Few economic benefits would flow from this option. Competition with the former CEGB would in practice be minimal, since it could occur only in the building and operation of the non nuclear stations. Even if every new non nuclear station were built by private investors, 10% at most generating capacity installed at the end of the century would be in private hands. Even this may well be a gross overestimate. The new non nuclear stations proposed by the CEGB are 1800 MW coal stations costing around £1.6 billion, each with a seven year or more lead time to completion. Few investors would contemplate investments of this magnitude and lead time in order to enter into competition with the massively entrenched former CEGB.

Such a scheme would also continue to confront the coal industry virtually with a sole buyer, and thus preclude the privatisation of coal with all its potential economic benefits.



Finally, if the type of regulation is as minimal as it is in with British Gas, the scheme would probably not produce any improvements in efficiency. Such regulation would most likely prove grossly inadequate, so that governments would be obliged to impose the expensive, politically contentious but still largely ineffectual forms of regulation which pervade the US private utility industry.

#### Integrated Regional Utilities (IRUs)

This, the third monopoly option, involves the creation of a number of regional 'power boards' having local monopolies of distribution, and generating most of their own power. Because it would be natural for the 'power boards' to favour their own generating sources, they would have considerable incentives to overinvest, so that this system would need US style regulation. That means extensive semi-judicial review of costs, investments and prices; and adjudication on the need for and type of future additions to generating capacity.

Based on American experience, this would be both costly and ineffectual. Effective competition - and improvements in efficiency - would be minimal. It is indeed more likely that additional layers of costs would be created in forming these companies and meeting Union demands. The only benefits which could accrue from this option would be indirect, in that it would create seven buyers of coal in place of one, permitting the privatisation of coal.

#### Monopoly Distribution and Transmission with Competition in New Generation

This, the Electricity Council proposal, combines all the disadvantages of the single monopoly with additional regulatory problems. It would create two separate monopolies (one of generation, one of distribution). The distribution monopoly would be allowed to compete in new generation, but in practise competition would be minimal. No new management would be likely to be brought in. The regulators would face extreme difficulties in attempting to regulate two such huge and unaccountable monopolies.



### Competitive Generation with Regulated Distribution (CG)

This option involves dividing the CEGB into 5 or so privatised generating companies serving some 5 Regulated Distribution Utilities (RDU's) (formed by amalgamating the 12 Area Boards). If it could be achieved within the term of the present government, it would fulfil all the essential criteria. Competition would produce pressure for efficiency, no regulation would be required in generation (70% of total power cost); and the scheme would create the diversified market which would enable coal privatisation to proceed. But it fails the criterion of being achievable within the term of the present Government. It would first require the CEGB to produce a technically viable plan for its own demise. Second, it would require the establishment of some 10 new companies - the 5 generating ones without any previous commercial management, staffing, sales contracts or profit record. Although such deficiencies could be remedied over time, much more than a parliamentary term would be required. So a mechanism is needed which will overcome the transitional difficulties in an acceptably short period.

### Privatised Transition to Competition (PTC)

An intermediate stage of privatisation is required, so structured as to bring about the competitive option over a more realistic period. The PTC model could achieve this as follows:

- i) Amalgamate the existing Area Boards into, say, 5 RDUs and give qualified corporate investors a controlling interest (say 25%) on the same terms as the balance of the shares sold to the public.
- ii) Establish the National Grid on a regulated independent basis, open to all users or potential users on equal terms to guarantee free access to all RDU and bulk customers.



- iii) Make the former CEGB a wholly owned subsidiary of these RDUs with the latter given the specific charter requirement to introduce competition in generation as soon as is practical. Since cost reductions would be shared, the RDUs would have the incentive to introduce generating competition. Simultaneously new controlling management should be brought in to provide a basis for quick progress to a fully competitive system.
- iv) Establish the former CEGB as 100% debt financed, the debt being held initially by the Treasury with all the costs of operation flowed through to the consumer (via the RDUs, effectively as the CEGB's costs are). Debt financing is to provide for the subsequent sale of part of the assets to private companies, impossible if the former CEGB was financed by equity (since at the time of privatisation the terms and conditions of its future sale would be unforeseeable).
- v) Post privatisation the RDUs would have the duty, the power and the incentive to establish competitive generation in an orderly manner. Deriving no profit from the 100% debt financed CEGB they would have no vested interest in sustaining its existence in its then form; indeed, they would have a financial incentive to introduce more efficient and competitive generation. Their task would be to make the CEGB sell off blocks of power stations to the private sector; and then buy back the power on long term contracts based on competitive tendering by intending purchasers of the stations. These contracts would constitute a basis on which substantial debt financing could be secured. When enough independent generating capacity had been established in this manner, the new generating companies could then deal directly with the RDUs on a competitive basis, thus realising the desired CG option.

The former CEGB (retaining the nuclear sector on the basis of 100% debt flow-through of costs) could remain a subsidiary of the



RDUs. This would provide the financing for the nuclear programme from the private sector and impose further degree of supervision by the RDUs, acting in accordance with prescribed Government policy.

The RDUs could be remunerated on the basis of permitting them to flow through capital charges to consumers - but limiting the operating costs which they might charge to those incurred prior to privatisation; subject to increases for relevant inflation and adjustments for the number of users.

Breaking up a monopoly - non-commercial, integrated and unionised - into a number of commercially companies requires new management of very high calibre indeed. Only experienced, corporate investors can supply such management; which must be a feature of any proposal designed to secure the economic benefits and to avoid the serious dissatisfaction among consumers. This is what the PTC option provides.

#### Privatisation Deferred

Although it is the Government's proclaimed intention to privatise the ESI in its present term, some forms of privatisation are inferior to maintaining the status quo (which at least leaves it open to privatise on a competitive basis at a later date). In our judgment, all the monopoly options are inferior to deferral.

Common to all the options - good and bad - is the desirability of setting up an Electricity Standards and Regulatory Commission, to ensure that good standards of service were maintained and that any regulatory structure was observed.



[Back panel]

Liberalisation at every possible stage of electricity generation and distribution [including the privatisation of coal] is the overriding determinant of choice of method of privatisation. The authors recommend an option which will inject genuine competition, introduce new management, establish effective but simple regulation and open the path to complete privatisation within the term of this Parliament. Their scheme amalgamates the Area Boards into some five regional distribution utilities, of which the former CEGB will become a wholly owned debt-financed subsidiary. These RDUs will have the duty, power and interest to establish competition in generating; their charter will demand that they have the CEGB sell off blocks of power stations to the private sector, and buy back power on long-term contracts based on competitive tendering.



## GLOSSARY

AGR	Advanced Gas-cooled Reactor. A British designed nuclear reactor which was the successor to Magnox.
CCA	Current Cost Accounting
CEGB	Central Electricity Generating Board
EEPTU	Electrical, Electronic, Telecommunications and Plumbing Union
EPEA	Electrical Power Engineers Association
ESI	Electricity Supply Industry
ESRC	Electricity Standards and Regulatory Commission - a proposed regulatory body
GMBATU	General, Municipal, Boilermakers and Allied Trades Union
Joint Understanding	A pricing agreement between the CEGB and British Coal
Magnox	Early British designed nuclear reactor
MW	Megawatt - a unit of power. One megawatt = 1 million watts.
NALGO	National and Local Government Officers Association
NHSEB	North of Scotland Hydro-Electric Board
PWR	Pressurised Water Reactor
QUICS	Qualified Industrial Consumers Scheme - a mechanism for providing low cost power to some users.
RPI - x + y	The British Gas regulation formula where RPI is the retail price index, 'x' is a factor set by the Government to reflect scope for improved efficiency, and 'y' is the change in fuel costs.



## REFERENCES

1. Reported in *The Financial Times*, 19 March 1987.
2. More detailed descriptions are in the annual reports of the nationalised electricity corporations and in, for example, *Electricity Supply in the United Kingdom: Organisation and Development*, Electricity Council, 1980.
3. Monopolies and Mergers Commission, *Central Electricity Generating Board*, HMSO, June 1987.
4. Alex Henney, *Privatise Power*, Centre for Policy Studies, 1987.
5. See Colin Robinson and Eileen Marshall, *Can Coal Be Saved?*, Institute of Economic Affairs, Hobart Paper No 105, 1985.
6. Electricity price controls may halt nuclear stations, *The Times*, 3 September 1987.
7. A number of economists have made this point. See, for example, Richard Pryke, *Privatising Electricity Generation*, Fiscal Studies, August 1987.
8. See Robinson and Marshall, *op cit.*
9. CEEGB Annual Report and Accounts, 1986-87, paras. 6 and 41-43.
10. See Henney, *op cit.*
11. Nuclear Energy Agency, *Projected costs of generating electricity from nuclear and coal-fired power stations for commissioning in 1995*, OECD, 1985.
12. On the starting grid but in need of a boost, *The Financial Times*, 7 August 1987.
13. See, for example, CEEGB in talks to set up private power stations, *The Financial Times*, 27 August 1987 and CEEGB talks on private power stations, *The Times*, 28 August 1987.



14. Private power stations, The Times, 28 August 1987.

15. Cabinet to discuss power sell-off, The Financial Times,  
7 September 1987.



en Sykes

31 Charles II Street  
St James's Square  
London SW1Y 4AG  
01-930 6200

The Rt Hon Norman Lamont, MP  
Financial Secretary  
H M Treasury  
Parliament Street  
London SW1

28 September 1987

MR. M. L. WILLIAMS  
PPS, Sir P. Middleton.  
Mr. Marsh, Mr. Moore,  
Mrs. Diggle Mr. Scheldahl  
Mr. Call.

Dear Norman,

Electricity Privatisation

Further to my 24 September letter to you on this subject, which was dictated prior to my going on holiday, I have now had a chance to read the extensive press comments of the last two weeks on the subject of electricity privatisation and to hear of the various schemes that are now being seriously canvassed in government circles. I am particularly concerned to note that despite protestations of wishing to introduce significant competition hardly any schemes contemplate the breakup of the CEBG. Without this happening there can be no effective competition and hence no likelihood of lower costs on the 70% plus of electricity costs due to generation, and without this privatisation seems largely pointless. Further, there would be no introduction of major private companies and senior management. Finally there would be little possibility of privatising coal on a competitive basis since this requires a breakup of the CEBG.

Accordingly, if it would be helpful, I would appreciate an early opportunity for a discussion with you to brief you more fully on these matters, preferably before next week's Conservative Party Conference.

With kind regards

Yours sincerely

Allen Sykes

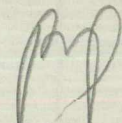
X is a ~~good~~ <sup>good</sup> pt.  
2. NB Y is current ~~point~~  
Issues over CEBG ~~breakup~~  
plans.  
3. Z is a v. ~~good~~  
proposal, in ~~the~~  
sense of ~~being~~  
a ~~good~~  
proposal.



Allen Sykes

*My FOT has received a copy of this letter and enclosure, which has been actioned etc. A short courtesy reply from me*

31 Charles II Street  
St James's Square  
London SW1Y 4AG  
01-930 0200



The Rt. Hon. Nigel Lawson, P.C., M.P.,  
Chancellor of the Exchequer,  
11 Downing Street,  
LONDON, SW1.

*2/10*  
*lyh*  
*psr*

20th October, 1987

Dear Chancellor,

Electricity Privatisation

Our Centre for Policy Studies booklet 'Current Choices - good ways and bad to privatise electricity' is published to-morrow. It is much altered from the draft papers sent to the Treasury a month ago, especially the last two chapters. I enclose a highlighted copy for ease of reading, plus a seven page summary of key points which you will probably want to read first. (Similar copies have gone to Cecil Parkinson and are being sent to your colleague, Norman Lamont with whom I had a meeting yesterday.

I apologise for not getting these papers to you a day or two earlier, but the Friday hurricanes delayed copies until yesterday, and it takes time to produce 'highlighted' versions.

