

June 1999

**REVIEW OF DOMESTIC AND SMALL BUSINESS
ELECTRICITY SUPPLY PRICE REGULATION**

A Consultation Document

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1. INTRODUCTION

The present regulatory controls on the Public Electricity Suppliers' (PESs' supply businesses' prices to designated customers¹ are intended to expire on 31 March 2000. This document reviews the existing price controls and associated standards of service and seeks views from interested parties on how PES supply businesses' prices should be regulated beyond 1 April 2000.

The review of the PES supply price controls takes place against a background of developing competition for designated customers. The PES statutory monopolies to supply electricity to these customers have been progressively removed between September 1998 and May 1999.

This review will be informed by an assessment of the development of competition for designated customers. OFFER is publishing a competition assessment in June. Some of the issues raised in the competition assessment are discussed further in this document.

The review of the PES price controls is also being undertaken in parallel with the Office of Gas Supply's (OFGAS') review of British Gas Trading's (BGT's) supply price control. OFGAS issued a similar consultation document on BGT's price control review on 2 June 1999.

The statutory duties imposed on the Director General of Electricity Supply (DGES) in the Electricity Act 1989 and on the Director General of Gas Supply (DGGS) in the Gas Act 1986 (as amended by the Gas Act 1995) are similar. Certain PESs and BGT are undertaking significant marketing initiatives involving a combined gas and electricity supply service to the domestic market. It is appropriate therefore to ensure that the two price control reviews are suitably co-ordinated.

The first part of this document sets out relevant background. The second part of this document invites comments on the principles to be applied and the suitable form of regulatory controls on PES supply business prices beyond 1 April 2000.

¹ Designated customers are those who consume less 12,000 kWh per year and/or are defined as domestic customers under the PES licence.

OFFER wishes to conduct the review of the PES supply price controls in as open a way as possible and to take account of the views of all interested parties. If you wish to express a view on the issues raised in this document, it would be helpful to receive your comments by no later than 9 July 1999. Responses should be addressed to:

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It is open to respondents to mark all or part of their responses as confidential. However, we would prefer, as far as possible, that responses are provided in a form that can be placed in OFFER's library.

If you have any queries concerning issues raised in this document, Shaun Kent on 0121-456-6254 (or e-mail: skent@offer.gsi.gov.uk) or Colin Green on 0121-456-6385 (or e-mail: cgreen@offer.gsi.gov.uk) will be pleased to help.

PART I - BACKGROUND

2. CONTEXT OF THE REVIEW

2.1 Developments and information

2.1.1 Developments since the last review

Since the present maximum price restraints took effect in April 1998, there have been and continue to be a number of significant developments in the electricity industry. The supply market has been fully opened to competition over the period September 1998 to May 1999. There have been new regulatory initiatives, affecting this newly competitive supply market. Other developments include recent mergers and acquisitions activity involving electricity businesses, and new and proposed government legislation affecting utility regulation.

A number of these developments have significant implications for the present review of supply price restraints, which are summarised below.

a) development of competition in the supply market

All electricity customers are now able to take competitive supply. Competition is a primary protector of customers' interests. At present, designated customers also receive protection in terms of prices paid through the operation of the maximum price restraints. As competitive forces develop, there is likely to be a reduced need for explicit protection of customers' interests through formal price restraints. The present review will need to consider the development of competition, the protection it affords customers, and the need for additional protection in the form of price restraints.

b) proposals for separation

At present PESs carry out both distribution and supply activities. The integrated nature of certain of these PES activities raises concerns that the future growth of competition in supply and metering activities may be hindered. In the light of these concerns OFFER published a paper on 19 May 1999 on the separation of businesses (*Separation of Businesses: Proposals and Consultation*). The paper proposes

enhanced arrangements for the separation of PES distribution and supply businesses. In order to promote the development of competition in metering, the paper proposes the transfer of meter reading and data aggregation activities from distribution to supply. An initial estimate of the resulting changes to cost allocations and attributions is set out in OFFER's May consultation paper on the distribution price control review, *Reviews of Public Electricity Suppliers 1998 to 2000 Distribution Price Control Review Consultation Paper*.

The present supply review will need to consider the impact of the separation proposals both on the development of the competitive market and in terms of costs which may arise as a result of the separation.

c) the generation market

In November 1997, the Government in conjunction with OFFER, announced that OFFER would undertake a Review of Electricity Trading Arrangements (RETA). One outcome of RETA is a proposal to replace the present Electricity Pool with bilateral trading arrangements that more closely resemble the operation of other commodity markets. Until these new arrangements are properly established there is some additional uncertainty about the future level of generation costs. There is also uncertainty about the costs of implementing RETA and whether these might have an impact upon the PES supply businesses.

OFFER has also addressed, and continues to address, the competitive position in the generation market. At privatisation, two generators, National Power and PowerGen between them owned 78 per cent of generation capacity in England and Wales. In 1994, OFFER investigated persistently high Pool prices and as a result secured an undertaking from National Power and PowerGen that they would dispose of 4000 MW and 2000 MW of generating capacity respectively. The subsequent disposal reduced the two companies' market share of generation capacity. Together both companies now have a share of total England and Wales generation capacity of about 47 per cent. PowerGen has acquired East Midlands and announced the sale of generating plant with the capacity of about 4000 MW; National Power has acquired the supply business of Midlands and is reported to be conducting a sale process for Drax (approximately 4000 MW).

In October 1998, the Government published its *Conclusions of the Review of Energy Sources for Power Generation and Government Response to Fourth and Fifth Reports of the Trade and Industry Committee*. In this, the government noted that security and diversity of supply could be put at risk by new gas-fired plant, and that the speed of introduction of this type of plant seemed due to a number of distortions in the market rather than underlying economics. The Government confirmed its intention therefore to adopt, for the time being, a broad policy not to grant consents for the construction of new natural gas-fired generation. In the short term this will restrict entry and limit competition in the generation market.

d) the regulatory framework

In March 1998, the Government published a Green Paper *A Fair Deal for Consumers Modernising the Framework for Utility Regulation* outlining proposals to modernise the framework for utility regulation. The subsequent July 1998 White Paper *A Fair Deal for Consumers Modernising the Framework for Utility Regulation; the Response to the Consultation* outlined a number of conclusions that will influence electricity regulation in the future. For instance the White Paper :

- provides for the merger of OFFER and OFGAS;
- proposes that the regulator should have a single primary duty to exercise the functions assigned to him in a manner that best promotes the interests of the consumer, wherever practical and cost effective, through promoting effective competition;
- proposes that the regulator should have a separate duty to pay due regard to social and environmental guidance from Government; and
- proposes the establishment of independent Consumer Councils dealing with customer complaints.

In November 1998, the Competition Act 1998 received Royal Assent. The Act aims to encourage the development of competition and the prevention of anti-competitive practices across the economy. It prohibits for example companies from exploiting a dominant position by charging discriminatory prices. It gives the DGES powers to apply and enforce its provisions in the electricity sector.

e) social initiatives

The Government's March 1998 Green Paper noted that securing a fair deal for all domestic customers, including the most vulnerable, was at the heart of the Government's review of utility regulation. It called for the gas and electricity regulators to establish an action plan to ensure efficiency, choice and fairness in the provision of gas and electricity to disadvantaged consumers.

OFFER and OFGAS published a joint Social Action Plan in June 1998, with a further document in May 1999 the *Social Action Plan : Discussion Document*. The DGES has also established that one of the priorities for the new regulatory organisation for electricity and gas is to give appropriate consideration to the social and environmental impact of regulation.

The May 1999 Social Action Plan for example highlights the use of prepayment meters (PPMs). Customers using such meters typically pay more for electricity consumed than customers using alternative methods of payment. PPM customers may also have received relatively fewer benefits from the opening of the competitive market.

In considering revised arrangements for price restraints it will be necessary to take into account the points raised by social initiatives. In general, it is to be expected that competitive forces and the provisions of non-discrimination conditions would cause tariffs to become more cost reflective. Such movement may result in price increases for some customers, particularly those customer groups which cost more than average to supply, and so may be in conflict with the desirability of addressing the needs of disadvantaged customers. It is for consideration how revised arrangements might operate in the light of these conflicting forces.

f) energy efficiency

Section 41 of the Electricity Act 1989 enables OFFER to determine Standards of Performance for PESs regarding the efficient use of energy by customers. OFFER set revised energy efficiency standards of performance in April 1998.

The costs to PESs of meeting these standards were taken into account in setting the present restraints and equate to about £1 per customer per year. The revised standards aimed at targeting customers covered by the existing price restraints and those least likely to benefit initially from the introduction of competition.

The Act gives no power to OFFER to set Standards of Performance for second tier suppliers. Obligations on PESs alone may have the potential to distort the competitive market. It is for consideration whether the current levels of energy efficiency standards are distorting competition.

In its review of utility regulation, the Government has proposed that Ministers should give guidance on social and environmental objectives. It is not yet clear how such future guidance might affect PESs, other suppliers, or both, in terms of energy efficiency standards of performance.

OFFER proposes to publish a separate consultation paper on energy efficiency matters later in the summer.

g) ownership structure of the industry

Since the time of the previous review of price restraints, there has been significant merger and acquisition activity which directly or indirectly may affect the supply review. The most significant transactions in this context have been :

- PowerGen's takeover of East Midlands (completed July 1998)
- Hydro-Electric's merger with Southern to form Scottish and Southern (completed December 1998)
- Electricité de France's takeover of London (completed December 1998)
- National Power's takeover of Midlands' supply business (completed May 1999)
- PowerGen's sale of two generating stations to Edison Mission Energy (announced 1999)
- National Power's proposed sale of generating stations.

Such merger and acquisition activity may have significant implications for the review of price restraints. It indicates a move towards a more vertically integrated structure

for the electricity industry. It raises possible concerns about market power of the newly formed vertically integrated companies which taken with the competitive situation in the wholesale generation market may have significant implications for this price control review.

A number of PESs have also become more vertically integrated over the period since the last review by acquiring generation assets. Eastern Group for example has purchased 6000 MW of generating capacity. PESs or groups that are vertically integrated make it more difficult to view supply and generation activities as separate markets, and may increase suppliers' ability to control input prices for their supply businesses. Such features may have implications for the form of protection appropriate to give the designated customers of these businesses.

The extent of vertical integration now present in the industry raises a number of issues in relation to the supply price control review, particularly whether :

- the combination of vertical integration and insufficient competition in the generation wholesale market risks giving companies incentives to keep generation prices high in order to deter competition;
- the vertically integrated companies may tend to behave in such a way as to favour their own supply businesses to the disadvantage of others, for instance in terms of what hedging products they are prepared to offer; and
- whether the increased matching of generation capacity and customer demand within a group leads to the risk of that group being more indifferent to the overall level of generation costs.

The issues are being investigated and may give rise to the need for continuing customer protection even as the market develops. It is for consideration whether different forms of price regulation would be appropriate for PES supply businesses which are part of vertically integrated groups.

A further feature of the emerging market structure has been the PESs entering the gas supply industry. 12 PESs now own gas supply businesses. This enables them to offer energy supply packages - the so-called 'dual fuel' deals to customers. Such offers may benefit from the PESs' ability to achieve savings in servicing such customers by, for example, maintaining only one set of customer records. It does

however also raise the possibility of PESs attempting to maintain electricity customers by predatory pricing in the gas market, or vice versa. There is a corollary in the gas market since British Gas Trading supplies electricity. This review will need to consider the implications for the development of competition, benefits offered to customers, and consequences for revised arrangements of such dual fuel offers.

2.1.2 Information and notation

In general, the information in this document comes from PESs' audited statutory and regulatory accounts, and from audited price control returns, the most recent year being 1997/98. Certain more recent information comes from the responses to the Business Plan Questionnaires that PESs have provided to OFFER for the purposes of reviewing the price restraints.

Information on PESs is presented on the basis of PES authorised areas, reflecting existing licensing arrangements. Therefore, while National Power now owns Midlands' supply business, Midlands continues to hold the PES licence for the Midlands area and so references are made to Midlands rather than National Power. Certain information is presented on the basis of the historic development of the electricity market and the associated reporting requirements on the PESs. For example, until the financial year 1997/98, a supply price control applied to all customers with a maximum demand of less than 100 kW. This document reports certain information using this definition, even though the increasing presence of competition may make such definitions less useful in future.

2.2 Structure of PESs

There are 14 PESs in Great Britain: 12 in England and Wales, which are sometimes called Regional Electricity Companies (RECs); and 2 in Scotland. Under the terms of their licences, the primary licensed activities of the PESs are distinguished as distribution (the transportation of electricity over the low voltage regional networks) and supply (the purchase and sale of electricity to customers). Each PES also carries out a number of other related activities.

The supply of electricity by a PES to customers in its own area is known as a PES's first tier business. The supply of electricity to customers outside its own area is known as a PES's second tier business. All PESs have first tier and second tier supply businesses. The supply market can be further distinguished between supply customers taking less than 12, 000 kWh a year (designated customers, whose prices are presently subject to price restraint) and those above that limit (non-designated customers to whose prices the price restraints do not apply).

2.3 The PES supply businesses

The PESs' supply businesses vary both in size and in the number of customers that they serve. Hydro-Electric, for example, has an authorised area that covers approximately one quarter of mainland Great Britain, but has only 2 per cent of all customers consuming less than 100kW. Table 1 sets out, for each PES, the number of designated customers, and the volume of electricity supplied to those customers.

Table 1 - PES Supply businesses - designated customer statistics

PES	Number of Designated Customers	Customer Numbers as a proportion of Customers in Each PES Area	Electricity Supplied to Designated Customers	Volume as a Proportion of Electricity Supplied in Each PES Area
	000's	%	GWh	%
Eastern	3004	94	13973	45
East Midlands	2252	98	9115	35
London	1822	89	6675	31
Manweb	1274	98	5205	28
Midlands	2165	96	9066	36
Northern	1313	92	4843	31
NORWEB	2124	96	8741	38
SEEBOARD	1932	95	8567	46
Southern	2504	96	11644	41
SWALEC	942	97	3369	28
South Western	1264	93	6006	44
Yorkshire	1935	96	7544	32
Scottish Power Hydro-Electric	1702	96	8609	40
	603	95	3821	48
Total	24836	95	107178	37

Designated customers account for about 95 per cent of all customers in Great Britain, and so the price restraints are an important part of the protection offered to the vast majority of customers. In terms of volume, consumption subject to the price restraint forms on average about 37 per cent of all electricity sold in Great Britain and therefore forms a smaller but nevertheless significant proportion of total electricity supplied.

2.4 Breakdown of PES supply business activities

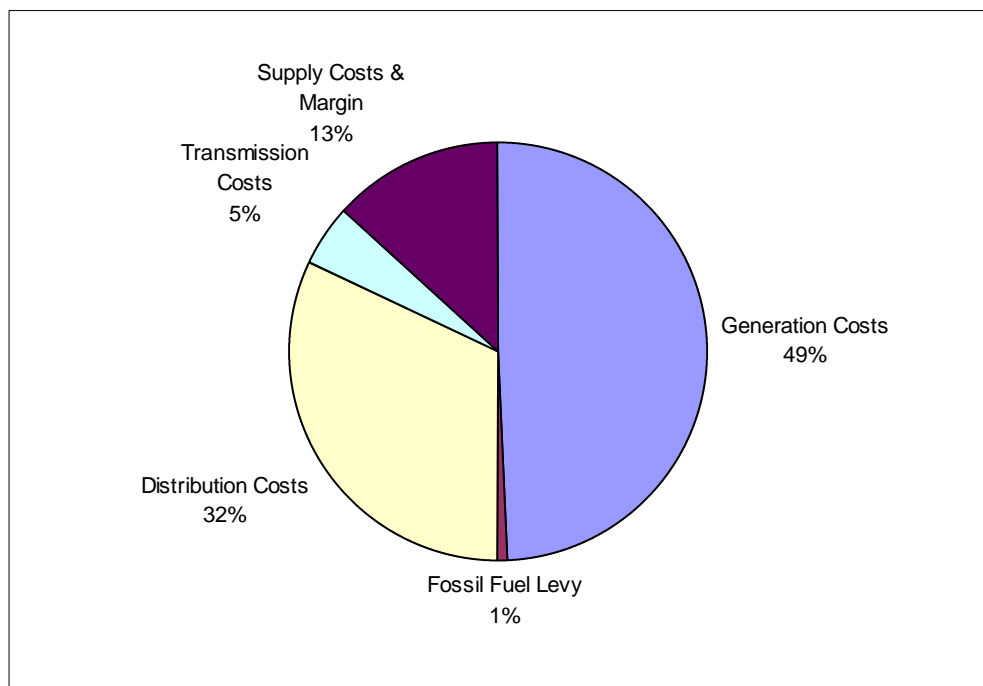
Each PES supply business carries out the following functions :

- purchases electricity;

- strikes contracts with counterparties affecting its generation costs;
- procures the transportation of electricity across the transmission and distribution systems as well as procuring certain other distribution services;
- provides customer service functions such as billing and account handling, as well as meter reading and related services (the costs of which are referred to as supply costs);
- earns a profit margin on its supply business activities; and
- pays a contribution to the 'fossil fuel levy' (FFL), which contributes to funding electricity generation from non-fossil fuel sources. At 1 April 1999, the rates were 0.7 per cent in England and Wales, and 0 per cent in Scotland.

Figure 1 shows how these elements make up a typical domestic customer's bill. This is based on a consumption level of 3300 kWh per year.

Figure 1 - Breakdown of a typical domestic bill (1998/99)



Notes:

Breakdown based on average breakdown across all 14 PESs.

All figures exclude VAT.

Generation costs account for the largest proportion of the typical domestic customer's bill at around half of the bill. Transmission and Distribution costs make up slightly more than a third of the bill. Supply costs, together with the FFL, make up the remainder.

As well as supply and distribution, most PESs have interests in generation and/or are part of wider groups who have interests in generation in Great Britain. In many cases these relationships have changed substantially over the duration of the existing supply price control. Table 2 sets out a summary of the position in respect of each PES.

Table 2 - PESs' and associated parent company generation capacity

PES Supply	PES Generation MW¹	Group	Group GB Generation Capacity⁸ MW
Eastern	6873 ²	Texas Utilities Company	USA
East Midlands	5 ³	PowerGen	UK 13983 ⁹
London	126	Electricité de France	France 2126
Manweb	-	Scottish Power	UK 4140
Midlands	-	National Power ⁴	UK 16056 ⁹
Northern	318	CalEnergy	USA
NORWEB	44	United Utilities	UK
SEEBOARD	263	Central and South West Corporation	USA
Southern	711	Scottish and Southern Energy ⁵	UK 3900
SWALEC	168	Hyder	UK
South Western	164	Pennsylvania Power & Light Global (51%) & Southern Company ^{6,7}	USA
Yorkshire	-	American Electric Power & New Century Energy	USA
ScottishPower	4140	Independent	UK 4140
Hydro-Electric	3900 ¹⁰	Scottish and Southern Energy ⁵	UK 3900

Notes

Total generation capacity in England and Wales is approximately 63902 MW.

1. Where PES has an equity stake in power project, PES generation capacity is taken as equity share multiplied by project's generation capacity.

2. Includes 6000 MW of generating plant divested to Eastern Energy.

3. East Midlands previously held an 80% interest in Corby Power. This remained with Dominion Resources following the sales of East Midlands to PowerGen.

4. National Power owns Midlands' supply business interests. Avon Energy Partners; a company jointly owned by Cinergy (US) & General Public Utilities (US) in equal proportions, owns the remainder of Midlands.

5. Southern has become a wholly-owned subsidiary of Hydro-Electric, which has changed its name to Scottish and Southern Energy plc.

6. Pennsylvania Power & Light Global (PP&L) is the majority shareholder with 51% of shares that carry rights to earnings and dividends. Southern Company own the remaining 49% share but retain operational and management control of South Western and continue to hold a majority of the voting shares and directors. PP&L control 49% of the voting shares compared to the Southern Company's 51%.

7. The Southern Company is distinct from the PES Southern.

8. Group GB Generation capacity is the owner group's generation capacity within or into Great Britain.

9. PowerGen has agreed to sell about 4000 MW of generating capacity to Edison Mission Energy, due for completion in June 1999. National Power is conducting a sale process for Drax (about 4000 MW) expected to be completed in autumn 1999.

10. Hydro-Electric's Scotland only generation capacity is 2953 MW.

Moreover following acquisition of Midlands' PES supply business and East Midlands' (EME) by National Power (NP) and PowerGen (PG) respectively, each have become part of a group that owns substantial generation capacity.

At privatisation, the PESs were independent companies, separately listed on the Stock Exchange. All PESs have subsequently become parts of larger groups, and/or merged with other PESs or utilities. Where PESs have become part of larger groups, OFFER has sought to put licence conditions in place relating to financial ring-fencing which limit the activities in which the PES may be involved and aim to protect it from adverse financial circumstances which might arise elsewhere in its group.

To put these acquisition and merger activities into perspective, appendix A contains tables that list for each of the PESs, turnover and profit for their associated UK group together with that for the PES's distribution and supply businesses, for 1997/98. The table therefore excludes turnover from parent companies that are abroad. The tables illustrate that PES supply business activities are a major contributor to the total turnover of UK group activities. Nevertheless, the contribution to UK group profitability can also be seen to be relatively small.

3. THE REGULATORY REGIME

3.1 Introduction

This chapter describes the main elements regulatory regime relating to the PESs' supply businesses, which aims to protect customers' interests. A major component of this regime is the set of price restraints applying to PES supply to domestic and small business customers. Customers also benefit from certain Standards of Performance that PESs are obliged to meet.

In addition, customers are protected by licence conditions which prohibit PESs discriminating between customers or groups of customers; by the Competition Act 1998 which prohibits abuse of a dominant position in a market; and the Electricity Act 1989 which requires PESs to develop and maintain an efficient, co-ordinated and economical system of electricity supply.

As described in chapter two, the present regime also includes measures in respect of energy efficiency.

3.2 The Present Supply Price Restraints

The existing maximum price restraint arrangements are described in this section. A summary, setting out the equivalent arrangements in gas, is provided in appendix B.

The present price restraints apply to designated customers and came into force on 1 April 1998, and are due to cover the two financial years 1998/99 and 1999/00.

The restraints identify, for each PES, a list of tariffs that designated customers are able to take. The restraints apply to final prices (excluding VAT) and so cover all elements of cost; generation, distribution, transmission, supply business costs and margin, and the fossil fuel levy. The restraints allow for variations in the fossil fuel levy to be passed through into prices.

The restraints are expressed in the form of a tariff basket. The restraints specify that for each PES a weighted average of these tariff prices should increase no faster than

RPI-X, where the X value varied between PESs. Table 3 gives the X values applying to each of the PESs in the first year of the control. The quantities to be used in weighting the tariff basket were pre specified and are listed in the PES licences. Hence the restraint compares old and new prices using identical, pre specified quantities.

Table 3 – Supply Business X Factors 1998/99

PES	X Factor
Eastern	8.9
East Midlands	6.3
London	11.8
Manweb	5.8
Midlands	7.1
Northern	4.2
NORWEB	3.4
SEEBOARD	6.0
Southern	3.2
SWALEC	8.5
South Western	6.6
Yorkshire	3.7
ScottishPower	2.2
Hydro-Electric	4.0

The restraints also placed a number of supplementary conditions on the way prices could change on 1 April 1998. These were:

- the average price per unit for customers on standard domestic tariffs should not exceed the average price per unit applying to those customers on 1 August 1997, calculated using a consumption of 3300 kWh per year, adjusted by the X factor applicable to the PES in question;
- the average price per unit for customers on other domestic tariffs should fall by at least 3 per cent in real terms;
- the standing charge to domestic customers should not increase in real terms;
- excluding the prepayment meter surcharge, the average price per unit to prepayment meter customers should be reduced in line with the average price per unit in the comparable domestic tariffs;
- the prepayment meter surcharge should not increase; and
- the average price per unit on all other tariffs for customers within the scope of the restraint should not increase in real terms.

Table 4 shows the price reductions for different tariff classes from April 1998. In fact, reductions in England and Wales were greater than those indicated by the headline X factors because the rate of the FFL was reduced from 1 April 1998, from 2.2 per cent to 0.9 per cent. This reduction applied to all the supplementary restraints.

In the second year of the control, 1999/00, the restraints specify that all prices of the listed tariffs applying on 31 March 1999 must fall by at least 3 per cent in real terms.

Table 4 – Effective Restraints on Price April 1998

PES	Standard Domestic Required Real Reduction (%)	Other Domestic Required Real Reduction (%)	Non-Domestic Required Real Reduction (%)
Eastern	10.1	4.3	1.3
East Midlands	7.5	4.3	1.3
London	13.0	4.3	1.3
Manweb	7.0	4.3	1.3
Midlands	8.3	4.3	1.3
Northern	5.5	4.3	1.3
NORWEB	4.7	4.3	1.3
SEEBOARD	7.2	4.3	1.3
Southern	4.5	4.3	1.3
SWALEC	9.7	4.3	1.3
South Western	7.8	4.3	1.3
Yorkshire	5.0	4.3	1.3
ScottishPower ¹	1.8	1.8	-0.4
Hydro-Electric	4.0	3.0	0.0

Notes:

1. Scottish Renewables Order levy rate applying to Scottish PESs was increased from 0.4 per cent (effective rate) to 0.8 per cent from 1 April 1998, resulting in lower required real reductions than the headline rate. Hydro-Electric price tariff exclusive of this levy, so the required reduction and X factor match.

The price restraints were set for the financial years 1998/99 and 1999/00. The arrangements provide default conditions for subsequent years should new arrangements not be agreed with the PESs. These defaults specify that maximum prices to be charged to designated customers should not rise faster than inflation, that is, should remain constant in real terms.

The restraints may be terminated or modified according to procedures set out in each PES's licence. A PES may deliver to the DGES a disapplication request, which asks for some or all of the provisions of the restraints to cease to have effect. Should the DGES agree to such a request, the relevant parts of the restraints would no longer be in force, from an agreed date.

Failing agreement, the DGES can refer the matter to the Competition Commission. In any event, unless the DGES agrees, no disapplication request may have effect before 31 March 2000. To date, no disapplication requests have been received.

3.3 Standards of Performance

Sections 39 and 40 of the Electricity Act 1989 enable the DGES to set certain Standards of Performance that the PESs are required to meet, and which are designed to maintain levels of service for customers. OFFER has set such standards for the PESs. PESs are also required to report on whether or not they have met these standards.

There are two types of standards, guaranteed and overall. Guaranteed standards set service levels which must be met for every customer. If the company fails to meet the standard for an individual customer, it is liable to make a compensation payment to that customer. Overall standards apply where it is not appropriate to give individual guarantees but where, nevertheless, customers as a whole should receive certain minimum standards of service.

There are 11 guaranteed standards and 8 overall standards. Some relate to the PES distribution businesses while others relate to supply businesses and some to both. In March 1998, OFFER published proposals for revised and higher standards, which the PESs agreed to. These came into force in April and July 1998. Table 5 describes the present standards that relate to the supply business (and which may also relate to the distribution business).

Table 5 - Standards of performance relating to the supply business

SERVICE	PERFORMANCE LEVEL	PENALTY PAYMENT
Guaranteed standards		
Respond to customer queries about charges and payment queries	A substantive reply within 5 working days and agreed refunds to be paid within 5 working days	£20
Making and keeping appointments	Companies must offer and keep a morning or afternoon appointment, or a timed appointment if requested by the customer	£20
Notifying customers of payments owed under standards	Inform and make payment within 10 working days	£20
Overall standards		
Reconnection after cut off for non-payment	Reconnect 100% of customers before the end of the working day after they have paid or made arrangements to pay the bill	
Changing meters where necessary on change of tariff	Within 10 working days of domestic customers' requests in 100% of cases	
Meter reading	Ensure that the company obtains a firm reading for customers' meters at least once a year in a minimum percentage of cases	
Respond to customer letters	100% of customer letters to be responded to within 10 working days	

OFFER has no power to set Standards of Performance for second tier suppliers. The Government has said that it may in due course legislate for the supply businesses of PESs and other suppliers to be placed on a similar basis. If this were to occur, consideration would have to be given to the Standards of Performance that would apply to PESs and other suppliers.

However, the conditions of second tier supply licences place certain customer service obligations on second tier suppliers. For example, there is a duty to supply

designated customers on request. Suppliers are also obliged to produce codes of practice dealing, for example, with payment of bills and guidance for customers in difficulty, and for persons who are of pensionable age or disabled.

3.4 The Electricity Act 1989

Section 3 of the Electricity Act 1989 puts the DGES under a duty to exercise his functions in the manner which he considers best to meet the objectives set out in that section. The objectives first mentioned, which are sometimes referred to as the primary duties, are:

- to ensure that all reasonable demands for electricity are satisfied;
- to secure that licence holders are able to finance their licensed activities; and
- to promote competition in generation and supply.

Other objectives, which are sometimes referred to as the secondary duties because the Act makes them subject to the ones listed above, include:

- the protection of the interests of customers in respect of prices and quality of supply services; and
- the promotion of efficiency and economy.

The Act requires that, in protecting customers with regards to price, the DGES take account of the protection of the interests of consumers in rural areas and, with regards to quality of services, take into account the interests of those who are disabled or of pensionable age.

3.5 Electricity Suppliers' Licences

The Electricity Act 1989 provides for the DGES to license electricity suppliers. It provides for two types of supply licence. One, the PES licence, regulates a PES's core activities, including distribution and supply. From 1990, PES licences have authorised supply to all types of customer in the relevant authorised area, including

designated customers. The other, a second tier supply licence, licenses second tier suppliers to supply the market but may prohibit supply to designated customers. All supply licences that permit supply to designated customers contain a number of extra obligations in respect of designated customers.

a) General obligations

All suppliers entitled to supply designated customers are required to supply (and continue to supply) electricity in the areas covered by their licences to every designated customer who requests such a supply at premises connected to the system, subject to certain caveats. In addition, each supplier must make available its terms of supply on request.

b) Customer service obligations

There are a number of customer service obligations on suppliers entitled to supply designated customers. For example, such suppliers are required to prepare codes of practice:

- setting out the ways in which the licensee will make available to its customers guidance on the efficient use of electricity;
- detailing the special services the licensee will make available for domestic customers who are of pensionable age or chronically sick;
- concerning the payment of electricity bills by domestic customers, including appropriate guidance for the assistance of such customers who may have difficulty in paying such bills; and
- detailing the procedure for handling complaints.

c) Non-discrimination conditions

The Electricity Act 1989 prohibits PESs, in fixing tariffs, from showing undue preference to, or exercising any undue discrimination against, any person or class of persons.

In addition, all supply licences contain a condition (condition 4A in the PES licence, condition 4 in second tier supply licences) that prohibits discrimination in supply,

where the supplier is in a dominant position in a market. In November 1997, the DGES determined that each of the 14 PESs was dominant until otherwise notified in, amongst other things, the market comprising designated customers in its own authorised area.

The effect of this condition is to protect customers where there is little competition by prohibiting dominant suppliers from targeting certain customer groups. Such a supplier may not offer any class of person 'unduly onerous' terms. Terms are unduly onerous if the resulting revenue significantly exceeds the cost of supply and exceeds such costs significantly more than in the case of other customers.

Protection is also given where competition is emerging, but not yet established. A supplier is prohibited from discriminating between customers in any market in which it is dominant. Nevertheless it may respond to competition as it emerges, provided that the response does not itself involve discrimination between customers in that market. Thus there is no bar to a supplier reducing prices to some customers in response to emerging competition, but failure to make a corresponding reduction to the remaining customers in the same market might be discriminatory.

The condition also prohibits suppliers from offering terms that are predatory; that is, from offering terms which are below cost, with the aim of distorting or preventing competition. There are also provisions in the Competition Act 1998 that will impact on discrimination by companies in a dominant position.