After the turmoil in the British and overseas stock markets in the last 48 hours many will be wondering if privatisation schemes may have to be deferred for several years, even to the next Parliamentary term. It is a particular feature of the scheme we are recommending (see end of first paragraph on Page 67) that, unlike all the other ESI privatisation schemes put forward, it does not require a major initial equity raising. It could, therefore, proceed without delay even in less than buoyant equity markets. Hence, in addition to its other strengths, it may be the only scheme achievable comfortably in this Parliamentary term.

We have tested our proposal out with both large multi-national companies and financial experts, and they command strong support. During November we hope to come forward with the considered views of a number of major international companies who are potential

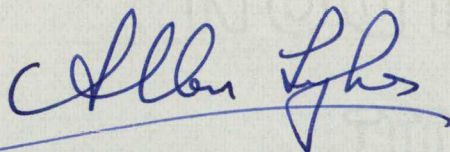


investors in coal, or electricity, or both, if privatised broadly along the competitive lines set out in our two papers. Such potential corporate investors are very necessary to realise the potential, major efficiency improvements in both industries. Their support will increase the case for and the confidence in our proposals.

We hope our analysis is helpful, and that our proposals address your major concerns. Colin Robinson, Tony Merrett and I stand ready to help.

With kind regards.

Yours sincerely,

A handwritten signature in blue ink that reads "Allen Sykes". The signature is written in a cursive style with a long horizontal flourish underneath the name.

Allen Sykes

c.c. Norman Lamont, Esq., M.P.

Encs:



(This paper is an abbreviated summary of the Centre for Policy Studies (CPS) Paper - 'Current Choices - good ways and bad to privatise electricity' by Allen Sykes and Colin Robinson - assisted by A J Merrett - to be published on 21 October 1987.)

THE REALISTIC ROUTE TO EFFECTIVE ELECTRICITY PRIVATISATION

1. Achievable Benefits

The annual cost reductions from an effective privatisation of the electricity supply industry (ESI) on competitive lines should be a minimum of £1200m a year within five years, rising thereafter. Half of these benefits, £600m, presume the privatisation of British Coal on the competitive basis set out in the July 1987 CPS paper, 'Privatise Coal - achieving international competitiveness'. The total present value of these long term savings to Britain from ESI privatisation would be a minimum of £13 billion, plus a further net £4 billion (gross £8½ billion) from British Coal. These represent substantial potential benefits for the nation, but they depend upon competitive privatisation of both the coal and electricity industries.

2. Sales Proceeds

Sales proceeds from ESI privatisation are estimated at £13½ billion to £18 billion\* (plus perhaps a further £2½ billion from Scotland), with a further £1½ billion to £3½ billion from coal privatisation.

\*(These estimates assume the 1986/87 profit levels of the industry, and no rise in real electricity prices. On 8 October, the Secretary of State for Energy announced a likely increase in electricity prices over the three years to privatisation by 4% to 5% in real terms which could increase pre-privatisation, real profits by between 30% and 45%. Other things being equal, this could increase ESI sales proceeds by perhaps 30% to 40% over the values used in the paper, i.e. by say £5 billion to £7 billion in England and Wales, and say a further £1 billion in Scotland.)



### 3. CEGB Break Up - Mandatory

Apart from the understandable views of the CEGB management and the power unions, it is generally agreed that the major potential benefits from privatising the ESI depend upon breaking up the CEGB into, say, five or six competing generating companies. Nothing less will provide genuine and lasting competition in generating, the non-monopoly part of the ESI which accounts for over 70% of total electricity costs. The need for breaking up the CEGB in this way is to provide companies with a broadly equal and balanced spread of power stations, acquired at comparable cost, such that they can offer competitive, reliable, variable load, long term power supply contracts to customers, and in particular to the former Area Boards, the regional distribution utilities (RDUs).

A belief has developed that effective competition in generation could be introduced gradually. The CEGB would be privatised in its existing form as a giant generating company, indeed the largest in the world. This dominant initial position, however, would supposedly be gradually eroded by permitting new generating companies to compete to build future power stations. If new competitors bid successfully for all the new power stations (12.5 gigawatts of capacity) needed by the end of the century competition would then still be minimal (only 10% of installed capacity would be owned by other than the former CEGB, or 14% if in the unlikely event that the 3 new nuclear stations were also built privately). This apart, it needs to be understood that prospective generating companies would be severely handicapped in securing any new power contracts in competition with the former



CEGB. And this would still be true if they could build and operate such stations more economically than the CEGB.

The reason is that effective competition cannot be introduced into the ESI on a station-by-station, piecemeal basis in competition with a continuing CEGB. The CEGB is a massive system of 78 power stations. No matter what happens to electricity prices before privatisation, it would acquire its assets at a marked discount to current costs. In contrast, any new competitor would pay current costs for building new stations. As importantly, single stations, even with lower costs, could not compete for new power contracts with a whole system of different types of power stations. The latter could supply variable load power, guaranteed reserve capacity, and other important features on terms which no single station could match. Hence the CEGB would win virtually all future power contracts with ease against such competitors. Nor could the marginal import of power from France and Scotland provide sufficient competition to a continuing CEGB, welcome though the use of these relatively neglected power sources would be.

The only way to create viable competition in generation is to break up the CEGB into five or six balanced groups of power stations. These created generating companies, plus France, Scotland and the excess power from power stations owned by some bulk customers, comprise the most effective form of competition in generation that would be practicable. Finally, only a breakup of the CEGB in this form would permit coal privatisation on a competitive basis since private companies would not be attracted to invest in coal at any values likely to be acceptable to the Government if they faced a dominant buyer for 75% of the market.



#### 4. Practical Implementation

In sum, the benefits of electricity privatisation require effective competition in generating and hence the breakup of the CEGB into five or six effective competing units. While the desirable goal is clear the route to achieving it is not. In default of identifying an achievable route, the Government may initially privatise only the distributing utilities (the present Area Boards) and maintain the CEGB intact while examining further the problems of privatising it effectively. Such an outcome, with no certainty of achieving any of the substantial benefits from electricity and coal privatisation, would not just be regrettable but might well preclude any satisfactory form of eventually privatising generation, on which nearly all the potential ESI cost savings depend. Fortunately, such an outcome is unnecessary because there is a scheme identified in the paper - the 'Privatised Transition to Competition' scheme (PTC) - which can be made to realise all of the achievable benefits identified since it meets the essential political and economic criteria by which privatisation should be judged.

Transforming the ESI into a competitive form involves immense technical, organisational and staffing problems and the introduction of new, commercially orientated management. This will take a considerable time. It cannot be accomplished while the industry remains in public ownership for two reasons. First, effective transformation needs the involvement of new corporate management experienced in such problems. Second, transformation of a complex industry into a competitive form cannot be accomplished with either certainty or speed by civil servants



whose background and expertise is very different from the powerful private sector managements schooled in such tasks. To leave the transformation task to the Government would allow delay and obstruction to defer privatisation indefinitely. It is therefore essential to devise a structure that will enable this transformation to take place after privatisation. The PTC schemes realises this objective.

## 5. Achieving Competitive Generation Via the Transitional PTC Scheme

### a) The Transition to Competitive Generation

The PTC scheme would place the present CEGB under the joint ownership and control of 5 or 6 equally sized privatised RDUs formed from an amalgamation of the present 12 Area Boards. Total sales proceeds might be £4 billion to £6 billion (30% to 40% more if electricity prices are raised before privatisation). Each RDU would be, say, 75% owned by public shareholders, and 25% owned by corporate investors to guarantee the introduction of new commercial management. The RDUs would be regulated but allowed to pass on in full all of their purchased power costs. The jointly owned generating company, the former CEGB, would be 100% debt financed, with the Treasury initially owning the debt. The RDUs would be under a statutory obligation within a period specified at the time of privatisation (say, 2 to 5 years), to sell off say, 5 or 6 broadly equal blocks of power stations (excluding nuclear stations, at least initially - see the paper) to private consortia at prices which would ensure no increase in pre-privatisation power costs. This would provide sales proceeds



of perhaps £10 billion to £14 billion (30% to 40% more if real electricity prices are raised pre privatisation), to pay off the Treasury owned debt. The RDUs, either directly or via their wholly owned transitional generating company, would grant long term contracts to the new, privately owned generating companies. Purchasers of generating assets would be chosen on the basis of offering the lowest cost, long term power contracts. As an additional incentive, the RDUs would be allowed to keep say 10% to 15% of the assessed savings in power costs resulting from the competitive structure.

b) Safeguarding Competition and Accountability

Corporate investors in RDUs would also be allowed to invest in the newly created generating companies subject to safeguards to preserve competition. First, an RDU corporate investor (or consortium) would only be allowed to invest in a single generating company. Second, none of the newly created generating companies would be allowed to merge with each other. Third, no RDU would be allowed to take more than an agreed minority proportion of its power needs from any one generating company (say a third at most). These safeguards, and the power to force the corporate shareholders of seriously inadequate RDUs to relinquish their shareholdings on penal terms, would seem sufficient to ensure both effective competition and accountability

c) The National Grid

The National Grid would become a privatised, regulated, common carrier at the outset with the present CEGB staff and management transferred to it. This would ensure that all present and future sources of power (the new generating companies, private



producers, Scotland and France) would have equal access to all customers (i.e. the RDUs and bulk purchasers). The sale of the Grid might raise a further £1½ billion to £2 billion (and perhaps more if electricity prices are raised before privatisation).

d) The Merits of the PTC Scheme

The PTC scheme introduces corporate investors with the means, experience, management and incentive to transform the CEGB into the desired 5 or 6 independent generating companies within 2 to 5 years of privatisation. This avoids the main weakness of all the other privatisation schemes which either maintain the CEGB intact and thus fail to realise the potential efficiency benefits of privatisation, or which improbably require the CEGB to break itself up, an unlikely occurrence without involving any new entities or new management.

6. Conclusion

The PTC is the only competitive privatisation scheme so far identified which meets the Government's criteria of being successfully accomplished in its present term of office, and without risk of either serious disruption or eventual consumer dissatisfaction. It further ensures maximum efficiency and minimum electricity prices by introducing realistic and sustainable competition by means of its structure. This would attract powerful corporate investors and new senior management, and yet involve minimal regulation. Finally, it alone would permit coal privatisation on a competitive basis.

In sum, there is a realistic method for creating a competitive, privatised electricity supply industry for the Government to follow.





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

01 211 6402

The Rt Hon John Major MP  
 Chief Secretary  
 HM Treasury  
 Parliament Street  
 LONDON  
 SW1P 3AG

CHIEF SECRETARY
- 2 OCT 1987
<i>Mr ML Williams</i>
<i>CX Sir Peter Maddox</i>
<i>Mr Butler Mr Monck</i>
<i>Mr Moore Mr Turnbull</i>
<i>Mr Gieve Mrs Diggle</i>

2 October 1987

*Mrs S Walker Mr Tyrone Mr Call*

*Dear John,*

**IFR 1987: COAL AND ELECTRICITY INDUSTRIES**

Thank you for your letters of 29 and 30 September. I am writing to let you know the positions settled in my discussions with the Chairmen of the industries on 30 September. You will recall that I was seeking an extra £182 million across the two industries, quite apart from any "adjustment" in the third year.

Before I rehearse the detailed position of each industry, I should record that we have deliberately set aside any potential consequences of electricity privatisation and any financial effects that may flow from current price negotiations between the CEGB and British Coal.

**COAL**

I told you when we met on 29 September of the savings I had obtained from Bob Haslam in my earlier discussions with him. The comparison with the industry's bid after my first round with Bob Haslam was:

£ million	1988/89	1989/90	1990/91	TOTAL
	-90	-95	-105	-290

In further discussion on 30 September, I managed to persuade him to reduce his EFRs in the last two years, as foreshadowed at our meeting and in our telephone conversation, by a further:

	1989/90	1990/91	TOTAL
	-37	-25	-62





reducing the industry's bids by a total of £352 million, and bringing the EFRs over the next 3 years below the baseline by £233 million. The resultant EFRs are:

1988/89	1989/90	1990/91
670	563	475

This is no mean achievement when dealing with an industry which absorbed a loss of revenue of £400 million a year in 1986, has had to make concessions costing about £125 million in 1987/88 and expects to have to make further concessions to non CEGB customers costing some £47 million per year. We shall need to bear this in mind when we review British Coal's strategy. Bob Haslam has stressed to me that while he is fully prepared to face what the market may do, he needs some reasonable assurance from one year to another about what attitude will be taken by the Government as his banker. I expect our decisions on his strategy to flow into next year's IFR, so that he and the industry will know where they stand.