3.6 Competition legislation

The DGES has concurrent powers with the Director General of Fair Trading under the Fair Trading Act 1973 and the Competition Act 1980. In relation to these concurrent powers OFFER works in conjunction with the Office of Fair Trading (OFT) under the terms of the OFFER/OFT Concordat. In exercising his functions under this competition legislation, the DGES must act in accordance with his duties under the Electricity Act 1989.

The Competition Act 1998 is intended to come into force on 1 March 2000 and replaces much of the existing competition legislation. It also replaces the Monopolies and Mergers Commission with the Competition Commission, which is to have certain

new duties and powers. It brings UK competition law into line with EU competition law.

The Competition Act 1998 aims to encourage the development of competition and discourage anti-competitive practices. The Act introduces two prohibitions, called the 'Chapter I' and 'Chapter II' prohibitions. Chapter I prohibits agreements between undertakings that have as their object or effect the prevention, restriction, or distortion of competition. Chapter II prohibits conduct by one or more undertakings which amounts to the abuse of a dominant position. The Act allows for fines of up to 10 per cent of UK turnover to be imposed on companies breaching these prohibitions.

The utility regulators are empowered to apply and enforce the provisions of the Act. Hence the DGES may use the Act's powers to investigate, for example, anti-competitive agreements or abuse of a dominant position.

4. EXPERIENCE UNDER THE PRESENT REGULATORY FRAMEWORK

4.1 PES prices against maximum price restraints

Against the background of emerging competition, a comparison of PES prices against those allowed under the maximum price restraints might indicate how much competitive pressure the PESs are facing on their tariffs. Table 6 compares the required overall real reduction in average prices against those achieved. Most PESs were, in aggregate, at 1 April 1998 pricing at about the level specified by the restraints. The main exception to this is Midlands, who set prices on average 1.1 per cent lower than that required by the price restraints. Midlands did so in order to compensate customers from higher prices charged in 1997/98 than that allowed under the price control then in operation.

As described above, the restraints also included supplementary restraints on domestic and other bills. Table 7 lists for each PES the minimum reduction required for a standard domestic bill, all other domestic bills, and non-domestic bills. For some PESs, for example South Western and Yorkshire, domestic bills fell more than the restraints required. Such reductions over and above the requirements of the restraints are at the discretion of the PESs concerned.

The picture for 1 April 1999 is more complex, because the price restraints allowed other circumstances to affect the necessary price reductions. For example, there were financial penalties on companies that were late in opening their areas to competition. These financial penalties were levied on companies in the form of additional price reductions to customers. However, taking these adjustments into account, prices at 1 April 1999 were on average at about the level specified by the price restraints for most PESs.

Over the period covered by the price restraints, a number of companies have introduced new tariffs. Some, for example, have introduced 'green' tariffs. These tariffs are, in general, designed to allow customers to pay a small surcharge on bills, which contributes to funding renewable or non-fossil fuel generation sources.

Table 6 - Performance relative to the first year of the price restraints (April 1998)

PES	Required real	Achieved real	Distance below
	reduction	reduction	price restraints
	%	%	%
Eastern	10.1	10.1	0.0
East Midlands	7.5	7.5	0.0
London	13.0	13.0	0.0
Manweb	7.1	7.1	0.0
Midlands	8.3	9.4	1.1
Northern	5.5	5.5	0.0
NORWEB	4.7	4.7	0.0
SEEBOARD	7.3	7.3	0.0
Southern	4.5	4.5	0.0
SWALEC	9.7	9.7	0.0
South Western	7.8	7.8	0.0
Yorkshire	5.0	5.0	0.0
ScottishPower	1.8	1.9	0.1
Hydro - Electric	4.0	4.3	0.3

Table 7 - Performance relative to the supplementary price restrictions 1998/99

	Standard Domestic Tariff		Other Domestic Tariffs		Non-Domestic Tariffs	
	Required real	Achieved real	Required real	Achieved real	Required real	Achieved real
	Reduction	reduction	reduction	reduction	reduction	reduction
	%	%	%	%	%	%
Eastern	10.1	11.4	4.3	5.1	1.3	7.0
East Midlands	7.5	7.6	4.3	4.3	1.3	3.6
London	13.0	13.0	4.3	5.6	1.3	4.2
Manweb	7.0	7.0	4.3	7.0	1.3	2.1
Midlands	8.3	10.0	4.3	4.9	1.3	4.8
Northern	5.5	5.5	4.3	4.6	1.3	3.6
NORWEB	4.7	4.8	4.3	4.3	1.3	3.8
SEEBOARD	7.2	7.2	4.3	5.6	1.3	3.4
Southern	4.5	4.6	4.3	4.3	1.3	1.3
SWALEC	9.7	9.7	4.3	4.5	1.3	6.4
South Western	7.8	8.2	4.3	4.3	1.3	3.6
Yorkshire	5.0	6.0	4.3	4.3	1.3	4.2
ScottishPower	1.8	1.8	1.8	1.8	-0.4	-0.4
Hydro - Electric	4.0	4.2	3.0	3.3	0.0	0.5

4.2 PES prices against second tier supplier prices

In the context of PES prices being close to those allowed under the price restraints, it may be instructive to compare PES prices against those being offered to second tier customers in their area.

If the comparison were to show second tier prices materially lower than PES prices it might be reasonable to conclude that the effects of emerging competition were not yet strong enough to be affecting first tier prices. Such consideration would need to take into account whether second tier prices were distorted, for instance by short term entry strategies, and whether any differentials were justified with reference to PES specific costs.

If the pattern of differentials were to vary from PES to PES, it might be reasonable to conclude that the differentials in the existing price restraints might need to be adjusted.

Table 8 sets out an example comparison. It shows for each PES area the typical annual bill that a standard quarterly credit domestic customer would be charged by the incumbent PES in that area, based on prices in forces at 1 April 1999. For each area, the minimum, maximum and average savings available from other suppliers compared with the incumbent are given.

Table 8 – Comparison of Annual Bills for a Typical Standard Domestic Customer† 1999/00

PES Area	Eastern	East Midlands	London	Manweb	Midlands	Northern	NORWEB
Typical Annual Bill	£251	£254	£257	£278	£253	£276	£256
Minimum Saving	-£8	-£12	-£6	-£2	-£12	£9	-£2
Average Saving	£13	£7	£4	£11	£7	£18	£5
Maximum Saving	£25	£23	£20	£27	£23	£31	£23

PES Area	SEEBOARD	Southern	SWALEC	South Western	Yorkshire	ScottishPower	Hydro-Electric
Typical Annual Bill	£251	£255	£290	£274	£255	£274	£278
Minimum Saving	£3	-£1	-£6	-£5	£3	-£13	-£3
Average Saving	£10	£5	£4	£3	£12	£6	£17
Maximum Saving	£29	£24	£25	£17	£25	£25	£35

Note:

1. Calculated for a typical 3300 kWh standard domestic customer. Prices are inclusive of VAT.

4.3 Prices to domestic customers over time

Table 9 illustrates movements in standard domestic prices over time. Notwithstanding the points above, it shows that the existing restraints have been effective in reducing prices. Prices to domestic customers have generally fallen in nominal terms. In real terms, prices have fallen substantially; for example, for customers paying by quarterly credit meter, real prices have fallen on average by 10 per cent since 1 April 1997.

Table 9 – Annual Bill for a Typical 3300 kWh Domestic Electricity Customer (Nominal Prices)

PES	1 April 1997			1 April 1998			1 April 1999		
	Quarterly Bill ed £/year	Direct D e b i t £/year	Prepayment £/year	Quarterly Bill ed £/year	Direct D e b i t £/year	Prepayment £/year	Quarterly Bill ed £/year	Direct D e b i t £/year	Prepayment £/year
Eastern	259.22	253.89	273.39	239.00	233.34	250.95	239.00	233.34	250.95
East Midlands	254.49	249.49	275.93	244.26	234.26	265.46	241.95	231.95	263.15
London	271.75	260.68	283.14	246.13	236.13	256.75	244.81	234.81	255.42
Manweb	276.22	268.77	293.98	266.65	259.34	284.55	264.89	257.60	279.84
Midlands	257.44	249.85	266.92	240.88	233.65	250.36	240.88	233.65	250.36
Northern	275.32	267.06	290.66	270.07	261.97	285.38	263.32	255.42	278.78
NORWEB	248.82	240.56	247.49	245.84	237.59	260.99	244.15	236.24	260.60
SEEBOARD	257.90	253.90	275.90	233.61	225.61	250.44	233.61	225.61	250.44
Southern	264.74	261.44	281.09	242.82	238.20	257.85	242.82	236.52	255.84
SWALEC	302.06	294.34	329.62	283.58	276.52	309.47	276.32	269.26	301.61
South Western	273.78	268.30	284.83	261.24	256.02	272.29	261.24	253.40	272.29
Yorkshire	244.27	234.27	267.87	242.62	230.62	266.24	242.62	230.62	266.24
ScottishPower	258.57	254.57	274.79	263.09	259.09	279.31	260.89	252.47	274.11
Hydro-Electric	267.20	258.33	262.76	265.55	256.64	261.15	264.64	255.87	260.25
GB Average	265.13	258.25	279.17	253.24	245.64	267.94	251.93	243.76	265.70

4.4 PES performance over this period

Each PES is required to produce separate accounts in respect of its first and second tier businesses. Appendix D contains tables that set out the Profit and Loss account for PESs' first tier business for the two years 1994/95 and 1997/98, and for the second tier business for 1997/98. The appendix also contains a table setting out each PES's first tier supply business cash flow for 1997/98.

In general, both turnover and operating costs fell for the PESs' first tier businesses. Turnover fell partly because the operation of price controls has reduced prices, and partly because over the period companies will have lost larger business customers to second tier suppliers. Reported operating costs have also fallen on average. In real terms, average operating costs have fallen about 13 per cent over the period 1994/95 to 1997/98.

The combination of reductions in turnover and operating costs have resulted in per kWh average operating profits falling from 0.12 pence per kWh in 1994/95 to 0.06 pence per kWh in 1997/98. A number of companies have reported operating losses in the 1997/98 financial year. A reconciliation of operating profits to cash flows, given in table D.3, shows that this has not resulted in a net cash outflow for the companies concerned.

Consequently, average margins earned on turnover have fallen, from about 1.9 per cent in 1994/95 to just over 1 per cent in 1997/98. Companies have recently reported costs and margins for standard domestic customers for tariffs in operation at 1 April 1998, which suggests that margins for these customers vary from those suggested by aggregate accounts.

PART II - REVIEW

5. OBJECTIVES AND APPROACH

5.1 Objectives

Against the background of the DGES' statutory duties, including the duty to secure that a licence holder can finance its licensed activities, the review will have the following objectives:

(a) To promote competition

It is important that further or revised regulation does not prevent, restrict, or distort the development of the competitive market. This implies that the form of price and service regulation should take account of the development of competition. Regulation should be targeted on customers or customer groups requiring protection without curtailing the operation of competitive forces, such as the entry of new suppliers.

In electricity supply markets, there are at least two forms of market power. A PES may have market power simply because it is the dominant supplier. A PES or group may also have market power by being vertically integrated, reducing for example its reliance on other generation sources. The remaining objectives are designed to address the issue of protecting customers from the exercise of market power.

(b) To protect customers where competition is not effective

Some customers may not be able to rely on the forces of competition to protect their interests. It will be necessary therefore to put in place revised price restraints for these customers. Such price restraints should reflect an efficient level of costs, and may cover both absolute and relative prices.

(c) To provide incentives to efficiency

Efficiency gains can benefit customers by reducing the costs of their electricity supply and improving the range of offers available through innovation. Effective competition will provide a greater spur to efficiency than regulation.

However, to the extent that immediate or prospective competition cannot be relied upon to provide sufficient incentives to efficiency, it is important that this is redressed in the regulatory framework. This may be particularly important in the case of electricity generation purchase costs, which form about half of a domestic customer's bill. Revised regulatory arrangements should, so far as is practicable, encourage PESs to purchase economically from generators.

If a company can improve its profits by achieving efficiency savings, without compromising its standards of service beyond those envisaged when the price regulation is set, it should have a prospect of retaining benefit from such action.

(d) To protect standards of service

Customers who have limited choices are not able to select for themselves the level of service that they receive. In these circumstances, if a company without effective competitors is under pressure to reduce prices, it may respond by cutting standards rather than seeking to lower its costs. Appropriate standards of service in supply must thus accompany the setting of price regulation.

(e) To provide transparency

Transparency allows interested parties better to understand the regulatory regime and company performance and it reduces uncertainty for both companies and customers. Further, in a competitive market transparent price regulation can provide clear targets for competitors to aim at and therefore facilitate the development of competition. Therefore as the price control review progresses, further information will be published on the assumptions and projections underlying any proposals for revised arrangements, bearing in mind the advantages of not distorting competition by the release of inappropriate information.

5.2 Approach

The review that set the present price restraints took place at a time when competition for domestic and small business customers had not yet been introduced. One of its objectives therefore was to put in place protection for these customers that would be robust against a number of outcomes, including the prospect that the development of competition was delayed or muted.

Competition is a primary protector of customers' interests. Rivalry between market participants tends to put pressure on prices. In seeking out new and more profitable business, participants in competitive markets tend to offer new services and improve existing standards of service. Opportunities in the market may encourage new entrants, adding to competitive pressures. In general, customers' interests will be protected best by effective competition.

Where competition is fully effective, there is generally little need to protect customers through specific price and service regulation. The non-discrimination provisions in supplier licences and general competition law may be expected to provide sufficient safeguards.

As at May 1999, around 6 per cent of the under 100 kW market have switched supplier. As from 24 May 1999, no PES has a statutory monopoly of supply to particular customers, and all electricity customers are able to choose a competitive supplier. By the time new arrangements are in place, on 1 April 2000, all markets will have been open for 10 months.

A key issue for this price control review is to assess to what extent the electricity supply market for designated customers has already developed and is likely to develop further towards effective competition. OFFER will pay particular attention to whether some classes of customers are benefiting more from competitive forces than others.

To examine this issue, it is helpful to consider competition as a continuing process. In the early stages of a market newly open to additional suppliers, incumbents will retain a dominant position, in terms of, for example, market share and experience.

Customers may not be fully aware of or have access to new competing suppliers, or the terms offered by these suppliers may not compare favourably with those of incumbents. At this stage, price regulation is needed to protect customers' interests.

There may be a substantial number of customers not receiving or unreceptive to marketing activities who remain as customers of the incumbent suppliers. If the market can be segmented so as to identify such customers as a separate class, they may be vulnerable to incumbent behaviour, for example, to creeping relative price rises, which are cumulatively important. Price controls may then need to be targeted so as to safeguard the interests of these more vulnerable customers. As competitors continue to refine their marketing tactics it may be expected that more of the customers protected by price controls will respond to competitive offers.

It is not clear therefore that the development of competition will benefit all customers equally. It is possible and likely that some customer groups will be offered less attractive terms for switching supplier, for example, and consequently will see fewer benefits from the opening of the competitive market than others. It is even possible that customers who have effectively been cross subsidised by other customers may find that their prices rise in relative, or even actual, terms. Where such price rises risk conflict with the principles set out in the Social Action Plan, careful consideration will need to be given to appropriate solutions.

The main approach of the present review will be to consider the relative merits of the benefits that competition is delivering against any disbenefits that might accrue to particular customer groups. This will be accompanied by a consideration of whether other regulatory safeguards, particularly the non-discrimination conditions, can be used as supplementary protectors of customers' interests. Where customers are seen to benefit, and to be protected, by effective competition it may be appropriate to reduce the scope of regulatory control.

In assessing the development of competition and the need for further regulatory controls, OFFER will pay particular attention to the following indicators :

- customer awareness of competing offers;
- the feasibility of rivals mounting an effective challenge;

- responsive customer behaviour such as switching to other suppliers and/or other tariffs;
- the range of offers available from new entrants, including price, dual fuel, standards of service, and market coverage;
- competitive responses by the incumbents;
- supplier behaviour, for example, entry, exit, market share, and so on;
- potential barriers to the development of effective competition; and
- the prospects for the future development of competition.