#### **ELECTRICITY**

I explained the outlook for electricity to you when we met, and again when we spoke on the telephone on 29 September.

In extremely difficult discussions with the Electricity Council I have persuaded them to increase their rate of return, compared with this year, by almost a half next year, to 3.75% gross, and to virtually double it in 1989/90, to 4.75% gross. (I say "gross", because, as your officials know, when the CEGB's contribution to funding reactor R&D is allowed for, the net returns are 3.6% and 4.6%). This, taken together with the outcome of the pressures I have put on both the Council and the CEGB to demonstrate the realism of their capital expenditure plans, has resulted in figures for 1988/89 and 1989/90 which, while difficult for the industry, are soundly based in agreed and attainable rates of return. I was able to secure this outcome on the basis that there would be no attempt next year to reopen this two year financial target.

I explained to you on 29 September that I had secured savings of £50 million in each of the first two years from the CEGB. When I met Sir Philip Jones on 30 September I was eventually able to persuade him, but only with the greatest reluctance, to agree to commend to the Electricity Council savings of £50 million in each of those two years from the Area Boards. I have asked for these savings to be made so far as possible through cost reductions. To the extent that this cannot be done, the capital bids of the Area Boards will have to be reduced. I have also proposed, and Sir Philip has agreed to commend to the Council, that savings of further £10 million in each of the first two years should come from to CEGB to yield the full £120 million for electricity which I had undertaken to you that I should seek.

When we spoke I said that you and other colleagues should not underestimate the outcry that there will be when the extent of





electricity price increases next April becomes apparent. The industry's view is that these will need to average 8.8%, and that some Boards will need increases going into double figures. I went over very carefully with the industry the idea of staging the increases. It has its attractions, but the earliest the first stage could now take place is effectively 1 January. Now that the industry are saying that they expect to meet their financial target this year, they see no justification for an increase before April; and a winter increase is politically most unattractive.

The April price increases will require careful presentation, in the first instance of course by the industry, but we shall come under attack. It will be necessary to stress the necessity of getting an adequate cash flow to fund the industry's growing investment programme, and to defend ourselves against the accusation of fattening the industry up for privatisation.

When we met on 29 September, I proposed that, without commitment on your, my, or the electricity industry's part, we should assume achievement of the baseline EFR of -£1315 million for 1990/91. You then asked for a further adjustment of £85 million to give a figure of -£1400 million for that year. In the light of my discussion with Sir Philip Jones last night I think it would be wrong to adjust the third year figure in a way which, as we both acknowledge, would have only cosmetic significance. The industry is prepared to see the baseline figure written in, without commitment on its part, simply because it is the baseline. To attempt to settle on some other figure would merely open up a new area of dispute to no practical benefit. Indeed I fear that it might prejudice acceptance by the Electricity Council of the tight settlement Sir Philip Jones has agreed to commend for the first two years.

The final outcome, then, on electricity is EFRs of:

1988/89	1989/90	1990/91	TOTAL
-1040	-1200	-1315	-3555

reducing the industry's bids by a total of £1970 million, and bringing the EFRs over the 3 years to within £233 million of baseline. This is a very substantial achievement.

I attach a table summarising the outcome for both industries.

Finally, although our discussions have not been easy, I should like to thank you for the constructive and courteous way they have been conducted.

*Cecil Parkinson*

CECIL PARKINSON



**IFR 1987**

£ million outturn	1988/89	1989/90	1990/91	TOTAL
<b>COAL</b>				
1. Baseline	683	621	637	1941
2. Industry bid	760	695	605	2060
3. Variance on baseline (2-1)	+77	+74	-32	+119
4. Agreed EFRs	670	563	475	1708
5. Savings compared with industry bid (2-4)	-90	-132	-130	-352
6. Variance on baseline (4-1)	-13	-58	-162	-233

**ELECTRICITY**

1. Baseline	-1190	-1283	-1315	-3788
2. Industry bid	-842	-460	-283	-1583
3. Variation on baseline (2-1)	+348	+823	+1032	+2203
4. Agreed EFRs	-1040	-1200	-1315	-3555
5. Savings compared with industry bid (2-4)	-198	-740	-1032	-1970
6. Variance on baseline (4-1)	+150	+83	-	+233



CONFIDENTIAL



Treasury Chambers, Parliament Street, SW1P 3AG

The Rt Hon Cecil Parkinson MP  
Secretary of State for Energy  
Department of Energy  
Thames House South  
Millbank  
London  
SW1P 4QJ

13 October 1987

*Dear Cecil,*

**IFR 1987: COAL AND ELECTRICITY INDUSTRIES**

Thank you for your letter of 2 October and for your efforts in securing from the industries the additional savings that we discussed.

I can confirm that the agreed EFRs are as set out in your letter. To have brought the two industries together back to baseline does indeed represent a very substantial achievement.

I recognise that you were only able to secure the outcome on electricity on the basis that there would be no attempt to open the financial targets for the 2 years (i.e. 3.6% and 4.6% on the net basis). I think that we agreed during our discussions, however, that over-achievement of the objective in the first year should not allow the industry to under-achieve in the second; and indeed we will be looking for the industry to achieve greater than allowed for cost reductions to meet its EFLs. On this understanding, I am content. No doubt you will let me have your ideas nearer the time on how the industries' future financial targets should be formally expressed.

I fully take your point that the April electricity prices will require careful presentation. You will be able to point to the industry's investment plans as published in the public expenditure White Paper to show that, for public expenditure planning purposes, we are already making provision (notwithstanding of course - as I know you accept - that the particular investments, notably power station orders, will have to be justified and approved in the normal way).



CONFIDENTIAL

Turning to the current year I am grateful for your assurance that the electricity industry will now be able to meet its financial target. I hope that this applies equally to its EFL. I assume that the offsetting action this year has been taken in such a way as to ensure that it will not jeopardise the agreement we have reached for 1988-89.

Finally, I am grateful for your comment that our negotiations were constructive and courteous; I agree, and I am most grateful for the part you played in ensuring this.

*Yours Ever,  
John*

JOHN MAJOR



CONFIDENTIAL

FROM: M L WILLIAMS  
DATE: 14 October 1987

FINANCIAL SECRETARY

*Shy* / Some interesting points on the pros + cons of the CPS' preferred scheme. The KB analysis ('X' in para 7, below) should be interesting. 25/15/87 *Yr*

cc Chancellor  
Mr Monck  
Mr Byatt  
Mr Moore  
Mr Houston  
Mrs Diggle  
Mr Call

PRIVATISE ELECTRICITY

Mr Allen Sykes is coming to see you on 19 October.

2. Mr Sykes sent to you on 24 September a copy of his and Colin Robinson's forthcoming CPS booklet "Privatise Electricity"; it is to be published later this month. Subsequently Mr Sykes wrote (on 28 September) expressing "concern" about press comments that implied that the CEGB will not be broken up. He asked for an early meeting.

### The Paper

3. Much of "Privatise Electricity" will be disappointing to a reader who has already had some contact with these issues. Although I have little quarrel with it, and the links between coal and electricity privatisation are well made, the analysis of the industry, its shortcomings and key issues arising is largely familiar. Considerable emphasis is put on the importance of privatisation as a means of improving market efficiency; but that is widely accepted. There is an exhaustive and rather boring list of possible privatisation options, which are analysed against a long list of essential and desirable criteria; a number of the options have already been publicly ruled out by Ministers. Not surprisingly, the paper confines itself to economics and business, rather than technical, issues (and will therefore not impress the CEGB). It is also short on figures. It does estimate the potential cost reductions from privatisation (coming to a total of £1.2 billion pa, although half of this is from lower coal prices which, in principle, are available without privatisation), but much of the figuring is derivative (from Henney) and open to criticism. The main item of interest is the paper's demerger or "PTC" (for "privatised transition to competition") option, which Messrs Sykes and Robinson developed with Tony Merrett. The Chancellor has drawn attention to this ingenious proposal (Mr Taylor's minute of 5 October).



CONFIDENTIAL

4. As background to the meeting you might like to skim the executive summary of the paper. The PTC option is described on p13-16. It is described on p88-90 of the main paper and discussed in more detail on p71-75. It is identified in the conclusion (p80-81) as the only option that meets all the essential criteria (critical among which is the need for complete privatisation within the life of the Government).

**The PTC Option**

5. I commented briefly on the PTC option in the briefing I prepared for the seminar at Chequers. It has three main advantages:

(i) the involvement of major companies injects an element of new management in generation from the outset, and also a class of informed shareholders. This distinguishes it from other pro-competition options;

(ii) it offers a way of developing competition in generation without relying on the emergence of entirely new generation companies while, at the same time, allowing a transitional period;

(iii) the sale could be secured in one Parliament.

6. But in other ways the option does not, at first sight, look very attractive. The main problems would seem to be that:

(i) we would be creating and selling an integrated structure at the outset. Since the pace (and extent) of subsequent break-up could not be mapped out with certainty, that is not an attractive political proposition. Moreover, in advance of break-up, the consumer would have no insulation from increases in generating costs; they would be fully passed through. (If some constraint was imposed, there would be a risk of bankruptcy. In those circumstances, it is unlikely that non-recourse finance would be available to finance new investment - ie until after break-up and new contracts had been established;



CONFIDENTIAL

(ii) the equity available to the public (except companies) would be limited to 75% of the distribution assets only - ie the Government would be foregoing the chance of a massive expansion in share ownership (ie £3 billion, compared to, say, £15 billion);

(iii) the final structure of the industry would be unclear, as would the timing of the sales of groups of power stations (and thus redemption of the debt). There would therefore be some uncertainty about the flow of proceeds to the Government, complicating public expenditure planning, except insofar as market conditions allowed the debt to be sold successfully. We would still be exposed to a bear market;

(iv) there would be a debt financed rump left owned by the distribution companies. This would almost certainly include the past and future nuclear stations, with full pass through of costs to the consumer. On what basis would new investment decisions be made by this quasi power board? Would purchasers of non-nuclear stations accept that the playing field was level?

(v) the ownership of the industry generally would become very interlocked, with major companies having large shares in generators, distributors and the grid. The same big companies may, in time, also be major shareholders in coal mines;

(vi) the scheme is very dependent on 5 or 6 groups of corporate investors being available and willing to take on an obligation for future purchase of the stations.

7. I know that DEn share some of these worries. However, they have asked Kleinwort Benson urgently to examine the scheme (along with other, although usually less sophisticated, demerger options). We should have their paper shortly; and I will let you know their views.



**Line to Take**

8. Mr Sykes is, of course, wrong to surmise that Ministers have concluded that the CEGB should not be broken up. Moreover, Mr Parkinson made clear at the Party Conference that the Government will be looking to secure competition in generation (without saying precisely what that meant, see attached extract from his speech). In general you can say that:

(1) the Government has not yet made any firm decisions, and will not do so for a few months;

(2) you are keen to consider a range of structural options, in particular to ensure a competitive environment, particularly in generation;

(3) the options certainly include those that would involve breaking up the CEGB, (whether by separation of the grid or also splitting generation).

9. In discussing Mr Sykes' PTC option, you will primarily want to hear what he has to say. But you could probe along the following lines:

(1) Who are these corporate investors? Are there enough of them? What incentive will they need?

(2) What are the risks of the RDU's being left with a substantial rump? Will the possibility of this rump (which will include the nuclear stations) itself act as a disincentive to corporate purchasers of the generating assets (the level playing field problem)?

(3) Where will the nuclear-dominated rump *leave* the SSEB's nuclear stations (a non-nuclear Scottish industry is not a viable company)?

(4) Initially the Government would seem to be creating a monopoly with pass through of generation costs. Given the uncertainty of the sale timetable, how can that be sold politically?

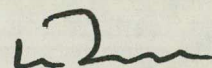


CONFIDENTIAL

(5) Does Mr Sykes have any views on how large users of electricity would react?

(6) Is it right to assume (as he does) that no new substantial companies are likely to emerge to meet the growing demand for electricity?

10. Mr Sykes throughout assumes that privatisation of this Parliament is a firm Government aim. You may like to hint during the discussion that the Government would not necessarily rule out privatisation across two Parliaments if that was judged necessary to do the job properly.



M L WILLIAMS



EXTRACT FROM MR PARKINSON'S  
SPEECH AT BLACKPOOL.

2

were left with second rate industries that were costing us a fortune. When Keith Joseph took over as Industry Secretary in 1979 the nationalised industries were costing tax payers £50 million pounds every single week. Keith was determined to put a stop to that and it was he who started the most radical and successful industrial policy of any British Government this century and we owe a great debt to him. No. The culture of what were once nationalised industries hasn't changed overnight and quite frankly we never thought that it would. Those industries had been insulated by the brick wall of state control for far too long - that was the problem with them, that was the problem with British Telecom. But once there in the private sector the pressure is on. The management know that they've got to do better, they'd better do better because they are accountable to their shareholders, and they are accountable to their customers. Privatisation is about power to the people and the people know it. In the seventies they had no say, but today customers' expectations are higher. They want former nationalised industries to offer the best in private sector service.

So I give you this pledge. When we privatise electricity, service to the customer will be the top priority. I'm currently examining radical new ideas for guaranteeing better standards of service and these include proposals for rebates and vouchers for customers who receive service that falls short of agreed standards. But above all we recognise the need for competition in electricity. We've not yet made a final decision on the structure of the privatised industry and we're considering various options in very great detail but I give you this further pledge. This huge industry will not be sold off as one vast monolithic corporation. Of course, the electricity supply that goes into your home is a natural monopoly. Sadly I can't promise competing light switches in every living room - it would be confusing as



well as expensive. But that natural monopoly only accounts for 20% of your electricity bill. The remaining 80% comes from generation and transmission. In other words the part of the industry that supplies your local electricity board with power. And there is no natural monopoly in generation and there is no justification for monopolistic practices in transmission. So I'm determined to introduce as much competition as possible. Competition and customer rights; that's what electricity privatisation will be all about and I hope you approve of it.

One of the successes of our privatisation programme, as a number of speakers have said, is the huge increase in the number of people who own shares in the company they work for and I can confirm that in the privatisation of electricity, as in every other privatisation, those who work in the industry will be given the right to own shares in the business to which they've devoted their lives. Industries work better when everybody is working together. But some people aren't interested in that. They are the politically motivated wreckers out to destroy industries rather than to build them up. So I have a message for a Mr Arthur Scargill, last heard of trying to stir up trouble in the British Coal industry. If Mr Scargill is listening I've got news for him, I'm not going to play politics with British Coal; it's far too important and nor, Mr Scargill, should you. And if you're thinking of taking on this Government my advice is simply this: don't. You didn't win last time and you wouldn't win next. I also have a message for everyone else in the industry. This Government has faith in British Coal. Our reserves of coal are a tremendous national asset. We don't want them to be a national battle ground. We want to see the industry succeed. That's why we're backing it with a massive £2 million pounds a day investment programme. But it isn't the Government that will decide the future of coal; it is British Coal customers. For the industry to



note - advice coming  
from Paula Diggle  
(Thom' John  
Anson)



DF 18.11.87

SECRETARY OF STATE FOR ENERGY

THAMES HOUSE SOUTH  
MILLBANK LONDON SW1P 4QJ

01 211-6402

CHIEF SECRETARY	
MP	26 OCT 1987
Mr M L Williams	
CX FST Mr Butler	
Mr Anson Mr Wood	
Mr Bugner Mr Moore	
Mr Turnbull Mr Geere Mr Tyrrie Mr Call	

The Rt Hon John Major  
Chief Secretary  
HM Treasury  
Parliament Street  
LONDON  
SW1P 2AG

26 October 1987

Dear John,

**AREA ELECTRICITY BOARDS: REQUEST FOR SUPPLEMENTARY CAPITAL APPROVAL 1987-88**

Our officials have been discussing the Electricity Council request, on behalf of nine of the twelve Area Boards, for increases in their capital approvals for 1987-88 totalling £38.5 million. This would raise the total for all Area Boards from £517.6 million to £556.1 million - an increase of 7.5%. (For the nine Boards concerned, the total increase would be 10%). The approvals are net of customer contributions to the cost of new connections; and an expected rise in contributions has limited the net increase for which supplementary approval is now sought.

After taking account of customer contributions, about 35% of the request is for new business, principally the cost of making new or enhanced connections to the distribution system for industry, commerce and new housing. Reflecting the welcome growth in the economy, most Area Boards are finding that the demand for new supplies is increasing at a higher rate than they had expected. The Boards have a statutory obligation to supply and little latitude for deferring such expenditure from one year to another.

About 26% of the request is for reinforcement of the distribution system and replacement of assets. The need for more reinforcement is a direct result of the higher growth in demand than expected. Without a strengthening of the system to cope with higher loads, security of supply would decline to an unacceptable level: the Boards are obliged to maintain adequate standards of security.

All Boards have either developed, or are developing, plans for orderly replacement of equipment in the distribution system (nearly a fifth dates from before 1950). But a need for some urgent, unscheduled replacement has arisen in order to meet safety standards and to maintain economic operation.

3.11  
Toson  
I will speak to Mr Williams  
MAY  
26.10.87

Leg  
Sent 3/11

request - straight forward  
but P. seeking  
further...  
in some...  
costs...  
DF 30.10.87





About 42% of the request is for expenditure on the infrastructure which supports the distribution system: completion of reorganisation, refurbishment of offices, a new depot, more vehicles to cope with increasing demand for electricity supplies, a new store and a showroom in a major new shopping area. Expenditure in this category has an important part to play in enabling Boards to improve efficiency and reduce costs.

Offsetting about 3% of the request is a deferment of expenditure on Combined Heat and Power schemes. The three Area Boards which have not sought supplementary approvals are not expecting to underspend. Nor is the CEGB forecasting an underspend of its capital approval.

The industry was forecasting a shortfall of £233 million against the EFL of -£1203 million. As your officials know, the industry's recent assessment is that it should now meet the EFL apart from the increase in Area Board capital expenditure which is the subject of the supplementary request. (This assessment was, of course, made before the storm of last week: it is too early to say to what extent it will be affected by the repercussions). In your letter of 13 October, you say you assume that the improvement in cash flow this year will not jeopardise the agreement on the EFL for 1988-89: the assumption is correct.

The Boards' requirements for additional expenditure to meet demand for new supplies, to reinforce the system, to replace assets for urgent safety and operational reasons and to complete reorganisation schemes designed to reduce operating costs should, I think, be recognised. Not to do so would risk accusations of hindering the industry from maintaining the system to the standard to be expected on privatisation. They have little scope for rescheduling and deferring optional expenditure at this stage in the financial year.

Nevertheless, since the industry is not able at this stage to undertake that cash flow will be improved to offset the supplementary request, I do not think we should approve the whole of it. As my officials have explained to yours, elimination of items of less urgency (eg token meters, budget warmth, Economy 7 new business) would reduce the total to £30 million. I therefore propose that supplementary approval to this amount should be given. It would be for the Electricity Council to decide how to allocate the reduced sum. The increase in capital expenditure this year will not endanger the EFL figure which we have agreed for next year.





I shall be grateful for your agreement to this course of action.  
I shall, of course, impress on the industry the importance of  
improving on the present external finance forecast to the maximum  
extent possible.

Yours  
Ed,  
Cecil

CECIL PARKINSON



PAY IN CONFIDENCE

NEW ST. ANDREW'S HOUSE  
ST. JAMES CENTRE  
EDINBURGH EH1 3SX



The Rt Hon John Major MP  
Chief Secretary  
Treasury Chambers  
Parliament Street  
London  
SW1P 3AG

CHIEF SECRETARY	
REC.	28 OCT 1987
ACTION	Mr Colman
TO	CX PMG Mr Bullock
	Mr Anson Mr Kemp
	Mr Monck Mr Moore
	Mr Turnbull Mr Gilhooly

27 October 1987

Mr A White Mr M Williams Miss Scaft  
Mr Tyrie Mr Call

Dear John,

SCOTTISH ELECTRICITY BOARDS: MEMBER'S PAY

I am writing to seek your agreement to my proposals for salary levels for the members of the Scottish Electricity Boards as from 1 April 1987.

In considering the awards, I have of course borne centrally in mind our agreement in E(NI) to seek to contain the average of awards this year within last year's average. I have also considered the very strong representations made by the Boards about the salary levels of their executive members, which are based not only on grounds of comparability with the private sector, but also on ever-narrowing differentials with senior Board employees and the resulting difficulties in recruitment and retention. Such difficulties have already surfaced in the SSEB, who have been unsuccessfully endeavouring since September 1986 to fill the vacant post of Director of Finance. Although similar problems have not yet occurred in the North Board, they may well arise next year when their Deputy Chairman and Chief Executive is due to retire.

The proposals from the Boards would call for very substantial increases and these cannot be justified within our present policy. I am instead proposing an across the board increase of 7.5% which I believe is fully justified in the light of the Boards' continuing sound performance. In proposing this level of award, I have taken into account the additional burden which privatisation is placing on all Board Members and the need to ensure that they are retained and motivated during the important period ahead. I have also considered the need to ensure that differentials with senior Board employees are not further eroded.

My proposals are summarised in the attached table. I am now under considerable pressure to make an award and it would be helpful to have your early agreement.

*Yours ever,*  
Malcolm

MALCOLM RIFKIND

PAY IN CONFIDENCE



PAY IN CONFIDENCE

SCOTTISH ELECTRICITY BOARD MEMBERS' SALARIES 1987-88

<u>SSEB</u>	<u>Present Salary</u> £	<u>Board's Proposal</u> £	<u>Proposed Decision</u> £
Chairman	52,750	67,000 (27%)	56,700 (7.5%)
Deputy Chairman	44,250	53,000 (19.8%)	47,550 (7.5%)
Non-Executive Members (5)	3,950	4,500 (13.9%)	4,250 (7.6%)
<u>NSHEB</u>			
Chairman	23,000	26,250 (14.1%)	24,700 (7.4%)
Deputy Chairman	42,500	48,500 (14.1%)	45,700 (7.5%)
Non-Executive Members (5)	3,950	4,675 (18.4%)	4,250 (7.6%)
Average of full-time salary increases	-	-	7.5%
Increase in Total Pay Bill	-	-	7.5%



RS

APPOINTMENTS IN CONFIDENCE

CONFIDENTIAL

*Alex  
I think this is OK  
but not v happy  
about them reports  
this.*

FROM: M L Williams

DATE: 28 October 1987

MR MONCK

cc Mr Moore  
Mrs Diggle  
Mrs Ryding  
Miss Swift

CHAIRMANSHIP OF THE ELECTRICITY COUNCIL

I attach a draft submission to Sir Peter Middleton.

2. Mrs Ryding might like to check the references to the Chancellor's views.

3. It would be helpful to have any comments by noon on ~~Thursday~~ <sup>Friday</sup>.

M L WILLIAMS





4769.

DRAFT

APPOINTMENTS IN CONFIDENCE

CONFIDENTIAL

FROM: M L Williams

DATE: ~~28~~ October 1987

SIR P MIDDLETON

cc Mr Monck  
Mr D Moore  
Mrs Diggle  
Miss Swift

CHAIRMANSHIP OF THE ELECTRICITY COUNCIL

Mr Gregson is writing to Permanent Secretaries to ask them for their comments on Mr Parkinson's proposal to reappoint Sir Philip Jones as Chairman of the Electricity Council for 3 years from 31 March 1988.

x

2. This is disappointing. We know (from a private conversation between Mr Parkinson and the Chancellor of which we have only an oral report) that Mr Parkinson was in two minds about reappointing Sir Philip. However, he has chosen to limit his term to 3 years, and proposes no improvement in pay and conditions.