The assessment of competition is discussed in chapter 6.

5.3 Other relevant issues

a) Standards of Performance

The present Standards of Performance applying to the PESs are an important part of the present maximum price restraints. They were put in place to ensure that, in the absence of sufficient competition, the PESs would not achieve price or cost reductions simply by offering a lower standard of service. However, as competition develops, suppliers can be expected to distinguish themselves from other suppliers by offering different standards of service.

Questions for the review of price restraints include the extent to which obligations on the PESs exceed those of other suppliers and the extent to which this should be recognised in setting revised restraints.

b) Energy efficiency

PESs are required to meet certain standards of performance in respect of energy efficiency. As noted above, the present maximum price restraints were set on the basis that each PES's energy efficiency standards of performance would be funded by an amount equivalent to about £1 per customer per year.

OFFER/OFGAS intend to publish a consultation paper later in the summer to consider the approach that should be adopted regarding energy efficiency in both the electricity and gas markets, against the background of increasingly convergent and competitive supply markets. The present review will therefore need to take account of conclusions reached on any future energy efficiency standards of performance.

c) Prepayment meters

Customers using electricity prepayment meters typically pay an annual surcharge of around £25, over and above the standing charge paid by an equivalent standard credit meter customer. The Government in its March 1998 Green Paper noted that one of the concerns of the use of prepayment meters was that such customers typically pay more for their electricity (or gas) than those who pay by other methods, and that consequently, prepayment meter customers have not been seen to benefit equally from the liberalisation of the market.

Both the PESs and British Gas Trading have stated that the provision of prepayment meters involves additional costs, both for the meter, and for additional meter charging and cash handling facilities, and hence justifies a prepayment meter surcharge. OFFER and OFGAS have thus commissioned studies of the extent to which the additional surcharges are reflective of the additional costs of providing such meters.

The OFFER study will take into account the extent to which prepayment meter customers provide benefits to companies such as the avoidance of bad debt and working capital saved. OFFER will publish a further paper on these matters later in the summer.

The present review will therefore need to take into account the final price paid by prepayment meter customers, including the need for further explicit controls on such prices, and the relative benefits that such customers are reaping from the liberalisation of the market.

Views are invited on any of the issues raised in this chapter. In particular, OFFER would welcome comments on :

- **the relative importance of the objectives set out above;**
- **the approach discussed above, particularly with regards to the assessment of competition;**
- **the treatment of energy efficiency Standards of Performance; and**
- **the treatment of prepayment meter customers.**

6. ASSESSMENT OF COMPETITION

6.1 Phased introduction of competition

Since 1990, customers with a maximum demand of over 1 MW have been able to take electricity either from their local PES, or from a second tier supplier. The right to take supply from a second tier supplier was extended to customers with a maximum demand greater than 100 kW from April 1994.

The competitive market was opened to the remainder of customers, those with a maximum demand of less than 100kW, over the period September 1998 to May 1999. There were three phases to opening this part of the market. Phase 1 contained 10 per cent of domestic and business customers and included all customers within a PES's area that had either a maximum demand meter or a half hourly meter. Approximately three months later Phase 2 opened the market to the remainder of business customers and a further 30 per cent of domestic customers. Two months later, Phase 3 added all remaining customers. The phases overlapped because some PESs were ready, for example, to commence Phase 2 while others were completing Phase 1. Table 10 gives the number of customers in the under 100 kW market eligible to take competitive supply over this period.

The rest of this chapter considers the development of the competitive market over time.

6.2 The Over 100 kW Market

Since Vesting, competition has developed rapidly in those parts of the market open to competitive supply. A number of suppliers other than the PESs have entered the supply market, and PESs have competed for business outside their own area with other PESs and second tier suppliers. At present, there are 39 companies licensed to supply the electricity market. Of these, 14 are the PESs. The major generators, British Energy, Magnox, National Power, and PowerGen are another 4. The remainder consists of companies such as British Gas and Independent Energy, that are generally fairly recent entrants to the market. Eleven of the remainder hold licences but are not active in the market.

Table 10 - Number of Under 100 kW Customers able to take Competitive Supply

Month 1998/99	No. Additional customers market open to '000s	Cumulative number Customers '000s
September	778	
October	382	1160
November	537	1697
December	3899	5596
January	3176	8773
February	6102	14875
March	4545	19421
April	1610	21031
May	4807	25838

Figures 2 and 3 (and appendix E containing tables E.1 to E.4) shows the development of market shares of REC first and second tier businesses, and other suppliers, by number of sites supplied and by output, for England and Wales. The figures suggest that PES first tier supply has fallen fairly rapidly in both the over 1 MW and 100kW to 1 MW markets. RECs have maintained some market share by increasing their share of second tier output, but have overall lost some of the market to other suppliers.

Competition has been introduced on the same timetable in Scotland. However, the impact of competition has been less than in England and Wales. Figures 4 and 5 (and appendix E containing tables E.5 to E.8) show that the two Scottish PESs have retained significantly more market share. The two Scottish companies in 1998/99 for example supply 89 per cent of output compared the RECs' share in England and Wales of 80 per cent.

Figure 2 - Electricity Supplied to the Over 1MW Market in England and Wales

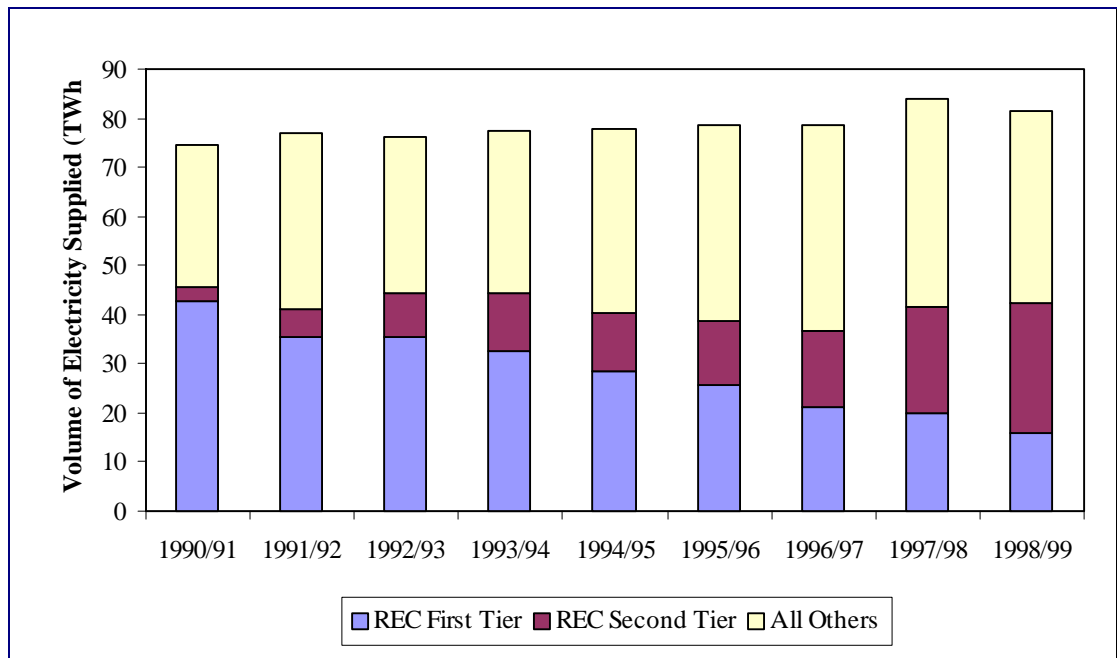


Figure 3 - Electricity Supplied to the 100kW to 1MW Market in England and Wales

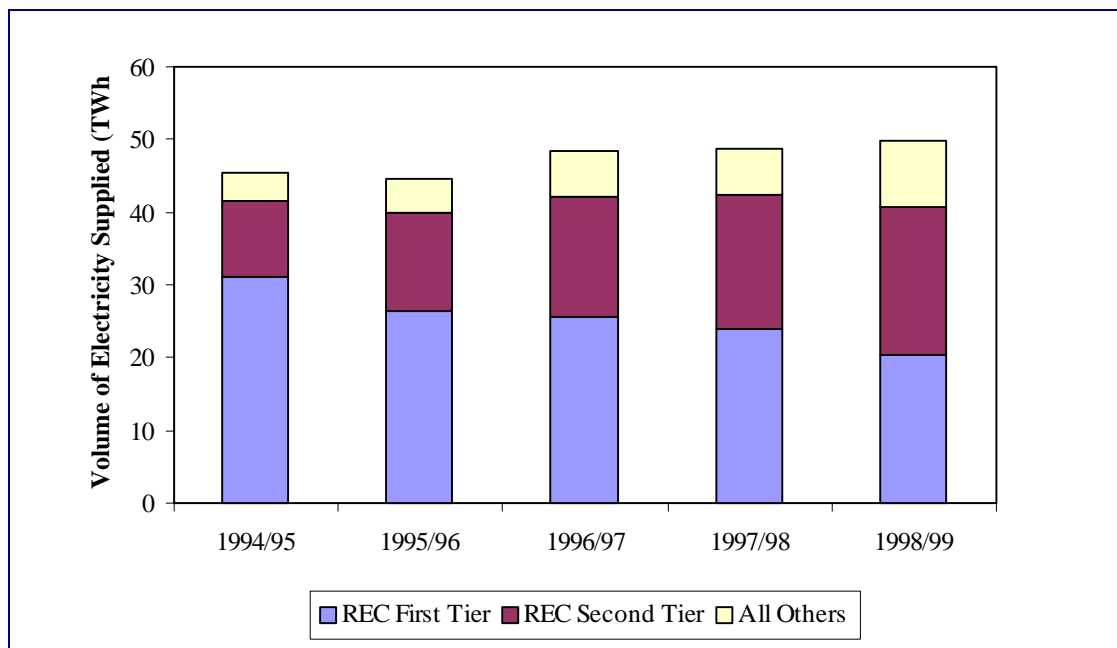


Figure 4 - Electricity Supplied to the Over 1MW Market in Scotland

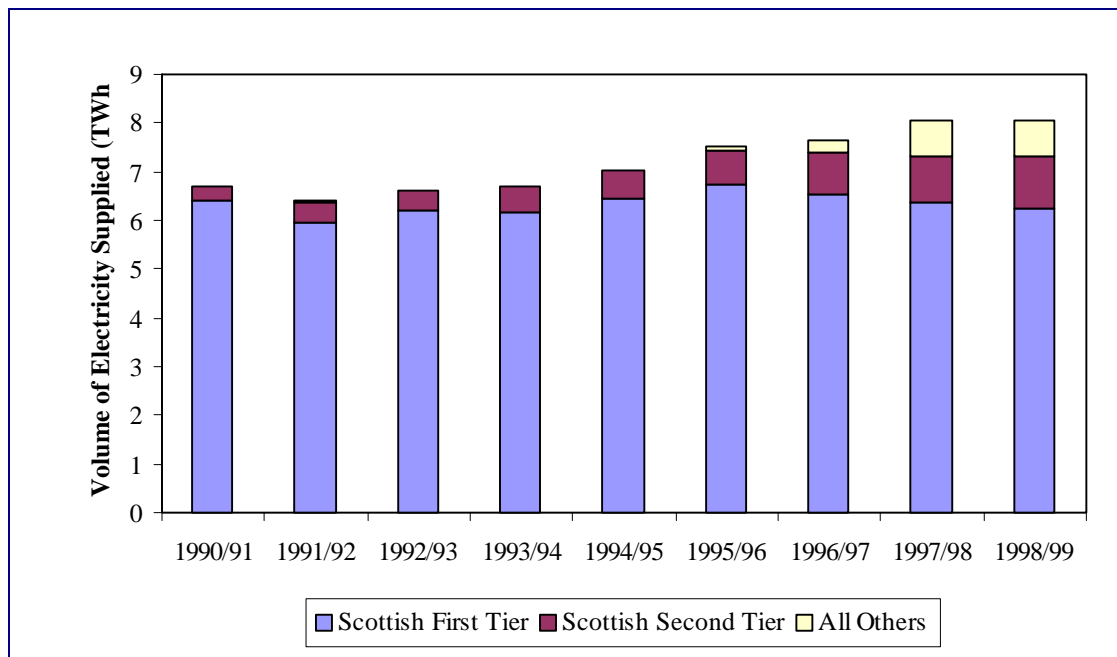
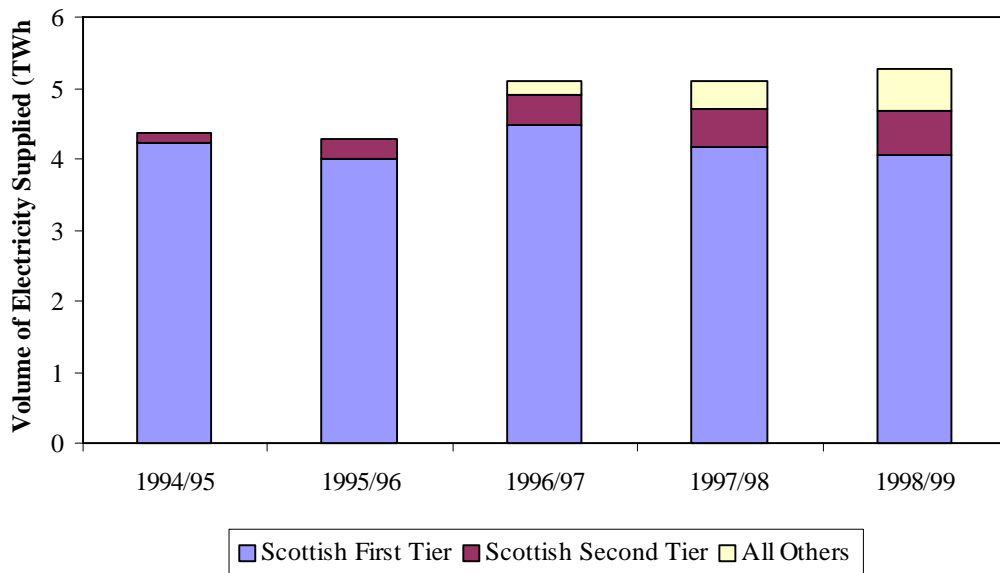


Figure 5 - Electricity Supplied to the 100kW to 1MW Market in Scotland



6.3 The under 100 kW market

Competition in the under 100 kW market has been phased in from September 1998 and was completed on 24 May 1999. All electricity customers are therefore eligible to choose an alternative supplier. This sector of the market is still in its early stages of development and therefore there are fewer indicators available of its development.

New entrants have started to supply to eligible customers however, and significant numbers of customers have switched supplier. There are for example 5 independent suppliers targeting customers taking less than 100 kW. At least 2 of these, British Gas and Independent Energy are directly targeting domestic customers.

Since this sector of the market has opened, around 6 per cent of eligible customers have switched supplier. A significant number of customers have switched to new entrants such as British Gas and Independent Energy.

In June, OFFER is publishing an assessment of competition for the under 100 kW market. This draws on a number of sources of information in order to provide an initial picture of the development of competition, and to give an initial assessment of the experience of customers, particularly designated customers. The rest of this chapter discusses some of the relevant findings of this initial assessment, and discusses their implications for the present review of price restraints.

a) Customer awareness

Domestic customers

During January/February 1999, on behalf of OFFER, MORI interviewed around 1000 domestic customers who were able to take competitive supply. The survey indicated that a high proportion of respondents were aware of the competitive electricity market. Only half however felt well informed about how the newly competitive market works.

Of those who had received information on comparative prices, 35 per cent found them easy to compare, with 31 per cent finding them difficult to compare. Price is a major factor for both those deciding to switch and those not deciding to switch. The

availability of dual fuel offers was also an important factor for switchers. Those not switching for example mainly cited 'no reason to switch' as a reason for remaining with their host supplier. However, one in ten non-switchers said they were likely to change electricity supplier in the next 12 months.