3. The Treasury would prefer not to see Sir Philip reappointed, for 2 reasons:

1) He has in general proved an obstacle to Treasury objectives to increase electricity prices with a view to the industry earning a rate of return closer to 5% real (compared with 2½% at present). Sir Philip's willingness, under great pressure from Mr Parkinson, to accept a real price increase in April 1988 only partly mitigates this record;

2) he is likely to prove unhelpful in the context of electricity privatisation. For example, we understand that he is pushing for a single distribution company (with himself at the head presumably), which neither the government nor most Council members find attractive. More generally, he is likely to push for a continuing role for the Council which is, as Mr Parkinson notes, unlikely.



APPOINTMENTS IN CONFIDENCE

CONFIDENTIAL

3. Despite these concerns, we understand that the Chancellor has decided that he will leave Mr Parkinson to make his own choice. [Moreover, our formal locus for intervention at official level is confined to the terms being proposed for the appointment.] For these reasons, I recommend that you simply note Mr Gregson's letter.

4. Sir Philip may in practice be irked when he learns that the terms which he is being offered will leave him with a lower salary than Lord Marshall's whose salary was increased on his reappointment earlier this year; the differential will be [X%; Miss Swift please]. If Sir Philip decided that these terms were unacceptable, well and good. There should be no difficulty in securing an acceptable replacement who could either be a ~~chairman, perhaps~~ <sup>perhaps</sup> somebody, <sup>perhaps</sup> towards the end of their career, who would have the explicit task of managing the Council's deminse, or a younger Chairman who would <sup>have</sup> the clear prospect of a major post within the industry after privatisation.

5. In the attached draft letter, I have therefore emphasised the importance of no improvement in the terms and conditions to be offered to Sir Philip.

M L WILLIAMS



APPOINTMENTS IN CONFIDENCE

DRAFT LETTER FROM SIR PETER MIDDLETON TO P L GREGSON ESQ CB

CHAIRMANSHIP OF THE ELECTRICITY COUNCIL

Thank you for sending me a copy of your letter of 23 October to Robert Armstrong.

I concur with your Secretary of State's proposal to reappoint Sir Philip Jones for 3 years. I agree that he should be offered the same terms and conditions, and regard it as important that these should not be open to negotiation.

I am sending copies of this letter to Robert Armstrong, Brian Hayes, Kerr Fraser and Richard Lloyd-Jones.





**DEPARTMENT OF ENERGY**  
**THAMES HOUSE SOUTH**  
**MILLBANK**  
**LONDON SW1P 4QJ**

01-211 4391

*From the Permanent Under-Secretary of State*

**P L Gregson CB**

PRIM SEC'S OFFICE	
RECEIVED	
24 OCT 1987	
Action:	Mr M L Williams
Copies:	Mr Mordaunt
To:	Mr D Moore

Sir Robert Armstrong GCB CVO  
 Cabinet Office  
 70 Whitehall  
 LONDON  
 SW1A 2AS

23 October 1987

*Dear Robert*

**CHAIRMANSHIP OF THE ELECTRICITY COUNCIL**

The five-year term of appointment of Sir Philip Jones as Chairman of the Electricity Council, the senior body in the federal structure of the electricity supply industry in England and Wales, expires on 31 March 1988.

My Secretary of State has it in mind to propose to the Prime Minister that Sir Philip should be offered reappointment on the same terms and conditions as at present (a salary of £76,490 pa subject to annual review on 1 April 1987 and in subsequent years) for a period of three years ending on 31 March 1991.

The post of Chairman of the Electricity Council is a difficult one as he has to oversee and co-ordinate the activities of the Central Electricity Generating Board and twelve Area Electricity Boards which are separate statutory bodies and have a high degree of independence. The relationship with the Central Electricity Generating Board which accounts for some 80 per cent of the industry's turnover is a tricky one. Sir Philip has met the challenge of the job with a reasonable measure of success and, although he has not avoided friction with the CEGB, he has managed to prevent this from becoming a public issue. He has had to cope with strong lobbying from electricity consumers for lower prices but, despite this, has secured the agreement of his Board Chairmen to a substantial increase in the industry's rate of return to take effect from 1 April 1988 with a further increase the following year.

In considering this appointment my Secretary of State has had to take into account the Government's manifesto commitment to bring forward proposals to privatise the electricity supply industry during this Parliament. Although no decisions have yet been taken about the structure of a privatised industry, it is common



APPOINTMENTS IN CONFIDENCE



ground that there will be no entity which corresponds to the Electricity Council in its present form. Depending on the progress of legislation there is therefore a strong probability that the Council will have ceased to exist before the end of this Parliament. A further five-year appointment would therefore not be justified. My Secretary of State considers however that a three-year appointment is needed to ensure the orderly run-down of the Council's activities and the transfer of its functions to other bodies. Sir Philip, with his previous five years' experience of Chairmanship of the Council, would be well suited to carry out this task. Although there are some young and able people within the industry, my Secretary of State considers that these should be reserved for new appointments in the privatised structure.

Sir Philip may be reluctant to accept reappointment to what will become a decreasingly attractive post on the same terms and conditions. He has some concern about his pension position. He may also ask that he should retain salary parity with the Chairman of the Central Electricity Generating Board from 1 April 1988 but this is ruled out by decisions, of which he is as yet unaware, taken at the time of Lord Marshall's reappointment earlier this year. My Secretary of State has concluded that, although there would be advantages in securing Sir Philip's reappointment, these are not so great as to justify an improvement in terms and conditions.

As we are already within the final six months of Sir Philip's term of appointment, my Secretary of State would like to let him know where he stands as soon as possible. I should therefore be grateful for any comments which you or other recipients of this letter may have by close of business on Monday 2 November.

I am sending copies of this letter to Peter Middleton (Treasury), Brian Hayes (Trade and Industry), Kerr Fraser (Scottish Office) and Richard Lloyd-Jones (Welsh Office).

*Yours ever*

*Peter*



CONFIDENTIAL

FROM: M L Williams

DATE: 29 October 1987

CHANCELLOR

Ch/ Shd. we arrange a bilateral  
with Mr P. (Or would you prefer to  
write?)

At 30/10

cc Financial Secretary  
Mr Monck  
Mr Byatt  
Mr Moore  
Mr Houston  
Mrs Diggle  
Mr Call

**ELECTRICITY PRIVATISATION**

This minute brings you up to date with the work on electricity privatisation, and suggests that you might like to arrange one of your informal meetings with Mr Parkinson. We have concerns both on substance and timetable.

**Progress to date**

2. The advisers, Kleinwort Benson, Touche Ross and Merz & McLellan have prepared a series of papers analysing the key features of the various structural options:

- 1) A workable common carriage regime (options A and B);
- 2) disposal of part of the CEGB's capacity (option B);
- 3) transferring the obligation to supply to the distribution companies (all options);
- 4) separation of the grid and the nature of the grid company (options C + D);
- 5) splitting the generation industry (option D);
- 6) the structure of the distribution industry (all options).

3. The advisers' conclude that there is no reason why either structures A or B could not be implemented. For option B,

Fix a date with Mr P.  
1 or 2 days in  
early to mid Oct.

Get ahead  
with disc  
co plan - also  
plan - also



CONFIDENTIAL

Kleinworts suggest that, providing a substantial number of power stations (some 20-40% of the CEGB's capacity) were given to the new generating company ("Genco"), it would produce competition across most parts of the merit order (except nuclear). It would also produce pressure to establish new entry to the grid, indeed that would be a pre-requisite for the successful flotation of Genco. Touche Ross conclude that a successful common carriage regime could be set up, under either A or B, but that it would require an arms length relationship to be established between the CEGB and its grid subsidiary.

4. It is clear, however, that options A or B would require extensive regulation. The main area of work now being undertaken is to reduce the regulatory regime to the minimum necessary. The particular aspects being explored are:

- 1) A workable common carriage regime;
- 2) the treatment of fuel costs and new investment in the regulation of tariffs. The issues here are much more complicated than in earlier privatisations: the main problems are to devise a pass-through formula for fuel costs that gives the companies an incentive for efficient fuel use; and how to provide an adequate rate of return on investment by new entrants in the event that the rate of return being earned by the industry on privatisation is too low in economic terms (which of course we intend that it should not be).
- 3) The risk of under investment, and the regulators' powers of intervention.

5. More work is also needed on how the merit order would be retained consistently with an expanded independent generation sector.

6. Work on grid separation (options C and D) is less advanced. But Touche Ross and Merz & McLellan have concluded that it is technically possible to separate ownership of transmission and



CONFIDENTIAL

Systems operation from the ownership of generation. In principle it should be possible to devise contracts which both maintain the economic operation of generation and security of supply. But the CEGB argues that replacing operational relationships with contracts will inevitably lead to inefficiencies and increased costs. They have quantified the annual costs of separating the grid at £271 million. This figure is being questioned by the advisers, who will also be considering the forms of contract needed.

7. Option D would involve the break up of the generating industry. Touche Ross have explored some possibilities. Their preferred solution is 5 or 6 conventional generation companies of roughly comparable size and plant mix, with existing nuclear power stations jointly owned by the other generators. The nuclear issues have not yet been thoroughly explored, but enough work has been done within the department to make it clear that the need to retain a future for nuclear power need not of itself preclude option D.

8. The work on the structure of the distribution industry is not crucial for the moment. Kleinworts have concluded that all the boards are financially strong enough to be floated separately, with possibly three exceptions. They have done some work on the logistics of floating 12 area boards, concluding that floating them sequentially would take a minimum of 6 years. They have therefore considered the possibility of a single offering of the area boards, represented by a single financial instrument which subsequently splits into the shares of each of the underlying companies. Further work is being done on the logistical problems. The area board Chairmen understandably wished to remain independent, and for that reason the department is concentrating on the feasibility of floating all 12 boards as they stand, or at least restricting mergers to those necessary for reasons of financial viability. I see no objection to letting this presumption proceed for the moment; if the companies can be successfully and timely floated there are advantages in having a number of boards, both in terms of future diversity and yardstick competition.



CONFIDENTIAL

9. Kleinwort Benson have also done some work on demerger options, including the proposal of Allen Sykes and Colin Robinson (on which I have commented separately). This work has been submitted to Department of Energy Ministers, but we do not yet know their reaction. I have also suggested to DEN that Kleinworts contact Mr Sykes to discuss his proposal further.

Mr Parkinson's next steps

10. While the advisers are pursuing this further work, Mr Parkinson has embarked on a series of meetings with Lord Marshall. The main objective of these meetings seems to be to establish the parameters of Lord Marshall's willingness to concede ground within the constraint of avoiding his resignation (a constraint which, resting on the Prime Minister's wishes expressed at Chequers, the department see as binding). So far Lord Marshall's and the CEGB's line is that anything is possible on paper. But they argue strenuously that the risks involved, and the extra costs, are not worth the (to them) extremely uncertain benefits.

11. The main risk is maintaining electricity supply from day to day; the system is inherently unstable and operates with little room for manouevre (vis 16 October), and substituting contractual arrangements for the existing command operation is inherently risky. The costs arise both from the need for a greater planning margin to cope with the risks of non availability and from the likelihood that power stations will be run out of merit order. To date Lord Marshall has not conceded anything of substance other than to accept that a new common carriage regime will be needed to secure the intention of the 1983 Energy Act; and that this will require both transparent and regulated pricing for use of the grid. He may be prepared to lose some of the CEGB's smaller stations, but nothing approaching Option B's Genco). The CEGB claims that all the benefits of competition (lower fuel costs, procurement costs, manning levels etc) can be achieved with an intact CEGB (in principle true but there are neither incentives nor ethic to do so).



Treasury concerns

12. There is a long list of decisions that need to be taken. These include:

- i) the degree of competition in generation;
- ii) the independence and ownership of the grid;
- iii) how to minimise the costs of grid independence while maximising the savings from greater competition;
- iv) whether the grid should be a market maker as well as facilitating common carriage;
- v) the regulatory structure;
- vi) the structure of the distribution company(ies).

13. Energy Ministers own views on these items seem to be far from crystallised, and there is no prospect of an early meeting with colleagues. Moreover, as I have indicated, some key areas have yet to be thoroughly addressed by the advisers. These in particular include how the dispatch mechanism would operate in practice and the potential costs and benefits of alternative options. There is also a tendency to resolve every problem by adding to the responsibilities of the regulator.

14. The process of negotiation with Lord Marshall also promises to be lengthy. Mr Parkinson has not yet conceded anything; but there will inevitably be some circling before any turkey is talked. I do not know whether Mr Parkinson has formed a view of what Lord Marshall will accept at the end of the day. He has certainly not been prepared to offer anything of substance. Moreover, it is in Lord Marshall's interest to spin out the negotiation process and of course he holds all the timetable cards (not least access to the necessary data). Even without such delay, it is clear that the timetable is tight:



CONFIDENTIAL

- 1) unless Ministers collectively make firm decisions by January there is no chance of legislation in 1988-89 (other than for a minimal change solution);
- 2) that deadline must be met if there is to be any chance of privatising CEGB assets by 1990-91 (depending also on the chosen option, co-operation from management and unions etc; Kleinworts will have to do more work on this).
- 3) collective decisions by January requires decisions in principle (involving you and the Prime Minister) comfortably before Christmas. There has to be a lengthy negotiation process with the industry including the unions, to put flesh on the bones before a statement in March.

15. There is a further risk that at the end of the day Lord Marshall's bottom line may be unacceptable when measured against Ministers' objectives for competition and the public expectations that have been aroused. If Ministers therefore decide to change tack we would have lost some months. Already work on option D is taking lower priority while negotiations with Lord Marshall are proceeding; little work is being done on the logistics of a two Parliament privatisation.

16. Mr Parkinson is unlikely to report back to colleagues until something has emerged from his consultations, ie towards the end of November. I therefore suggest that it would be a useful time to arrange a meeting with him, at which your main question might be to probe how the timetable is developing and how he sees his discussions with Lord Marshall crystallising, in relation to Ministers' objectives for competition. Will Lord Marshall be prepared to accept option C (grid separation and Genco); anything less would surely be unacceptable to the Government and public?

17. Your meeting would essentially be aimed at addressing the



CONFIDENTIAL

political constraints and challenges faced by Mr Parkinson. Indeed you might propose an early meeting with the PM to help bring them to a head.

18. But a meeting with Mr Parkinson would also be an opportunity to register some of our concerns with the substance of the work. We have already passed these on to DEN and its advisers. In most cases they have acknowledged their pertinence, noting either that the issue is further down the work programme or that the department is of a like mind. But we nevertheless remain concerned that they will not be given sufficient priority. It would be premature to complain that we are not sufficiently involved in the work. DEN are keeping us in touch with its broad progress, but we have little direct access to the advisers, we tend not to see thinking until it has been crystallised and there is an inevitable tendency for policy to be made on the hoof in day to day discussions with the advisers and the industry. The purpose of your registering the following points to Mr Parkinson would therefore be to pull them to the forefront of his own mind, making sure that they are given full weight:

- 1) It is important that **merit order operation** is retained. The CEGB's estimates of the costs of out of merit order running may be too high but they must be minimised not only to increase the net benefit of privatisation, but to avoid giving ammunition to its critics;
- 2) maintaining merit order operation in a more competitive, contractually based, environment is **not a trivial issue**. The main problem is establishing where the costs of compliance falls, and devising appropriate contracts. Related issues for grid operation include how to cope with users deciding to contract directly with new generators (which can leave the distributor with excess capacity). These difficulties and their solution must be addressed in detail if the CEGB's criticisms are to be met;
- 3) the model envisaged for **grid separation** has the grid

*for comment  
v. comment*

??

*As per*



CONFIDENTIAL

operating as a "market maker", ie it would have sole responsibility for contracting capacity and power. The grid would probably be jointly owned by the distributors; independent contracts between users and generators could exist, but only if, as at present, they comprised a small part of total supply. Market maker is of course a misnomer; the grid would be operating both as a monopsonist and a monopoly supplier to the boards. At Chequers Mr Rickett put forward this approach as being more likely to minimise costs and risks (since it represents less of a departure from the present arrangements) than the alternative of allowing unrestricted contracting between generators and distributors with the grid in effect operating as a universal common carrier. This latter arrangement is more complicated; but it can still allow merit order operation (the grid would dispatch on the basis of short run marginal costs, sharing out the benefits of doing so), and it both opens the possibility of more diversity within the industry and avoids the risks of the grid using its monopolistic/monopsonistic power to discriminate. There should therefore be a clear presumption that the market maker solution is at most a transitional arrangement only;

*will ultimately deliver for you? what?*

*M.S.*

- 4) there is a general reluctance to rely on **market mechanisms**. In particular, the department's advisers envisage a major **role for the regulator**. This extends (under some options) to approving power station construction (including cost and location); oversight of all the key grid operations, including investment, charges, outages scheduling etc; and very complicated formulae for pass-through of costs. There is a dangerous political trap here; if extensive regulation is required to make the system work then either a large bureaucracy is needed (if it is to be effective) or there is a risk that the regime will in time be shown to be ineffective. That said, there may be no obvious way out of the trap, but DE Ministers must press for solutions that allow



CONFIDENTIAL

light regulation to be thoroughly investigated.

- 5) Kleinwort Benson's financial modelling to date has been very crude and mechanistic; and has not properly taken on board economic issues. Among other things this probably affects their judgement about the viability of particular distribution companies.

*P. Diggle*

PP

M L WILLIAMS



PAY IN CONFIDENCE

MS

FROM: MISS J M SWIFT  
DATE: 2 November 1987

- Agreed  
J.G.C.  
2/11
1. MR COLMAN
  2. CHIEF SECRETARY

cc: PS/Chancellor ✓  
PS/FST  
PS/PMG  
Mr F E R Butler  
Mr Kemp  
Mr Monck  
Mr D J L Moore  
Mrs P Diggle  
Mr Cropper  
Mr Call

**SCOTTISH ELECTRICITY BOARDS: BOARD PAY 1987**

Mr Rifkind's letter of 27 October seeks your early agreement to a 7.5 per cent and 7.4 per cent average increase in salaries for executive members of, respectively, the SSEB and the NSHEB. This is a substantial reduction on the Boards' recommendations for increases of 23.4 per cent and 14.1 per cent. But it is still more than is strictly required to maintain salaries broadly in real terms and, in the case of the NSHEB, fails to meet the requirement for a reduction on the 8.2 per cent and 7.3 per cent average increases for executives in 1986. Mr Rifkind proposes 1987 increases of 7.6 per cent for non-executives.

**Recommendation**

2. You are recommended to reject Mr Rifkind's proposals and to propose that average aggregate increases be held to 5 per cent.

**Background**

3. The alternative proposals are shown at Annex A. In 1986-87 executive members earned performance bonuses of 12 per cent out of a possible 20 per cent.



## PAY IN CONFIDENCE

4. Last year your predecessor accepted the case for a higher than average increase for the two Boards, taking into account very similar arguments to those made this year by Mr Rifkind, including the need to motivate and to maintain differentials. This year, E(NI) guidelines offer that much less room for manoeuvre. We therefore warned Scottish Office officials that, in the absence of a substantial case in relation to individuals, it was unlikely that you would be sympathetic so soon to similar general arguments forming the basis of increases in excess of those required to maintain salaries in real terms.

5. Mr Rifkind makes no such case for individuals. He does not endorse the Board's arguments of comparability with the private sector but relies again on general arguments of motivation and differentials.

### Privatisation

6. Mr Rifkind points to the additional burden of privatisation and the consequent need to retain and motivate. We do not dispute that the executive members are worth retaining. The Chairman of the SSEB, for example, is a good and forceful operator whose value was recognised in exceptional pay increases in 1984 and 1985. The two Deputy Chairmen have already recently received exceptional increases (9.9 per cent and 10.1 per cent in 1986) on retention/motivation grounds. Mr Rifkind does not now claim that there are, in practice, difficulties in retaining any individual Board member in the face of privatisation challenges. Indeed, potential rewards post-privatisation may well provide their own motivation.

### Differentials

7. Mr Rifkind wishes to avoid further erosion of differentials with senior staff. This is what last year's Deputy Chairmen's increases were designed to assist. In this context the difficulties of recruitment and retention to which he refers concern senior staff, not Board members. Specifically, failure



## PAY IN CONFIDENCE

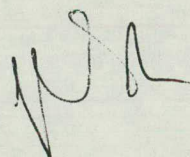
since September 1986 to fill the post of SSEB Finance Director. The post is not currently at Board level. Treasury officials have suggested it should be. Scottish officials have seen the SSEB Deputy Chairman's 1986 salary as a ceiling on the salary they could allow the Board to offer candidates for Finance Director. Mr Rifkind's proposal for a 7.5 per cent increase to the former is designed to allow him to improve the latter. It is not, however, the intention of E(NI) policy that members' salary increases should be consequent on what a Board feels it needs to offer to recruit senior staff. But your proposal of 5 per cent or £46,460 for the Deputy Chairman would anyway allow the SSEB to offer more for a Finance Director and, with the attractive prospect of post-privatisation salary for a good candidate, improve their chance of filling the post. It may be that the Board will eventually have to live with an inverse Board/staff differential. UKAEA have in the past. Certain water authorities do so now. Similarly, if the Finance Director is to be recruited to the Board, it would be open to Mr Rifkind to make a case for a particular salary level for an individual. But there is no case for giving more than the E(NI) baseline increase to the SSEB Deputy Chairman, for whom no retention problem is claimed.

### Conclusion

8. We think that this year Mr Rifkind must be asked to make a substantial retention or motivation case justifying higher increases for individuals or to agree to a package averaging 5 per cent. This what you have told Mr Parkinson, who similarly sought 7.5 per cent for the ESI (England and Wales).

9. Pay are content.

10. Draft attached.



MISS J M SWIFT



	1986	1987		1987	
	£	Mr Rifkind £	% increase	Treasury £	% increase
<b><u>SSEB</u></b>					
Chairman	52,750	56,700	7.5	55,390	5.0
Deputy chairman	44,250	47,550	7.5	46,460	5.0
Non-Executive(5)	3,950	4,250	7.6	4,150	5.0
<b><u>NSHEB</u></b>					
Chairman (p/t)	23,000	24,700	7.4	24,150	5.0
Deputy chairman	42,500	45,700	7.5	44,625	5.0
Non-Executive(5)	3,950	4,250	7.6	4,150	5.0



PAY IN CONFIDENCE

DRAFT LETTER TO:

The Rt Hon Malcom Rifkind MP  
Secretary of State for Scotland  
New St Andrew's House  
St James Centre  
Edinburgh  
EH1 3SX

SCOTTISH ELECTRICITY BOARDS: MEMBERS PAY 1987

Thank you for your letter of 27 October.

2. I am grateful that you have been able to go a long way in reducing the increases sought by the Boards themselves but you have yet to convince me of your case for 7.5 per cent. I have considered carefully your arguments of motivation and differentials. Last year my predecessor very reluctantly accepted your proposal for exceptional increases for certain members on those grounds. This year, the additional constraints of the policy mean I must look to you to persuade me that a real problem has arisen in retaining the services of a key individual Board Member before I could consider an increase to his salary higher than that required to maintain it in real terms. You do not suggest that this is the case. Certainly, it is not the intention of the policy that increases in Board pay should be consequent on what they wish to pay to recruit senior staff.