Electricity customers clearly see the need for continued regulation in the competitive electricity market. Almost all are in favour of an independent organisation to look after customer's interests and to set quality standards that suppliers must adhere to.

Small business customers

The present price restraints apply to customers taking less than 12 000 kWh per year. For the purposes of the competition assessment and this section, small businesses are defined as those with a consumption of 12 000 kWh or less per year.

By 1 January 1999, around 51 000 small business customers were eligible to take competitive supply. Around 5000, or 10 per cent, had switched.

b) Prices

Domestic customers

A useful comparison is to review the savings available to customers in each area, compared to the incumbent PES annual bill. Using a consumption level of 3300 kWh - a typical level for a domestic customer - shows that for a customer paying by quarterly credit or direct debit, the average highest saving across all areas is about £26, or 10 per cent of an annual bill. For customers using prepayment meters, the saving is about £17, or 6 per cent of the bill. These figures are electricity only offers and therefore exclude 'dual fuel' offers.

However, these best savings conceal variations both in the average and between PES areas. The average saving to a direct debit customer is about 4 per cent, and that for a quarterly credit customer, slightly less at 3 per cent. Prepayment meter customers may, on average, not see competitors offering a saving compared to the incumbent PES.

The payment of standing charges may well mean that average prices paid or savings available to low volume customers may differ from customers using 3300 kWh per year. Average highest savings for customers using 1500 kWh per year is the order of £12 per year, again about 10 per cent of the bill, for both quarterly credit and direct debit customers. The saving for customers using prepayment meters is about £10, or 6 per cent of the bill.

Small business customers

There are a range of savings available to small business customers.

For credit customers, the average saving is just over 2 per cent. However, savings of up to 30 per cent are available in some areas, compared to the incumbent PES. For direct debit customers, the average saving is about 8 per cent. The highest saving available is about 30 per cent.

c) Disadvantaged customers

The MORI survey carried out for OFFER included a review of the experiences of 'disadvantaged' customers in the competitive market. MORI used several definitions of 'disadvantaged' customers, for example those customers :

- with an annual household income of less than £5000;
- in social classes D or E;
- in receipt of benefit payments;
- who receive a state pension;
- without a bank account;
- who form single parent families; and
- using prepayment meters.

Depending on the definition used, these groups formed between 4 and 38 per cent of the customers eligible for competitive supply up to the end of December 1998.

Generally speaking, these customers knew less about the opening of the competitive market, and were less likely to switch supplier, or to say that they intended to switch

supplier. This is particularly true of low income groups, those without a bank or building society account, and those who pay by prepayment meter. About 2 per cent or fewer of these groups has switched to date, and fewer than half feels well informed about competition. As noted above, customers paying by prepayment meter have tended to experience few or no cost savings from switching suppliers, and this may partially account for the low switching rate.

Overall, the evidence seems to suggest that disadvantaged customers are benefiting less from competition than other customers.

d) Supplier behaviour

A number of new suppliers have entered the electricity market. All PESs and a number of other companies are targeting the domestic market. British Gas and Independent Energy in particular have taken on a significant number of domestic customers, mainly at the expense of the PESs.

Many PESs are focusing attention on capturing customers in areas adjacent to their own authorised areas. Other PESs are concentrating on retaining within area custom, and consequently are relatively less active in the second tier market.

e) Market share

The number of customers switching supplier has increased steadily since the market opened in September 1998. Up to the second half of May 1999, around 1.7 million customers had registered to change supplier. Around 6 per cent of eligible customers have completed registration and switched.

The introduction of competition has been recent, and it is difficult to draw firm conclusions about any trends emerging in market shares.

f) Dual fuel

A significant feature of the development of the competitive market has been the introduction of 'Dual Fuel' offers for both gas and electricity supply. Fifteen suppliers are presently offering dual fuel deals, although some of these are limited to particular areas.

Some offers take the form of a reduction for customers who take both fuels. For example, London, Northern, Yorkshire, and Scottish Power offer £10 discounts. At least 7 suppliers are not offering specific discounts for customers taking both.

g) Potential barriers to the development of effective competition

The relative ease with which new suppliers may enter the market will in part determine the strength of competitive forces operating within that market. Certain factors - barriers to entry - may act to inhibit such entry, and so the assessment of the relative strength of such barriers may help to determine how competitive a market may be. In the electricity market, relatively important barriers to entry may include:

- using Dual Fuel offers to maintain customers;
- the integration of PESs distribution and supply activities; and
- the difficulty of obtaining price hedging contracts for generation purchases.

6.4 Implications for the present review

The evidence above suggests that competition is developing and delivering or likely to deliver some benefits before April 2000, for some customer groups. Business customers using less than 12 000 kWh per year are, it appears on the basis of presently available evidence, amongst those customers benefiting.

Some respondents to the July 1998 consultation paper echo this view. Most PESs for example argued that there should be no presumption that price restraints should

continue after April 2000, with some arguing that to do so could distort the development of competition. Some PESs suggested that, if any further restraints were required, that they should be restricted to a few domestic tariffs.

There is no clear evidence to date that all domestic customers are benefiting from competition to the degree that no new price controls are required. The range of terms on offer to customers using prepayment meters for example is not so great as to customers willing or able to pay by direct debit, and the proportion of prepayment meter customers switching supplier is significantly lower than for other groups. It is not clear either that low volume customers are being offered terms that offer lower standing charges.

Although there is some evidence that other domestic customers are beginning to benefit from the development of competition, it is not certain that this will sufficiently protect these customers in the event that price restraints are completely removed. The present evidence therefore points to the need for some form of continued price restraints. It will be necessary to consider further whether competition is sufficiently benefiting, for example, small business customers and hence whether such customers should be removed from the scope of any revised restraints.

There are a number of options for revised arrangements to protect the interests of customers. Option 1 is the introduction of revised price restraints as discussed in chapters 7 and 8.

Chapter 9 considers a second option. This is to use competitive pressures where they are strongest to bring price benefits to all customers in a non-discriminatory way. This may be put into effect in practice by strengthening the prohibition on PESs from exercising undue discrimination or preference to any class of person or persons.

Chapter 10 considers a third option. This is to remove price restraints entirely and rely on standard non-discrimination conditions and general competition law.

7. OPTION 1 – SETTING A REVISED PRICE CONTROL

7.1 Introduction

It is likely that some form of continued price restraint will be needed for at least some customer groups. It will be necessary therefore to decide which customers such restraints should apply to (the scope of the control). It will also be necessary to consider the form of the control, its duration, and the level at which it should be set.

7.2 Scope

The present restraints apply to designated customers. As discussed above, the scope will be largely informed by the assessment of competition. Customers who are seen to be benefiting from its introduction are less likely to need continued protection under a price restraint. However, restraints ought not to impinge on the development of competition.

It will also be necessary to take into account other factors in deciding the scope of any revised restraints. For instance, OFFER and OFGAS' Social Action Plan identifies other factors, such as the need to consider prepayment meter customers.

Evidence on the development of competition (briefly reviewed in chapter 6) points, at this stage, for restraints to apply to at least all domestic customers. The competition assessment notes that some customer groups, notably disadvantaged domestic customers and customers using prepayment meters, may be particular groups benefiting relatively less well from the introduction of competition. Setting the scope of revised restraints to cover domestic customers would include these groups, but it is for consideration whether special arrangements should apply to these groups.

Comments are invited on the appropriate coverage of revised restraints, and views are sought in particular on the question of disadvantaged customers.

7.3 Form

RPI-X control

The present price restraints are based on an RPI-X control that applies to the total price and thus covers generation purchase, transmission, distribution, and supply costs, including a margin on turnover. The restraints constrain a weighted average of prices to increase no faster than inflation less a specified X factor. This form of control has been widely used in the regulation of UK utilities. It can be set over a number of years so as to reflect future efficient operating costs and an appropriate return to shareholders. The control is particularly suitable where associated costs are relatively predictable and controllable, because it provides incentives to companies to achieve efficiency savings.

A particular issue for the present review of restraints are generation purchase costs. It is open to question whether such costs are either predictable or controllable. It would be possible for example to set an RPI-X type restraint that included an assessment of an appropriate generation purchase cost. This would provide an incentive for companies to negotiate purchase costs below that assumed. However, it is possible that lower outturn generation costs than assumed would simply reflect the difficulties of assessing future generation purchase costs rather than the company's efforts in this regard. Conversely, outturn generation costs that were higher than those assumed could significantly reduce suppliers' margins.

A possible solution to these problems would be to set an RPI-X control for all elements other than generation costs, with some other arrangement for this element, such as use of some form of comparator of generation purchase costs for all suppliers. Chapter 8 discusses this in more detail.

Cost pass through or profit control

An alternative to an RPI-X type control is one where prices are adjusted in the light of outturn costs so as to cover costs and to give an appropriate rate of return. Such controls are sometimes considered advantageous in that there is unlikely to be any extreme of profit or loss. However, since outturn costs are passed through to prices,

there is little incentive on firms to achieve efficiency savings, and so customers may not benefit in the longer term.

Difficulties with this approach also include the specification of an appropriate rate of return, and if and how shareholders and customers should share any losses. It might also be necessary to specify, in measuring profits, the allowed rate base and supervise the accounting treatment of items in order to specify it.

In addition, this form of control has generally been applied to monopoly businesses where some restraint on profits has been a key concern. In a developing competitive market, there are additional competitive pressures on profit which make a profit based control less useful.

It is for consideration whether a profit based control's disadvantages in terms of lack of incentives, difficulties in enforcing, and limited use in a competitive market should rule out its use in setting revised price restraints.

Error correction method

Several forms of control have been put forward that seek to combine the advantages of an RPI-X type control with those of a profit based control. The general form of such a control is to set a forward looking control, perhaps on an RPI-X type basis. However, the control would provide for the sharing of any unanticipated gains in profits in each year with customers, through compensating price reductions, thus reducing any extremes of profits. Such a control could be called an error correction method because it allows unanticipated gains to the company to be shared with customers. If this scheme were to be applied symmetrically, customers would have to share the risk of unexpectedly higher costs.

There are a number of practical difficulties associated with such a control. As with other methods, an appropriate profit level would need to be defined and measured, possibly involving the need for more prescriptive accounting rules. It is likely that there would be lags in assessing compliance with the control, because outturn costs would have to be determined after the event. Such lags may introduce the need for subsequent correction factors, thereby increasing uncertainty in final prices faced by customers which may become increasingly inappropriate as competition develops.

Views are sought on the benefits and practicalities of using an error correction type mechanism in revised restraints, particularly with regard to the treatment of generation costs.

7.4 Level

In a competitive market, companies typically set prices over time at levels that attract customers and cover their costs together with an appropriate return to providers of capital in the business. Competitive pressures would also encourage companies to operate more efficiently, resulting in lower prices or higher standards of service.

The level of any revised restraint would need to be set with reference to the underlying costs of supplying the customer group or groups to which the restraints apply, together with an appropriate return to shareholders. There is no presumption, however, in setting a restraint, that PESs should price at this level, or that shareholders will necessarily receive a particular level of return. Competitive pressures may well result in outturn prices being below the level of any revised restraints, or in returns on capital differing between companies. The level of restraints should also be set so as to reflect pressures on companies to achieve efficiency savings. That is, they should be set on the basis that companies are acting in an efficient manner and that they will continue to do so.

Supply business costs

Any new restraints must make an appropriate allowance for the costs of operating the supply business together with an appropriate margin.

Of particular importance will be the allocation and attribution of metering costs and of corporate overheads. OFFER has undertaken an analysis of cost allocations across the PES distribution and supply businesses. This has identified a number of costs that PESs presently treat as distribution costs but which should more properly be regarded as supply business costs. Any assessment of appropriate supply business costs will therefore need to be consistent with such revised treatment.

Another important issue is the prospect of the separation of the PESs' distribution and supply businesses. OFFER has recently proposed an enhanced degree of separation for these businesses resulting in, for example, an obligation on PESs to maintain separate operations for distribution and supply. PESs have estimated that there may be significant costs associated with such an exercise. However, there should be no presumption that such costs will arise, or that any such additional costs should be allowed for in the operation of revised price restraints. This is strengthened by the sale by Midlands of its supply business to National Power. As part of the arrangements, Midlands has agreed to an enhanced degree of separation between its distribution and supply businesses. This suggests that there is scope for increased separation and that this need not result in higher prices arising from the need to recover transitional costs from customers.

Supply margin

The supply margin is the supply business profit element on sales of electricity, and forms the basis of a return to shareholders. The present restraints were set on the basis of a 1.5 per cent margin on turnover. This was felt to be a suitable margin achievable by a reasonably efficient PES, and reflected the uncertain position prevailing at the time regarding the further opening of the market and the transition from a pass through control to a maximum price restraint. The present review will need to re-consider these points in the light of market developments, including the prospects for generation costs.

PESs have recently submitted data concerning their under 100 kW supply businesses. Although not directly comparable with the set of designated customers, there is nevertheless significant overlap. Measuring margin as operating profit divided by turnover suggests that achieved margins for 1998/99 averaged about 4 per cent. There was considerable variation amongst PESs however with two PESs reporting negative margins.

There are a number of ways of assessing an appropriate margin. One is to consider appropriate returns to business, taking into account those businesses' risks relative to all other businesses in the economy, using the Capital Asset Pricing Model (CAPM). Rates of return so calculated can be used in projecting forward supply business costs and revenues under a number of scenarios in order to gauge an appropriate margin

on turnover. Another possibility may be to consider margins earned in other comparable industries, including second tier suppliers and gas suppliers.

Generation costs

Generation costs account for about 50 per cent of final prices. RECs presently buy through the Pool and also buy financial instruments designed to hedge against price risk. The two Scottish companies both have their own generating capacity and buy from the Pool and from nuclear sources. The Pool trading arrangements are presently subject to review with the intention that revised arrangements are put in place from April 2000.

The costs to the PESs of supplying their total customer base is determined by their overall purchase strategy, their portfolio of price hedging contracts, and the overall demand profile of their customers. The cost of purchasing electricity to service a particular customer or customer group is partly determined by the purchase profile of that group.

The above factors make it difficult to gauge future generation costs that can form the basis of revised restraints. Since generation costs form such a large proportion of final bills, small variations in generation costs can have a large impact on prices or supplier margins, particularly if the end price is subject to restraint. There are a number of potential ways of dealing with these difficulties. Chapter 8 discusses potential approaches.

A number of PESs now have, or are parts of groups, which have significant generation interests. It is for consideration whether the scope for vertical integration has any relevance to the risks described in this section.

Distribution and Transmission

Distribution and transmission charges form around 35 per cent of a standard domestic customer's bill.

Suppliers pay distribution use of system (DUoS) charges to PES distribution businesses. The charges vary according to the type of tariff; domestic Economy 7

type tariffs for example have DUoS charges that differ from those for standard domestic tariffs. In addition, each PES's distribution business is subject to price control, which presently constrains average DUoS charges to fall in real terms each year.

In setting revised restraints, account must be taken of the DUoS charges. It will be important to ensure that PESs do not gain inappropriately by restructuring subsequently DUoS charges.

It will also be important to ensure that the benefits of the price control on DUoS charges are passed on in the level of revised restraints. Proposals for the price control to apply to distribution charges from April 2000 are due to be published in late 1999, and so can inform the basis on which price restraint levels are set. Similar considerations apply to Transmission Use of System (TUoS) charges in Scotland, which are being reviewed concurrently.

TUoS charges are set for the RECs by the National Grid Company and are also subject to price control that presently requires price controlled revenue to fall at 4 per cent in real terms each year. This is due for review from April 2001. RECs have little influence over the structure of TUoS charges. The setting of the revised restraints may need to reflect any changes in TUoS charges.

Both DUoS and TUoS charges are published in advance of the year to which they apply. On this basis, it might be possible to allow for the pass through of these charges without damaging incentives.