3. In all the circumstances, I am not prepared to agree to an aggregate average increase of more than 5%. My proposal will nevertheless allow an increase in the salary the SSEB



**PAY IN CONFIDENCE**

is currently offering for a new finance director. If, as I hope you intend, that appointment is to be made at Board level, it would be open to you to make a case on merits, for a salary to recruit a particular individual to the job.

**J M**





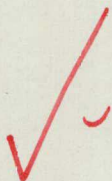
Ch,  
This note was written before  
your talks with Mr P.

Line to take, now, is simply:

"I understand that my RHF  
will be making a statement  
later this afternoon."

2F

2/11





CONFIDENTIAL

*Prof*

*ch/ Now a statement*

Ps/Chancellor

FROM: M L Williams

DATE: 3 November 1987

~~CHANCELLOR~~

*Since I wrote the attached we have learnt that a PND has been put down that Mr Parkinson will be answering this afternoon. Recipients might, however, find it helpful to have the ~~att~~ additional material attached.*

cc Chief Secretary  
Financial Secretary  
Economic Secretary  
Paymaster General  
Sir P Middleton  
Mr F E R Butler  
Mr Monck  
Mr Moore  
Mr Turnbull  
Mr R I G Allen  
Miss O'Mara  
Mrs Diggle *Mr Tarkowski*  
Mr Tyrrie

*Wm*  
3.11

ELECTRICITY PRICES

You wanted a more forthcoming line to take on electricity prices. I have suggested a form of words below. The key sentence is the last one, about which you are going to speak to Mr Parkinson. (A middle way would be not to deny the figure of 8-9% if press reports were quoted at you).

*Garbled.*

"The electricity industry in England and Wales is embarking on a major new investment programme, to meet the expected rate of growth of demand over the next decade. Provision has been made in the plans that I have announced today for the initial expenditure.

But the industry's current level of profitability is too low to justify and finance this programme. I therefore expect it to increase its rate of return next year. The precise increase in prices needed is for the industry to decide; it will depend for example on the scope for further cost savings and other developments. But it may be [somewhat above the rate of inflation] [of the order of 8-9% in nominal terms]."



Additional Points as Required

- 1) The industry's current rate of return is only about 2½% in real terms. There is a long standing policy that nationalised industries should earn an adequate real rate of return, comparable with the private sector;
- 2) too low a return means wasted resources and that the taxpayer is not getting a fair return on the substantial sums invested;
- 3) it is reasonable for customers to contribute to the costs of new investment;
- 4) domestic electricity prices have fallen by 15% in real terms over last 5 years;
- 5) the industry in England and Wales is currently investing about £1.3 million a year. This figure will increase by about 15% next year, with further increases in later years. [Detailed figures cannot be released, not least because they have not been agreed with the industry. Future year figures will also be subject to the normal survey processes].

Defensive

1. You will not want to say anything about price increases beyond 1988-89, which are very uncertain (although we would expect real increases, but somewhat smaller ones). If asked, I suggest:

"It is much too early to say, although the plans I have announced do provide for the industry's investment programme to grow over the period."

2. You may be asked about Scotland. Discussions with the industry there are less far advanced, and the outcome more uncertain. Moreover, you cannot use the need to justify or



CONFIDENTIAL

finance a new investment programme. I suggest:

"The circumstances of Scotland are not exactly comparable, not least because the industry increased its tariffs in the current year."

I attach some background figures.



M L WILLIAMS



ELECTRICITY IN ENGLAND AND WALES

	<u>Investment</u> £ billion	Increase in <u>Domestic Tariffs</u> revenue/Kwh %	Increase in <u>Industrial Tariffs</u> revenue/Kwh %
1982-83	1.3	12.7	7.0
1983-84	1.4	-	-2.1
1984-85	1.3	1.3	1.9
1985-86	1.2	2.9	3.0
<del>1986-87</del>	<del>1.2</del>	<del>2.9</del>	<del>3.0</del>
1986-87	1.2	0.3	-1.0
1987-88	1.3	[- 0.5]	[2.3]
1988-89	1.5		

[The bull point on domestic tariffs is a fall of 15% in real terms over the last 5 years. That compares spot prices in April 1987 with those in April 1982 (6.2%) against the RPI increase over the same period (25.6%)]





*mf*

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

CH/EXCHEQUER	
REC.	3 NOV 1987
ACTION	<i>Mrs Diggle</i>
COPIES TO	<i>CST</i> <i>Sir P Middleton</i> <i>Mr Monck</i> <i>Mr DJH Moore</i>

Jonathan Taylor Esq  
Private Secretary to  
The Chancellor  
Treasury Chambers  
LONDON  
SW1P 3AG

*3d* November 1987

*Dear Jonathan*

I enclose a copy of the Electricity Council note which my Secretary of State promised the Chancellor earlier this morning. This is an off the record briefing which Sir Philip will draw on.

*Yours ever,  
John*

S HADRILL  
Principal Private Secretary



Statement in response to Government's  
Autumn Financial Statement

OFF

the Record Response to Press Enquiries

The Government has been discussing with the Electricity Council the profit targets for the Industry for the years ahead. The present target, which covers the three years 1985/86 to 1987/88 is a 2.75 per cent return on CCA-valued net assets.

The Government considers that, in accordance with the financial rules for nationalised industries set out in the 1978 White Paper, the profit targets should be raised. The Electricity Council has accepted, following extensive negotiations with the Government, targets of 3.75 per cent return in 1988/89 and 4.75 per cent in 1989/90. The External Financing Limit for 1988/89 of a payment to the Government of £1,040m, announced in the Autumn Statement, is consistent with these profit targets.

For the past decade or so, the Industry has had a surplus of capacity and this is why its profit targets have been below the return of 5 per cent specified in the 1978 White Paper for new investment.

Electricity prices had fallen by 15 per cent in real terms in the past five years. Electricity demand was increasing steadily and substantial new investment would be

/required ....



required in the years ahead.

*^* "In these circumstances," "while the industry would have preferred a slower rate of increase in the targets, an increase in the industry's rate of return was inevitable, irrespective of privatisation." *te*

The CEGB and Area Boards are now considering their individual profit targets and until this process is completed it will not be possible to be specific about the consequences of the higher profit targets for electricity prices. Preliminary indications are that it will be necessary to increase prices by an average of *8 to* 9 per cent on 1 April 1988 and *substantially less* *in the following year.* There is likely to be some variation around these figures for individual Boards and different groups of customers.





3/11

pyp

## FINANCIAL TARGET FOR THE ELECTRICITY SUPPLY INDUSTRY

With permission, Mr Speaker, I should like to make a statement.

As the House knows it has been the policy of successive Governments to agree targets for the nationalised industries which set their financial framework and which enable them to plan their operations in a commercial manner. The industries then decide how to achieve these targets either through price increases, cost savings or a combination of both.

The present target for the electricity supply industry which covers the three years 1985/86 to 1987/88 is a 2.75% average return on current cost assets. The Government has therefore been discussing with the Electricity Council the targets for the years ahead. Although the details of individual Boards' targets have yet to be finalised it has agreed an overall target for 1988/89 and 1989/90. The industry's EFL which was announced by my Rt Hon Friend this afternoon, is based on this target.

In considering the target for these years the Government has had to take into account the fact that, although in the recent past the electricity supply industry has had a surplus of capacity, this position is now changing. On current forecasts, the Central Electricity Generating Board (CEGB) envisages that at least 13GW of new capacity will be needed to meet demand by the end of the century. Furthermore the industry also needs to modernise its transmission and distribution system if it is to maintain secure and economical supplies into the next century.

At a time of surplus capacity, it is possible to meet extra demand by using that surplus at relatively little extra cost. In the past this has been reflected in a low rate of return. It took account of the fact that some of the industry's assets were under-used. This has resulted in the industry's prices effectively remaining unchanged since April 1985 and in prices falling by at least 15% in real terms over the last 5 years.





Mr Speaker, when new capacity has to be built to meet additional demand, the costs of meeting that extra demand rise. It must be right that the rate of return should rise to a level closer to that which nationalised industries are required to earn on new investment as a whole. This is currently 5%.

The Government has therefore agreed that the industry's overall target return on current cost assets should be 3.75% in 1988/89 and 4.75% in 1989/90.

The CEGB and Area Boards are now considering their individual profit targets. Until this process is completed it will not be possible for the industry to be specific about the consequences for electricity prices. In particular, Mr Speaker, the Government expects the industry to consider carefully the scope for improving the rate of return through increased cost efficiency. But preliminary indications are that it will be necessary to increase prices by an overall average of 8 to 9 per cent on 1 April 1988 and substantially less in the following year. There is likely to be some variation around these figures for individual Boards and different groups of customers.

I am determined that Britain will have a modern, secure and efficient electricity supply industry in the years ahead. This will involve a massive investment programme and that in turn demands an improved rate of return for the industry.





FROM: A C S ALLAN

DATE: 3 November 1987

MR M L WILLIAMS

cc PS/Chief Secretary

Mr Monck

Mr D J L Moore

Mr R I G Allen

Miss O'Mara

Mrs Diggle

Mr Tyrie

*Mr Turnbull***ELECTRICITY PRICES**

The Chancellor feels that, in the light of the press stories today, he will have to be more forthcoming this afternoon than simply to say that electricity prices are for the industry to decide in the light of EFLs and financial targets. He feels he should confirm that electricity prices are likely to rise by [8½ per cent], but highlight the massive expansion in investment planned. It would be more helpful for Mr Parkinson for the information to come out in this way than via a separate announcement.

2. The Chancellor would therefore be grateful if you could agree a line with Department of Energy, and provide figures for past and prospective increases in electricity prices and for investment.
3. I should be grateful for this by noon today.

*ACSA*

A C S ALLAN





FST  
p/pri/3

HOUSE OF COMMONS

LONDON SW1A 0AA

5th November 1987

MR MCWILLIAMS  
ASST PS FST  
SIR P. MIDDLETON  
SIR T. BURNS  
MR MONCH  
MR OUL MOORE  
MRS DIGGLE

I thought it would be helpful to write to colleagues before the weekend about the new financial targets set for the electricity industry in England and Wales from next April.

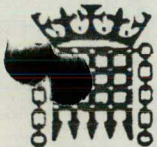
The background is that the industry faces a massive investment programme. Due to a concentrated construction programme in the 1960s and 1970s, a large number of power stations will reach the end of their lives over a short period from the mid-1990s. The industry estimates that this - as well as increasing demand arising from economic growth - will mean that we will need 10 very large power stations by the year 2000 to ensure that the lights don't go out; even more capacity will be required immediately afterwards.

The industry expects that £15 billion will have to be spent at 1987 prices on the first family of PWRs and new coal stations which are required by the year 2000. There will also be a further investment, over the same period, of £10 billion on the stations that are required by 2003. In addition, there is an investment requirement of £5 billion on transmission, desulphurisation and other generation-related projects. Taken together, this adds up to a total programme costing £30 billion at today's prices, or almost £45 billion at estimated outturn prices.

At present, the electricity industry is not generating enough income to finance this programme. This year, its current rate of return is just 2.45% - well below the target for nationalised industries that even the last Labour Government laid down. We have therefore agreed the following revised targets: 3.75% for 1988/89 and 4.75% for 1989/90. This is still low compared with the average of over 10% in the private sector last year.

The new financial targets are likely to lead to a price increase of 8-9% next April, followed by a considerably smaller one the year after. But I am also determined that the industry does something about its costs, so that the customer doesn't have to pick up the whole bill for future investment. Any industry with a wages bill of £2 billion a year must have scope for considerable cost savings.





No electricity price increase is popular. But by next April, prices won't have gone up for three years. The 8-9% increase will be lower than the 11.3% rise in the RPI over that period. After April, domestic consumers will be about 6% better off than they were five years ago; the fall in real terms for industrial consumers has been even better. This compares with a 30% increase over inflation under the last Labour Government.