Fossil Fuel Levy

Companies are required to purchase certain quantities of electricity from non fossil fuel sources. Such purchase costs typically exceed market prices. The RECs are allowed to recover the excess costs by means of the FFL on final electricity prices. In Scotland excess costs are recovered under an analogous scheme called the Scottish Renewables Order.

In England and Wales the levy rate was last reset on 1 January, when it was reduced to 0.7 per cent from 0.9 per cent, and is now due to be reset annually in October. In

Scotland the levy rate was reduced to 0 per cent from 0.8 per cent and will be reset each April.

The present restraints allow the prevailing levy rate to be passed through to customers. Since the levy is a small item, subject to infrequent change, and not known in advance, it may be sensible to continue with this arrangement.

7.5 Structure

The present restraints are based on a basket of all tariffs applying to designated customers, and essentially place constraints on the average prices charged to designated customers on these tariffs. It is for consideration whether this will remain the most appropriate structure. The structure will for example be influenced by the scope of any revised restraints, or the form.

It may be, for example, that the further analysis of the competition assessment points to continued protection for domestic customers, plus supplementary protection for certain categories of domestic customers (such as prepayment meter customers). An appropriate structure for the restraint in this case might be to place caps on certain individual tariffs, to which all appropriate customers would be guaranteed access. This has the advantage that direct regulation would be removed from a wide range of tariffs, while offering continued protection to those customers who might require it.

7.6 Duration

Revised price restraints are intended to protect customers' interests during the period that competition is developing. At least two factors, the competitive position and prices in the generation market, are likely to evolve rapidly over the next year or two and therefore make it difficult to set restraints for a longer period. These factors point to a short duration for the revised restraints of one or two years. The need for further price restraints after this period can then be reviewed in parallel with developments in competition and other factors.

7.7 Additional considerations

It may be necessary in setting revised restraints to consider any associated cost implications of the energy efficiency Standards of Performance and the Social Action Plan.

A possible treatment for energy efficiency Standards is to make an allowance for funding these standards when setting the level of restraints. Such an allowance should be robust against a PES losing a significant number of customers to competitors, but should not simply spread costs over a smaller customer base. A further question, if such allowance is made, is how PESs should be encouraged to aim the benefits of such standards at the customer groups covered by revised restraints.

A particular issue arising from the Social Action Plan is the treatment of prepayment meter customers and the surcharge paid by such customers. Revised restraints may need to take particular account of prices paid by such customers.

Views are invited on the desirability of setting revised restraints, and if so, the customers or customer groups to which such restraints should apply. OFFER also seeks views on the appropriate form, duration and setting of such restraints, particularly with regard to the treatment of generation purchase costs.

8. TREATMENT OF GENERATION PURCHASE COSTS

8.1 Introduction

Generation purchase costs account for around 50 per cent of a domestic customer's final bill, excluding VAT. The proportion has increased over time as other components have fallen more rapidly than generation purchase costs. The level of generation costs ensures that they will be a major consideration when assessing the future level of any restraints. Section 8.2 reviews the generation market. Section 8.3 discusses the assessment of future generation costs. Section 8.4 discusses how differing forms of restraint might address some of the difficulties associated with assessing generation costs. Section 8.5 raises issues associated with independent power projects (IPPs).

8.2 Background

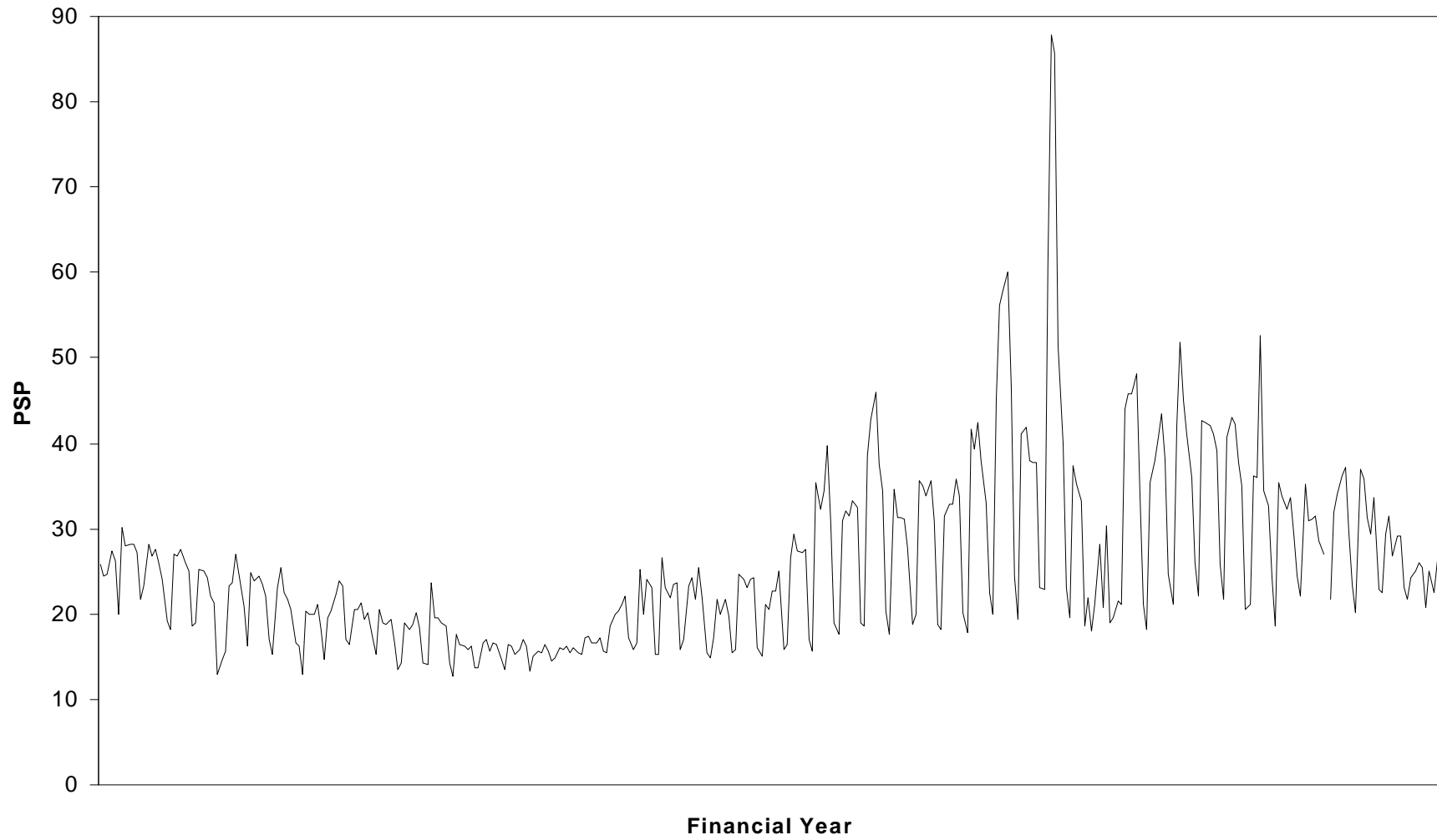
In England and Wales, most of the electricity generated is required to be traded through the Pool. Electricity produced by sites embedded in a REC's area, or sites exporting less than 100 MW generally need not trade through the Pool.

The Pool operates as a day ahead market, with generating units submitting bids specifying the quantities and prices at which they are willing to trade. Bids are aggregated and set against forecast national demand to produce a clearing price at which sufficient electricity will be generated to meet demand. Prices vary each half hour. Figure 6 gives daily time weighted average pool prices for 1997/98, and illustrates the variance in prices over time.

Some three quarters of generation output in England and Wales is produced by five companies; National Power, PowerGen, British Energy, Eastern and BNFL/Magnox. National Power, PowerGen and Eastern operate mainly fossil fuel powered stations. British Energy and BNFL/Magnox Electric are nuclear generators. Other output is produced by independent gas fired generators, Scottish and French interconnector capacity, First Hydro's pumped storage generation and some centrally despatched renewable generation. PowerGen recently announced the sale of 4000MW to Edison Mission Energy, the owners of First Hydro and so this will increase First Hydro's

market share and reduce that of PowerGen. National Power has also announced that it plans to divest about 4000 MW of generating capacity and this again will alter future market shares.

Figure 6 – Time Weighted Daily Average Pool Selling Price 1997/98



Suppliers purchase most of their generation requirements through the Pool. However they can hedge against Pool price volatility by entering into financial contracts with generators, or financial intermediaries, in order to swap the floating Pool price for a fixed contract price. In the electricity industry these resulting financial swaps are sometimes known as 'contract for differences' (CfDs). Under the most common form of CfD, a fixed contract price is agreed (the 'strike price'). If the Pool price rises above the strike price then the generator pays the supplier the difference, on an agreed volume, between the Pool and the strike price. If Pool prices fall below the strike price the supplier pays the generator the difference. This reduces the risk to the supplier of variances in Pool price. The strike price agreed however is typically above the expected Pool price. This may represent a premium payment to the generator for taking on risk.

Most PESs also own, as a separate business, and sometimes as part of joint venture, generation assets. Most projects with a REC interest are combined cycle gas turbines (CCGTs) and most were initiated in the early years after Vesting. REC backed CCGTs tend to have long term CfDs with the REC's supply business, which were required in order to raise finance for the projects. Many PESs including the Scottish companies form part of corporate groups with significant generation interests in Great Britain.

There have been a number of criticisms concerning the way the Pool operates, in particular relating to:

- overall price levels;
- pattern of prices;
- a lack of competition in price setting;
- a lack of demand side participation; and
- the complexity and artificiality of the trading rules.

OFFER, in conjunction with the DTI, is presently undertaking a review of electricity trading with the aim of replacing the Pool with a revised set of trading arrangements, in 2000. The revised arrangements will be underpinned by bilateral contracting between participants, with the aim that electricity trading practices will resemble those undertaken for other energy commodities. A balancing mechanism will operate up to four hours prior to each trading period where participants may trade changes in output demand with the system operator.

This ensures that, as far as possible, generation output is in line with demand. The system operator will have responsibility for matching real time generation with demand.

There is no Pool in Scotland although a separate review of trading arrangements commenced with an initial consultation paper in December 1998. The Scottish PESs own their own generation assets and use these to meet the demand of their customers in Scotland. Both Scottish PESs are able to trade with the Pool, sending exports or receiving imports via an interconnector with the England and Wales transmission system. Both companies also have certain long-term contracts to buy further generation output from certain Scottish sources. For example, both companies are obliged to purchase output from Scottish nuclear sources (now owned by British Energy) until 2005. In addition, under separate contracts, ScottishPower has options to use output capacity from gas-fired and hydro-electric plant owned by Hydro-Electric. Hydro-Electric also has the opportunity to use output capacity from coal-fired plant owned by ScottishPower.

8.3 Assessing future generation purchase costs

In order to assess the level of any future price restraint, it will be necessary to take a view on generation purchase costs, although the need for this will vary with the scope and form of the control. For example, if the control were to take the form of a simple RPI-X cap, it would be necessary to assess how generation purchase costs might change over time. If the restraint applied only to a standard domestic tariff, it would be necessary to identify generation costs for that sector.

Future generation costs will be determined by a number of factors. The generation market is a potentially competitive market, with a number of players. The interaction of these players' bidding strategies and competitive position over time will determine both the level and pattern of Pool prices, in turn influencing contractual terms available. Generators' bidding strategies will also be influenced by developments in input costs, particularly coal, oil and gas prices. Another uncertainty will be the impact of the revised trading arrangements.

The competitive position of the major players in the market can be illustrated by analysing the proportion of time generators set the system marginal price (SMP) in the Pool. Since all generators are paid the marginal price, the ability to set it is a useful indicator of market power. In February 1999 for example, Eastern Energy set SMP 51 per cent of the time,

followed by National Power (24 per cent) and PowerGen (18 per cent). Such market power, particularly in the context of these companies owning supply businesses, adds another layer of complexity to the problem of assessing future generation purchase costs.

Following implementation of the new trading arrangements, there is an expectation that a more competitive wholesale market will lead to lower overall prices. However it is today unclear how this will happen or how quickly. For instance, it is not clear whether the volatility of prices will be affected and how this might affect the costs associated with particular load profiles.

Some guide to future purchase costs faced by the PESs may come from an assessment of the degree to which they are already contracted and the mix of those contracts. It will be important to consider the degree to which PES contracts are internal or external to the organisation. Table 11 examines these factors over the period 1998/99 to 2000/01 on the basis of information provided by the RECs. The table captures those contracts that signed by the RECs with IPPs in which they hold a financial interest. The table also identifies the remaining proportion of generation purchase contracts between the RECs and other generating assets they own as part of their separate businesses.

Table 11 - RECs' Supply Business Output Covered by Contracts

	1998/99	1999/00	2000/01
	%	%	%
Internal contracts : IPPs	16	18	18
Internal contracts : Other	14	16	16
External contracts	63	59	41
Uncontracted	7	7	25
Total	100	100	100

Source : PES submissions

RECs have tended to sign relatively long term contracts with their IPPs, typically 15 years or so, and this is reflected in the proportion of internal contractual cover over the period. Otherwise, contract cover is largely external. RECs, in aggregate, have about a quarter of their purchases uncontracted in 2000/01. This increase may to some extent reflect uncertainties concerning the opening of the market fully to competition during 1998/99 and 1999/00, and the implementation of revised trading arrangements. The existence of some

forward-looking contracts may inform the evaluation of RECs' views of future generation purchase costs.

The RECs' contracts with their own generation interests do not necessarily provide a useful guide to future purchase costs. Internal contracts imply that the organisation may be neutral in terms of the price agreed, since either the generation or supply activity will see the benefit of a high or low price, and both are part of the same organisation. This is particularly the case in Scotland, where the majority of purchases are internal. It may be appropriate in this case to examine directly generation costs rather than contracts that relate to them.

An appropriate starting point for assessing generation costs might be to consider each PES's overall purchase portfolio. This was the basis for previous supply price controls; PESs allocated their contract portfolios either onto the franchise or non-franchise sector of the market. Load profiles of franchise customers may well be such that the weighted generation purchase cost for the franchise sector as a whole is greater than that for the non-franchise sector. However, even allowing for this, contracts allocated to the franchise sector for the purposes of the previous supply price control have tended to be relatively expensive, and were effectively placed on the monopoly sector of the market. For example, contracts with generators designed to back up generator's purchase of relatively expensive coal were allocated to the franchise market.

With the opening of the competitive market, it should no longer be appropriate to allocate unduly expensive contracts to the regulated sector. However, depending on the scope and form of revised restraints, it may be possible to make a broad attribution of costs to particular groups of customer. It is not clear how the PESs themselves attribute the cost of their portfolio to particular customer groups. One approach would be to use typical demand profiles for particular customer groups, and hypothecate overall costs to match these demand profiles.

In summary, assessing future generation purchase costs will not be straightforward for a number of reasons. These can be summarised as:

- generation purchase costs are determined bilaterally with limited price reporting;
- future fuel costs are unknown (particularly in the light of the uncertainties surrounding the gas moratorium) and may affect generator bidding behaviour;
- the present Pool is due for replacement and the timing and impact of the revised trading arrangements is unclear;

- the uncertainty created by the review of trading arrangements for long term contracts;
- forward looking contracts provide little information about competitive generation costs;
- the attribution of overall purchase costs to particular customer groups will depend on a number of assumptions; and
- ownership of generation assets may affect contracting behaviour.

8.4 Form of regulation

Chapter 7 above discussed different forms of regulation that might be used as the basis for a future restraint, and noted that the scope and form of such a restraint will depend on the assessment of competition and the customer groups which have benefited from its development.

The appropriate treatment of generation costs will also be influenced by the choice of the form of control, and there are a number of advantages and disadvantages for each.

Pass through

It would be possible simply to pass through outturn generation costs into prices, subject to an economic purchasing obligation. This is analogous to a profit type control discussed above, where outturn costs are allowed, with an appropriate element for profit. It is also how the price controls in force for electricity supply prices prior to 1998 operated, and close to the price controls on British Gas Trading. In practice, companies estimate in advance the level of generation costs for the tariffs or set of tariffs to be covered by the restraint. After actual generation costs become known, companies would be allowed to adjust prices for the following year to make up any under or over recovery of generation costs the previous year. This form of control would continue to need to be accompanied by obligations on companies to purchase economically.