Electricity is estimated to account for about 2% of manufacturing industry's costs and around 1% for the economy as a whole. A price increase of 8-9% would therefore represent an increase in industrial costs of only about a sixth of one per cent. Special arrangements have been made for heavy users of electricity, and will continue to be made. British businesses pay less for their electricity than their rivals in France, Germany, the USA, Japan and almost all our industrial competitors. The attached tables show where we stand in world terms on both industrial and domestic prices. Even after the increase, I am confident that we will maintain a very competitive position.

Next April's price increase is likely to contribute 0.26% to the RPI. Pensioners and others in receipt of state benefits will be protected from the increase by index-linked uprating. In addition, we will continue to make special provision for people on low incomes - the elderly in particular. From 1978-1986, payments under the Heating Addition Scheme increased by 159%, compared with fuel price increases of 116%. From next April, this money will be included in the new Income Support Scheme.

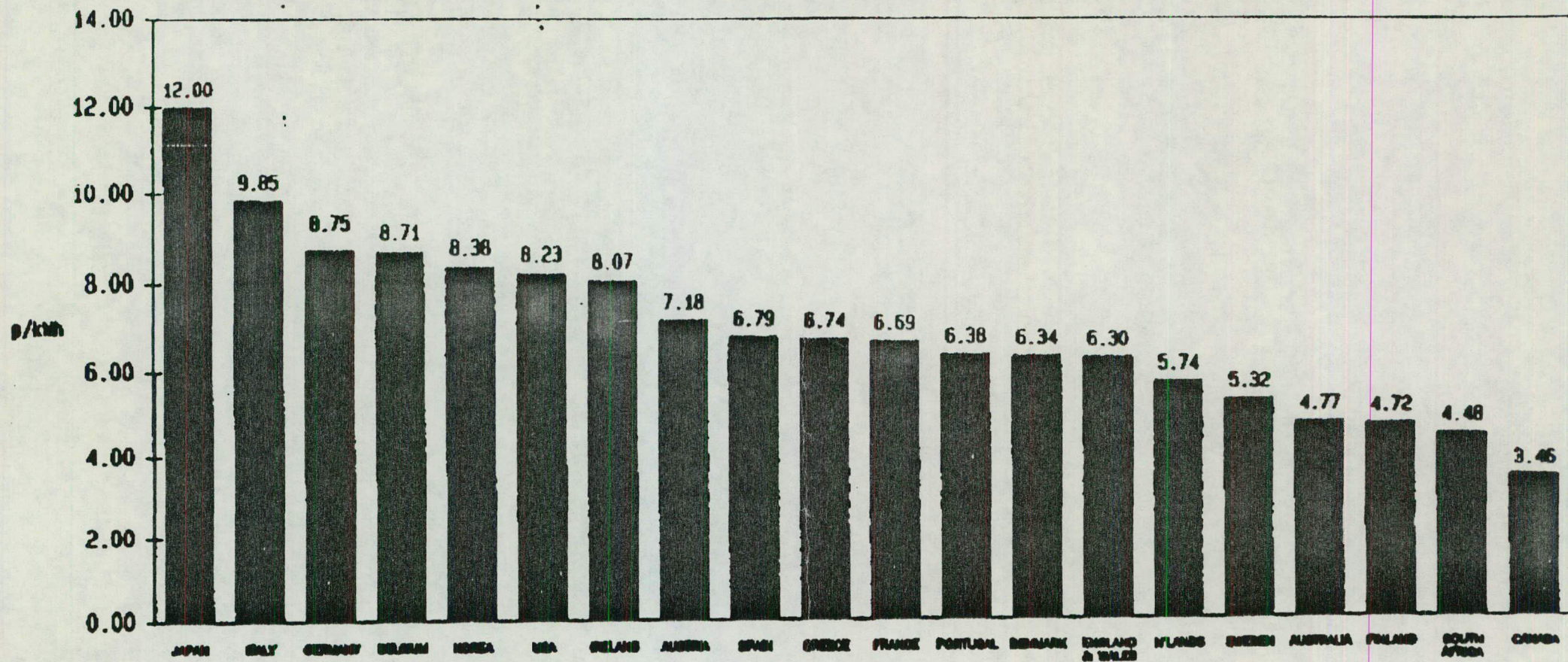
We will also press ahead with our financial assistance for people on low incomes to encourage them to insulate their homes and hence use less electricity. Since 1980, 400,000 homes - 60% occupied by pensioners - have been insulated at little or no cost to the people concerned. From next April, all low income households will qualify for 90% grants. We will also continue to monitor the Code of Practice on Disconnections designed to safeguard the least well off; this already ensures that no pensioner can be cut off in winter.

The investment programme would have to take place whether the industry was in private or state ownership. Privatisation and competition in generation will be a downward pressure on prices in the future, by making the industry more efficient and conscious of its costs.

CECIL PARKINSON



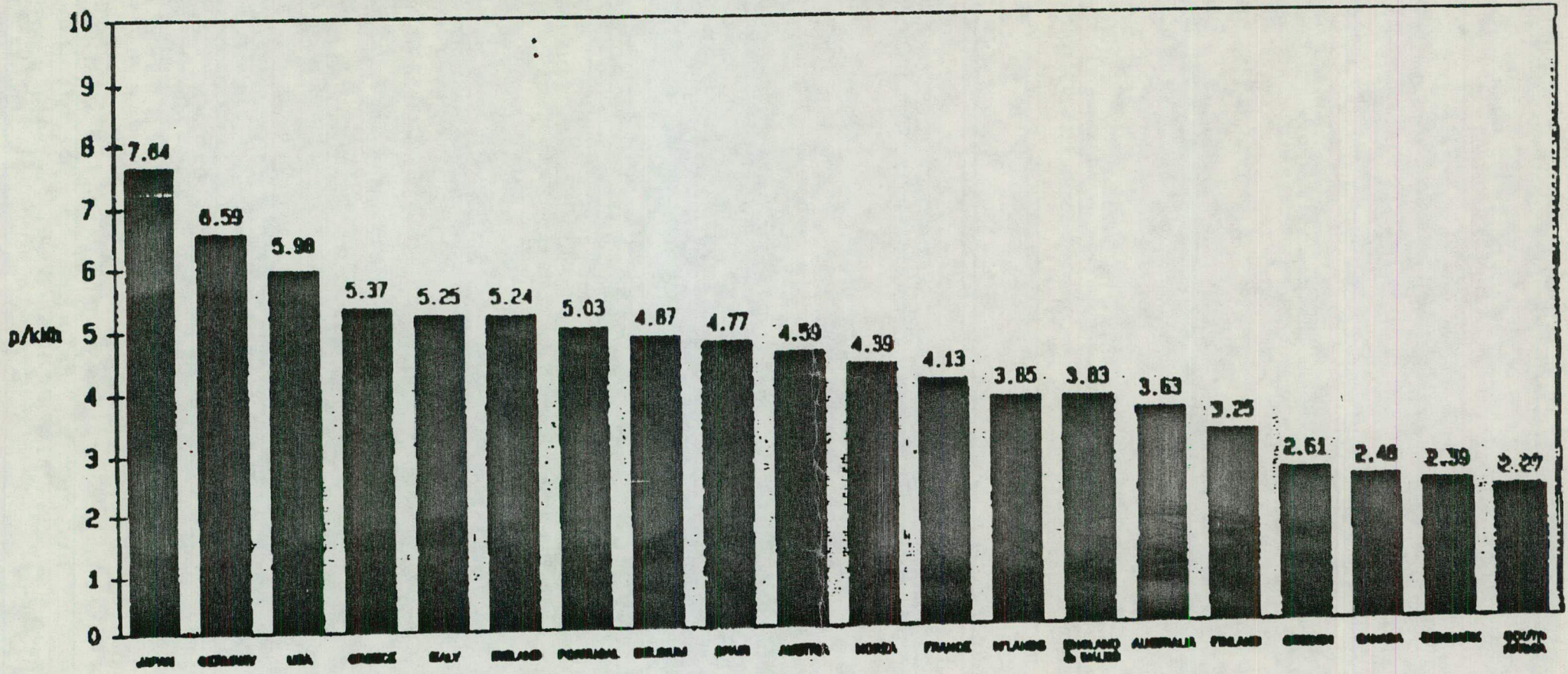
# WORLD DOMESTIC ELECTRICITY PRICES



Price per kWh for customer on standard domestic tariff using 3300 kWh/year, as at 1 October 1986.



# WORLD INDUSTRIAL ELECTRICITY PRICES



Price per kWh for typical 2.6 MW, 40% load factor supply, as at 1 October 1986.



Electricity prices

Debate, 5 Nov.

Speaking note

~~Cecil Parkinson's announcement yesterday about electricity prices and profits is a [nother] demonstration of our determination to foster sound and durable economic growth by putting the nationalised industries on to a firm commercial footing. This is hardly controversial. As long ago as 1978 the Treasury published a white paper which emphasised the importance of a sound economic and financial framework for nationalised industry planning.~~

2. The plain fact is that the electricity industry is earning an inadequate return - inadequate as a return on the taxpayers' investment over the years, and inadequate to meet the requirements of the investment programme which is just beginning to deal with the growing need for new generating capacity. Over the last few years when there were more power stations than we needed, rising demand could be accommodated quite cheaply without buying expensive hardware. Now that the surplus has run out, lifting profits is the normal commercial response.

Defensive points

(a) For industry to determine prices consistent with profit requirements of financial target. Agree likely to be in range 8-9%.

(b) Cannot comment on any particular Area Board's possible price increases.

(c) Reject accusation of fattening for privatisation. Profit improvement justified on its own merits irrespective of privatisation.

(d) Scale of investment programme: already begun with Sizewell. Hinkley Point PWR under consideration. Agree programme will exceed #10bn before end of century. Do not confirm CEGB figure of #40bn which is questionable.

(e) Domestic electricity prices cheapest in Europe. Down 15% in real terms in last 5 years.

Factual

	1988-89	1989-90
New targets (CCA)	3.75%	4.75%
Probable price increases (do not reveal)	8.8%	6%



UNCLASSIFIED

FROM: M L Williams

DATE: 5 November 1987

CHIEF SECRETARY

cc Chancellor  
 Financial Secretary  
 Sir P Middleton  
 Sir T Burns  
 Mr F E R Butler  
 Mr Monck  
 Mr Moore  
 Mr Turnbull  
 Mr Burgner  
 Mr R I G Allen  
 Miss O'Mara  
 Mrs Diggle  
 Mr Tarkowski  
 Mr Tyrie

*This is a copy of the report  
 @ minute copy done  
 a tip of the iceberg.  
 Large-scale elec consumer  
 mlt to get 2 million  
 Jan 88*

**ELECTRICITY PRICES**

You may already be aware of the concern being expressed by industrialists that the average 8-9% increase in electricity prices next year is going to mean much higher increases in prices to industrial consumers. For example, ICI told us today that, from their contacts with area boards, ~~that~~ they were expecting price increases throughout the country of the order of 15% next April with a further 10% before the end of the year.

2. Increases of this order would clearly be very badly received by industry, and would in consequence be damaging in the context of our prices strategy for electricity in the run up to privatisation. In fact, no decisions on detailed price increases next April have yet been made. The Electricity Council have yet to break down the financial target set for the industry as a whole into separate targets for the area boards; and technical work on the structure of the CEBG's tariffs is incomplete. Certainly there are a number of technical reasons why tariff increases will vary both by area and by class of customer, but we have no reason to expect differences to be as great as these scare stories imply. I suspect that some of the potential differences have been magnified by the area boards for their own "political" reasons.



3. Mr Parkinson is equally concerned by these reports and spoke to Sir Philip Jones today. As a result, the Council have issued a press release dampening down speculation ( I will circulate a copy as soon as I have it). The main line to take is that no decisions have been made.

4. This minute is primarily for information. I do not suggest that you need to take any action; but were you or other Treasury Ministers to cross paths with Mr Parkinson you might like to stress the importance for our wider objectives of avoiding an increase for industry that was generally and substantially out of line with that for other customers, making it all the more difficult to cope with criticisms of the average price increase.



M L WILLIAMS