This approach has the main advantage that it avoids the need for the regulator to forecast uncertain generation purchase costs at the year or 2 year ahead stage. It also provides certainty for companies in that they will over time be able to recover costs. Customers too benefit in that they do not over time pay more than outturn costs.

This approach has a number of drawback. It may not be straightforward to identify generation costs for a particular tariff group or group of customers. Reliance on companies

to do this could introduce incentives to allocate higher priced contracts to the regulated sector of the market. Placing obligations on companies to purchase economically mitigates this problem, but in turn creates the need for more frequent and rigorous monitoring of companies' purchasing decisions. Furthermore, customers are exposed both to the risk of generation costs changing in an unpredictable way, and customers could not be certain of prices to be charged until some time after the event. This risk might be increased if the number of customers using the regulated tariff held by the company fell, resulting in a smaller customer base to support subsequent corrections.

In addition, the vertically integrated nature of many PESs could result in any pass through arrangements creating perverse incentives for a PES to increase generation purchase costs in the knowledge that these would simply be passed through to customers.

RPI-X tariff cap

The present form of the restraint includes an allowance for generation costs. If generation costs exceed the level assumed, companies' profit margins are reduced and customers gain, and vice versa.

There are advantages in continuing with this approach. First, it provides continuity with the existing restraints and provides certainty to customers in that final prices are known. Such an approach also provides powerful incentives for the companies to purchase electricity at prices lower than those assumed in the restraints, which might be passed on to customers in a subsequent review. The power of these incentives will tend to be increased as the duration of new restraints is increased. Disadvantages include the difficulties of accurately assessing future generation costs, as discussed above.

Marker tariff

A third option for price restraints is to nominate a marker tariff, either as part of the price control review or before the beginning of each financial year. This might offer a useful approach for the treatment of generation costs. For example, generation costs for a particular tariff subject to restraint might be related to other tariffs operating in the competitive sector of the market.

This approach combines some of the advantages above. It might offer protection to customers in that generation cost movements marked out in the competitive sector are linked through to protected customers. It might also avoid the need to assess generation costs in advance.

There are a number of difficulties that would need to be dealt with in order to implement successfully a system of price regulation based on market tariffs:

- the level of any market tariff would need to be determined by competitive forces and not subject to manipulation;
- it would be necessary to subtract allowances for supply, distribution, transmission and FFL costs. Calculating an appropriate allowance for supply costs may not be straightforward; and
- consideration would need to be given to any adjustments necessary to take account of differences in load profiles between different groups of customers.

8.5 Independent Power Producers

As indicated above, the RECs have, between them, a number of long term contracts with independent power producers, which were typically entered into for a 15 year period. Since RECs entered into these contracts, Pool price reductions have tended to result in these contracts appearing relatively expensive compared to short term contracts available now. Such costs, before 1998, were typically passed to franchise customers.

RECs accepted that, when the contracts were entered into, it was on the basis that these purchasing decisions would be subject to competitive challenge with the final opening of the competitive market from 1998. The October 1997 Price Restraints Proposals accepted that, in setting price restraints, it would be inappropriate simply to assume that these contracts did not exist, and to assess generation purchase costs purely on the basis of short term contracts available now and future Pool prices.

The contracts need to be assessed against the duties of the DGES to promote competition and to ensure that licence holders are able to finance their licensed activities. However, it will be important in assessing future generation costs to reflect the best deal available to

designated customers, in relation to all other customers. The October 1997 proposals suggested that an appropriate treatment of these contracts would be to spread their costs over the RECs' entire purchase portfolio, resulting in protected customers bearing only a portion of their costs.

Under the proposals for the revised trading arrangements, it may be necessary for the parties to the IPP contracts to consider revisions to the terms of those contracts in the light of changes to Pool trading arrangements. It will be appropriate to review such changes as the need arises, in order to ensure that customers do not bear undue costs as a result.

Comments are invited on the practicability of assessing future generation purchase costs, particularly for certain customer groups. Views are also sought on how the form of restraint may be modified to take account of the difficulties of assessing generation costs.

9. OPTION 2 – RELATIVE PRICE REGULATION

9.1 Interaction of Price Controls and Licence Conditions Prohibiting Discrimination

The maximum price restraints have played an important role in the development of competition. By setting maximum prices for periods ahead, they have acted as incentives for the PESs to reduce supply costs and as targets for new entrants to challenge the market. They have also restricted the PESs' ability to respond to competitive pressures in a pre-emptive way that would hinder the development of competition.

A price control (such as RPI-X) applied only in market segments where competition is weak could attempt to simulate the impact of effective competition for the relevant customers. However, a predetermined forward looking price control based on projected efficient costs is unlikely to capture fully the dynamic pressures that effective competition will bring to bear on prices and costs.

In the parts of the market where a PES faces strong competition, including those to which the price control does not apply, it will have a strong incentive to make efficiency savings and pass these on to customers by way of a price reduction or improvements in the quality of service. The PES will also have incentives to innovate and improve the choice and range of offers available for these customers. Where competition is weaker and a PES retains market power, it will not have these incentives to the same degree. In effect a PES can use this market power to discriminate between customers in its search for efficiency gains.

The issue of undue discrimination is dealt with by Condition 4A of the PES licence and Condition 4 in a second tier licence, and as outlined in section 3.5(c) above, and under the Competition Act 1998. However, it can be argued that the present condition is an unsatisfactory means of dealing with market power in the developing market because the principle of non-discrimination, embodied in the condition, is intended to serve purposes beyond the aim of combating market power and promoting competition. In effect, a single policy instrument, Condition 4 or 4A, may be used with multiple objectives in mind.

In particular, Condition 4 or 4A has been seen as a means of addressing perceived inequities between classes of customers. The existence of these equity considerations therefore implies that price structures that would normally be judged consistent with the

absence of undue discrimination under Condition 4/4A might nevertheless be judged to be unduly discriminatory when the further considerations are taken into account.

It might be the case that in future a number of concerns that in the past have been taken into account in assessments of undue discrimination can be better addressed through the OFFER and OFGAS Social Action Plan. This should facilitate better targeting and greater transparency in meeting the relevant objectives, and, at the same time, it opens up the opportunity to concentrate the application of non-discrimination conditions to matters more narrowly concerned with market power. This separation of approaches could also help to improve policy targeting and transparency in relation to OFFER decisions aimed at promoting and protecting effective competition. Such a non-discrimination condition to combat market power moves the regulatory focus to relative price regulation.

9.2 Relative Price Regulation

Relative price regulation can be viewed as a form of regulation in which the regulator commits to accepting that price structures will not be considered to be unduly discriminatory provided that relative prices are maintained within predefined ranges. It has the characteristic that relative to simple deregulation coupled with reliance on Condition 4 or 4A and the Competition Act 1998, it gives the regulated company and designated customers greater certainty as to what is and is not acceptable pricing conduct. This may be particularly important in the early years of the Competition Act 1998, when there may be greater uncertainty as to how the competition authorities will view certain types of business conduct. Provided the predefined pricing ranges are reasonably related to relative costs, the approach is also consistent with the principles of general competition law.

Such an approach could work by identifying a “marker” class of customers for which competition is expected to provide sufficient protection beyond April 2000; and then link price changes for this class of customer to the “target” customer classes where competition is not expected to provide sufficient protection. The classes of customers that make up the marker group and the target groups could be defined in a number of ways, such as by tariff, payment type, consumption, location, and those not subject to price controls.

To the extent that competition brings prices down for the “marker” class of customers, a PES would be required to make similar price reductions for other regulated customers. The link

could be specified as a maximum, predetermined differential between the “marker” class and the regulated customers. The effect is equivalent to a price cap for the group of customers thus targeted, where the level of the cap is directly related to prices in the more competitive segment of the market. In effect, it could act to ensure that the benefits of competition are more widely distributed among different classes of customers.

No explicit constraints would be placed on minimum levels of prices for any of the identified classes of customer, including for the marker group. However, the DGES would take action, using his Competition Act powers, in the event that the levels adopted indicate predatory pricing.

The maximum differential could be pre-determined for a specified period, as in current RPI-X regulation, and it would be a matter for consideration as to how the initial and subsequent values were set. Differentials in the costs of supplying the relevant groups of customers would clearly be an important consideration in setting initial values, and subsequent adjustments might be specified via an RPI-X formula. Alternatively, the maximum differential might be set as a simple percentage of the average price to the marker group.

OFFER would need to give careful consideration to the question of whether this type of approach might create perverse incentives that weaken competition for customers in the defined, marker group. For example, knowing that a reduction in prices in the more competitive parts of the market would require it to reduce prices in less competitive parts of the markets, a PES might be less inclined to cut prices. The magnitude of any such effect will depend upon factors such as the strength of competition for the marker group of customers, the relative volumes of electricity sold to different groups of customers, and the margins obtained from sales to those different groups. If, for example, competition is very strong for marker customers, and if a PES obtained a substantial part of its profits from those customers, its competitive behaviour is unlikely to be much affected. On the other hand, if competition were less strong and a PES obtained only a modest fraction of its profits from marker customers, it might be incentivised to price higher so as to maintain higher prices in those parts of the market where competition was weaker still.

In adopting such an approach, it might therefore also be relevant to take account of second tier prices.

OFFER considers that the option of ‘relative price regulation’, which has a number of

potential variations, offers a potentially attractive way forward that is worthy of more detailed assessment. Although there would be constraints on relative prices, the position in this regard might not be very different from that under general competition law in its application to price discrimination by a dominant firm.

9.3 Generation costs and relative price regulation

Regarding generation costs, relative price regulation might have the advantage of reducing the need to take a view on the likely level of future generation costs, or of relying on PES's own projections. Relative price regulation would instead rely on competitive pressures to establish appropriate levels.

OFFER invites views on the option of relative price regulation, and in particular on its relative merits compared with (a) the continuation of price caps and (b) reliance on licence conditions prohibiting price discrimination general competition law. OFFER would also welcome views on ways of implementing relative price regulation.

10. OPTION 3 – REMOVING PRICE RESTRAINTS

10.1 Introduction

Chapter 9 sets out an option for relative price regulation where competition could be expected to protect some customers but not others. For those customers who are adequately protected by competitive forces, one option for reform would simply be to remove price restraints applying to these customers. It is possible and likely that the assessment of competition will identify particular groups of customers for whom competition is beginning to deliver significant benefits and for whom it may be feasible to remove from the coverage of price restraints. Presently such customers are almost likely to be business customers using less than 12 000 kWh per year.

Explicit price controls were removed from the over 100 kW market in April 1994. Section 10.2 therefore briefly reviews the experiences of these customers with regards to price. Customers not protected by explicit price restraints nevertheless have a number of regulatory safeguards. Sections 10.3 and 10.4 consider these.

10.2 Experience of customers in the over 100 kW market

Since price controls ceased to cover customers in this market in the over 100 kW market from April 1994, the average price paid by a medium sized industrial customer in the UK has fallen from 4.31 to 3.34 pence per kWh in real terms, or 23 per cent. This compares with a real fall for standard domestic customers of 22 per cent. Domestic prices over this period were subject to price control or restraint.

PESs' profit margins on their second tier business (which includes out of area over 100 kW and over 1 MW market) have not increased significantly over the period. Section 7.4 noted that the profit margin for under 100kW customers was about 4 per cent on average in 1998/99.

10.3 Regulatory safeguards

a) Condition 4A of the PES licence

Section 3.5 explains the provisions of supply licence Condition 4 and 4A.

In reducing the scope of price restraints, and placing more reliance on condition 4/4A, it will be increasingly important to consider ways in which pricing might be considered to breach the provisions of the condition. OFGAS has generally judged BGT's gas pricing behaviour in terms of the equivalent condition, by considering whether price offers cover the attributable costs of supplying the customers plus a reasonable and consistent mark-up. OFGAS has also considered whether offers are made to all customers in a manner which is not unduly discriminatory.

It may be possible or desirable to set out in advance the approach to take in judging compliance with conditions 4/4A. Such an approach could be that as set out by OFGAS. Setting an approach in advance has the advantage that licensees have clear guidelines within which to set prices.

On the other hand, it may be desirable to take a more reactive approach, and to judge pricing behaviour after the event. This has the advantage of not constraining companies' pricing behaviour and allows, for example, for the outturn competitive position to be judged. However it might lead to undesirable delays before consumers enjoyed the benefits of its protection.

b) Competition legislation

Section 3.6 explains that OFFER works with the OFT to exercise the DGES's functions under competition law. It also explains that the Competition Act 1998 will introduce two general prohibitions.

In conjunction with OFGAS, OFFER will be a publishing guideline on the application of the new Competition Act 1998 in the electricity and gas markets. It is intended that this guidance will be published for consultation later in 1999. This sector specific guideline and the general guidelines published by the OFT and other Regulators will set out the general

principles that will be applied when exercising powers under the Competition Act in the electricity market.

10.4 Relying on the Competitive Market

Competition in the domestic market is a relatively recent phenomenon and the Competition Act 1998 has yet to be brought into force. In these circumstances, there may be considerable uncertainties as to how condition 4/4A and the Act would be applied in the various possible circumstances that may arise. OFFER could potentially be faced with a series of complaints about the PESs' pricing behaviour in changing market conditions (for example, in the event of some companies leaving the market) which would lead to substantial investigative and compliance burdens in a period when few precedents would be available against which to form expectations about likely outcomes.

OFFER invites views on whether the maximum price restraints applying to PESs should be removed from 1 April 2000. In particular, OFFER would welcome views on whether, given the development of competition, Condition 4A of the PESs' Supply Licences and general competition legislation would provide adequate protection for customers without creating significant uncertainties and associated costs (of enforcement and compliance) that might be avoided by a more phased approach to deregulation.

11. PROCESS AND TIMETABLE FOR THE REVIEW

The present restraints were put in place for the two years to end of March 2000. It will be necessary therefore to put forward proposals for revised restraints by Autumn 1999. This will allow a referral to the Competition Commission (formerly the Monopolies and Mergers Commission) in the event that proposals are not agreed by the PESs.

OFFER's indicative timetable and is set out below.

March 1999

OFFER sends a supply business plan questionnaire to all PESs for completion by the end of April 1999. The questionnaire seeks information on aspects of the PESs' first tier supply businesses, in particular the cost structure and information concerning generation purchase costs.

June 1999

Consultation document published.

June 1999 - End August 1999

OFFER considers development of competition and the implications for the scope of revised restraints. First calculations of level of such restraints for particular customer groups.

September 1999

Initial proposals published. This will include a summary of views expressed in replies to the June consultation paper.

September 1999 - End October 1999

Further refinement of scope and level of restraints. Discussion with PESs in light of initial proposals.

November 1999

Final proposals published.

December 1999

Acceptance of proposals or referral to the Competition Commission.

April 2000

New arrangements take effect.

Comments are invited on the proposed timetable and on how views of interested parties can best be accommodated within the process.

APPENDIX A

PES SUPPLY BUSINESSES IN RELATION TO UK GROUP

Table A1 - PES Supply Businesses in relation to UK Group (1997/98) - Turnover

PES	UK Group Turnover £m	Distribution £m	Total Supply £m	Total Supply Turnover as a proportion of UK Group Turnover %
Eastern	3475.4	421.4	1908.7	55
East Midlands	1195.3	352.6	1067.0	89
London	1253.1	338.8	1149.4	92
Manweb	3128.2	236.8	612.9	20
Midlands	1337.5	343.9	1141.9	85
Northern	981.8	220.3	825.2	84
NORWEB	2150.2	342.7	1097.1	51
SEEBOARD	1143.2	266.0	967.8	85
Southern	1774.9	387.7	1511.2	85
SWALEC	1185.1	190.5	525.5	44
South	761.1	228.1	706.7	93
Western				
Yorkshire	1285.6	307.0	1118.0	87
ScottishPower	3128.2	313.4	1112.4	36
Hydro-Electric	1607.5	156.5	594.9	37
Total	24407.1	4105.7	14338.7	

Notes

1. Supply turnover derived from in-area activities includes relevant distribution revenue.
2. Manweb is part of the Scottish Power group

Table A2 - PES Supply businesses in relation to UK Group (1997/98) - Profit

PES	UK Group Operating Profit £m	Distribution £m	Total Supply £m	Total Supply Operating Profit as a Proportion of UK Group Operating Profits %
Eastern	337.2	181.7	-128.1	-38
East Midlands	118.6	139.4	-14.0	-12
London	146.8	143.8	13.7	9
Manweb	785.1	95.4	27.3	3
Midlands	133.2	142.5	19.0	14
Northern	102.0	73.7	22.4	22
NORWEB	602.8	154.5	28.4	5
SEEBOARD	157.3	131.2	42.1	27
Southern	248.0	213.4	28.1	11
SWALEC	244.7	77.1	16.2	7
South	114.4	108.9	19.4	17
Western				
Yorkshire	153.7	140.3	13.5	9
ScottishPower	785.1	169.4	38.0	5
Hydro-Electric	242.9	70.1	-12.1	-5
Total	4171.8	1841.4	113.9	

Notes

1. Supply turnover derived from in-area activities includes relevant distribution revenue.
2. Manweb is part of the Scottish Power group

APPENDIX B

Comparison of the Existing Electricity and Gas Supply Price Controls

Element	Electricity	Gas
Scope	1 st tier GB customers which are either:- <ul style="list-style-type: none"> - Domestic; or - non-domestic below 12,000kWh a year (“domestic” is defined in EA89) 	BGT’s GB customers consuming at or below 73,200kWh a year (or 2,500 therms a year)
Coverage	All elements of supply chain:- <ul style="list-style-type: none"> - generation; - transmission; - distribution; - metering; - meter reading; - supply; and - Fossil Fuel Levy. 	All elements of supply chain:- <ul style="list-style-type: none"> - Gas; - Transmission; - Distribution; - Metering; - Meter reading; and - Supply.
Duration	1 April 1998 – 31 March 2000 (i.e. 2 years). (After 2 years all RPI-3 changes to RPI-0)	1 April 1997 – 31 March 2000 (ie. 3 years). (After 3 years nothing necessarily changes.)
Structure	Overall average revenue cap (using preset volumes of customers (as at 1 August 1997) & units (as at 1997/98) in actual & allowed average revenue calculations) plus supplementary caps:- <ul style="list-style-type: none"> A) 3,300kWh annual bill on nominated PES standard tariff; B) Average revenue cap on other domestic tariffs (again using preset volumes); and C) Average revenue cap on non domestic tariffs (again using preset volumes). <p>(There is also a PPM customer cap and a cap on domestic standing charges.)</p>	7 caps on elements of 3 obligatory tariffs:- <ul style="list-style-type: none"> A) DirectPay (standing & commodity charge); B) OptionPay (standing & commodity charge); and C) Standard/Prepayment (standing & commodity charges, with lower standing charge, and higher initial commodity charge for PPM).

Element	Electricity			Gas
Form	RPI-X covering all elements, with pass through of Fossil Fuel Levy (and Scottish equivalent)			RPI-X of supply and meter reading costs, with pass through of gas, transportation, storage and metering
Rate of X	Overall A B C	98/99 various various 3 0	99/00 3 3 3 3	"Po"s fixed for 1997/98, thereafter X=4
K factor	No K factor			K factors associated with each individual cap.
Disapplication procedure	PES can request disapplication before 31 March 2000, but no "penalty" on DGES, if he rejects application. PES can give notice at anytime to disapply with effect from 1 April 2000. DGES either accepts or refers to the Competition Commission.			No disapplication before 31 March 2000. BGT can give 11 months (or more) notice to disapply on or after 1 April 1999. DGGS either accepts or refers to the Competition Commission.

APPENDIX C
STANDARDS OF PERFORMANCE
Table C.1 - Guaranteed Standards of Performance

	Service	Required performance level prior to 1 July 1998	Penalty payment	Changes from 1 July 1998
1	Respond to failure of a supplier' fuse	Within 5 hours of any notification during working hours*	£20	All PESs to respond within 3 hours on weekdays between (at least) 7 am to 7 pm, and within 4 hours at weekends between (at least) 9 am to 5 pm)
2	Restoring electricity supplies after faults	Must be restored within 24 hours	£40 (domestic customers) and £100 (non-domestic) customers for not restoring supplies within 24 hours plus £20 for each further 12 hours	For domestic customers £50 for not restoring supplies within 24 hours plus £25 for each further 12 hours
3	Providing supply and meter	Arrange an appointment within 3 working days for domestic customers (and 5 working days for non-domestic customers)*	£20 - £100	2 working days for domestic customers and 4 working days for non-domestic customers
4	Estimating charges	Within 10 working days for simple jobs and 20 working days for most others*	£40	5 working days for simple jobs and 15 working days for most others
5	Notice of supply interruption	Customers must be given at least 2 days notice*	£20 domestic customers £40 non-domestic customers	At least 5 days notice
6	Investigation of voltage complaints	Visit or substantive reply within 10 working days*	£20	Visit within 7 working days or substantive reply within 5

7	Responding to meter problems	Visit within 10 working days* or substantive reply within 5 working days	£20	Visit within 7 working days or substantive reply within 5
8	Responding to customers' queries about charges and payment queries	A substantive reply within 5 working days	£20	Agreed refunds to be paid within 5 working days
9	Making and keeping appointments	Companies must offer and keep a morning or afternoon appointment, or a timed appointment if requested by the customer	£20	
10	Notifying customers of payments owed under standards	Write to customer within 10 working days of failure*	£20	Payment to be made within 10 working days
11	Respond to prepayment meter failures		£20	Respond within 3 or 4 hours

Notes

The standards apply to tariff customers and those marked * vary between companies.

Table C.2 - Number of Guaranteed Standards Payments made by Companies, 1997/98

	Total (excluding winter storm payments)	Payments per 100 000 tariff customers
Eastern	336	11
East Midlands	216	9
London	327	16
Manweb	62	4
Midlands	46	2
Northern	125	9
NORWEB	166	7
SEEBOARD	28	1
Southern	15	1
SWALEC	124	13
South Western	25	2
Yorkshire	278	14
ScottishPower	117	6
Hydro-Electric	88	14
All companies	1953	7

Overall Standards

The Overall Standards set minimum levels of performance which companies are required to achieve over a 12 month period in specific service areas. There are 8 Overall Standards, which can be described as follows:

1. Minimum percentage of supplies to be reconnected following faults within 3 hours (1a) and minimum percentage within 24 hours (1b).
2. Minimum percentage of voltage faults to be corrected within six months.
3. Connecting new tariff customers' premises to electricity distribution system. Minimum percentage of domestic customers to be connected within 30 working days (3a) and minimum percentage of non-domestic customers to be connected within 40 working days (3b).
4. Minimum percentage of customers who have been cut off for non-payment to be reconnected before the end of the working day after they have paid the bill or made arrangements to pay.
5. Visiting to move meter when asked to do so by customer within 15 working days in minimum percentage of cases.
6. Changing meters where necessary on change of tariff within 10 working days of domestic customers' requests in minimum percentage of cases.
7. Ensuring that the company obtains a firm reading for customers' meters at least once a year in a minimum percentage of cases.
8. Minimum percentage of all customers letters to be responded to within 10 working days.

Although there is no obligation to make a payment to the customer if a company fails to meet an Overall Standard, under the Competition and Service (Utilities) Act 1992, each company has a duty to conduct its business in such a way as can reasonably be expected to lead to its achieving the Standards. To ensure that companies account to their customers about the Standards, the Director General has directed each company to give information to customers about its performance under the Overall Standards.

Table C.3 - Overall Standards Required and Achieved 1997/98

	OS1a		OS1b		OS2		OS3a		OS3b	
	Requi red	Achie ved	Requi red	Achie ved	Requi red	Achie ved	Requi red	Achie ved	Requi red	Achie ved
Eastern	93	93.2	100	100	97	100	99	100	100	100
E Midlands	85	92	99	100	95	99.5	98	100	99	100
London	80	81.4	100	100	97	100	98	100	99	100
Manweb	85	83.7	99	98.4	95	97.1	98	100	99	99.8
Midlands	95	91.3	100	99.9	100	100	100	100	100	100
Northern	88	92.9	100	100	95	100	100	100	100	100
NORWEB	85	89.7	99	99.6	95	100	98	100	99	100
SEEBOARD	80	89.5	99	100	95	100	98	100	99	100
Southern	85	93.7	99	100	95	99	99	100	99	100
SWALEC	80	87.4	99	99.8	95	100	98	100	99	100
S.Western	80	88	99	99.7	95	100	98	100	99	100
Yorkshire	80	94	99	100	95	99.4	98	100	99	100
S Power	80	88.1	99	100	95	93.7	98	100	99	100
Hydro-Elec	80	84.6	99	99.8	95	100	98	100	99	100

	OS4		OS5		OS6		OS7		OS8	
	Requi red	Achie ved	Requi red	Achie ved	Requi red	Achie ved	Requi red	Achie ved	Requi red	Achie ved
Eastern	100	100	100	100	98	99.4	99	99	99	99.8
E Midlands	99	100	99.9	99.7	95	97.4	99	99.9	100	100
London	99	100	98	100	97	100	98	97.4	99	87.5
Manweb	100	100	98	99.9	95	100	98	98.1	99	100
Midlands	100	100	100	100	100	100	99	99.1	100	100
Northern	100	100	100	100	95	99.9	99	99.1	100	98.4
NORWEB	99	100	98	100	95	100	98	98	99	100
SEEBOARD	99	100	98	100	95	100	98	98	100	100
Southern	99	100	99	100	99	100	98	99	99	100
SWALEC	99	100	98	100	95	100	98	98.4	99	99.9
S. Western	99	100	98	100	95	100	98	99.4	99	100
Yorkshire	99	100	98	100	95	100	99	99.3	100	100
Sc. Power	100	100	98	100	95	100	98	98.7	99	100
Hydro-Elec	99	100	98	100	95	100	97	98.9	99	100

APPENDIX D

PES Supply Business Accounting Information

Table D1 - PES First Tier Supply Business CCA Profit and Loss Summary

	Turnover £m	Operating profit £m	Turnover p/kWh	Operating profit p/kWh
1994/95				
Eastern	1630.7	30.1	6.27	0.1
East Midlands	1141.7	28.0	6.55	0.2
London	1098.4	13.6	6.26	0.1
Manweb	732.8	14.8	7.18	0.1
Midlands	1242.5	31.1	6.65	0.2
Northern	734.7	25.4	6.87	0.2
NORWEB	1165.9	28.7	6.45	0.2
SEEBOARD	991.3	15.3	6.58	0.1
Southern	1437.1	14.9	6.49	0.1
SWALEC	529.6	9.6	7.77	0.1
South Western	719.2	15.1	7.24	0.2
Yorkshire	1144.8	23.8	6.58	0.1
ScottishPower	1199.5	12.5	5.93	0.1
Hydro-Electric	443.1	7.3	5.85	0.1
Total	14211.3	270.2	6.53	0.1
1997/98				
Eastern	1488.9	-124.8	5.99	-0.5
East Midlands	1019.3	-16.2	6.09	-0.1
London	1009.8	12.1	6.21	0.1
Manweb	610.7	26.6	6.89	0.3
Midlands	1056.4	23.5	6.30	0.1
Northern	636.6	14.5	6.36	0.1
NORWEB	981.7	34.7	6.10	0.2
SEEBOARD	858.0	40.1	6.22	0.3
Southern	1296.5	30.6	5.92	0.1
SWALEC	460.9	18.2	6.98	0.3
South Western	636.3	24.2	6.98	0.3
Yorkshire	952.1	15.1	5.99	0.1
ScottishPower	1112.4	39.0	5.69	0.2
Hydro-Electric	439.8	-3.0	5.78	0.0
Total	12559.4	134.6	6.15	0.1

Source : PES Regulatory Accounts

Table D2 - PES Second Tier Supply Business CCA Profit and Loss Summary

	Turnover	Operating profit	Turnover	Operating profit
	£m	£m	£m	£m
Eastern	215.4	0.0	419.8	-8.8
East Midlands	38.3	-4.5	47.7	-2.9
London	15.2	-0.9	139.6	-3.3
Manweb	48.3	0.1	2.2	0.0
Midlands	80.2	-3.2	85.5	-4.0
Northern	248.2	-0.7	188.6	8.9
NORWEB	46.4	0.4	115.4	-5.1
SEEBOARD	58.4	0.7	109.8	0.6
Southern	49.3	-0.2	214.7	4.0
SWALEC	18.8	-0.3	64.6	-1.9
South Western	5.6	0.1	70.4	-4.3
Yorkshire	198.4	-2.1	165.9	-0.7
ScottishPower	48.8	-1.7	162.3	-3.4
Hydro-Electric	117.0	3.6	155.1	-9.2
Total	1188.3	-8.7	1941.6	-30.1

Table D3 - Reconciliation of First Tier Current Cost Operating Profit/(Loss) to Cash Inflow/(Outflow) from Operating Activities (1997/98)

	Eastern £m	East Midlands £m	London £m	Manweb £m	Midland s £m	Northern £m	NORWEB £m
Operating profit	-124.8	-16.2	12.1	26.6	23.5	14.5	34.7
Exceptional costs	0.0	26.7	0.0	0.0	0.0	0.0	0.0
Depreciation and other fixed asset adjustments	7.1	3.1	5.8	1.7	4.2	0.3	0.2
Working capital	280.4	15.6	40.4	-5.2	46.5	22.2	11.8
Provisions	0.3	0.4	-21.1	2.3	0.0	2.3	-6.0
CCA Adjustments	3.5	5.1	2.8	0.8	-0.9	-1.0	-1.0
Other	0.0	-21.9	0.0	0.0	0.0	0.0	0.0
Net cash inflow(outflow) from operating activities	166.5	12.8	40.0	26.2	73.3	38.3	39.7

	SEEBOAR D £m	Southern £m	SWALEC £m	South Western £m	Yorkshir e £m	ScottishPowe r £m	Hydro- Electric £m
Operating profit	40.1	30.6	18.2	24.2	15.1	39.0	-3.0
Exceptional costs	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Depreciation and other fixed asset adjustments	1.2	0.1	0.2	3.8	1.5	3.5	2.6
Working capital	1.5	62.6	8.7	-0.3	27.0	31.3	21.5
Provisions	0.1	-19.3	-0.8	-0.2	7.5	0.0	-2.0
CCA Adjustments	1.4	-5.1	-0.3	0.0	-0.9	-1.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net cash inflow(outflow) from operating activities	44.3	68.9	26.0	27.5	50.2	72.8	19.1

APPENDIX E
Market Shares for the Over 100kW Market

Table E.1 - Non-Franchise Market by Sites Supplied - England and Wales
Over 1 MW Market

	1990/ 91 %	1991/ 92 %	1992/ 93 %	1993/ 94 %	1994/ 95 %	1995/ 96 %	1996/ 97 %	1997/ 98 %	1998/ 99 %
REC first tier	72	64	68	63	56	49	43	37	29
REC second tier	4	10	12	19	23	26	29	34	39
All others	24	26	20	18	21	25	28	29	32
Total	100	100	100	100	100	100	100	100	100

Table E.2 - Non-Franchise Market by Sites Supplied - England and Wales
100 kW - 1 MW Market

	1994/95 %	1995/96 %	1996/97 %	1997/98 %	1998/99 %
REC first tier	75	68	62	59	49
REC second tier	20	26	31	32	38
All others	5	6	7	9	13
Total	100	100	100	100	100

Table E.3 - Non-Franchise Market by Output Supplied - England and Wales
Over 1 MW Market

	1990/ 91 %	1991/ 92 %	1992/ 93 %	1993/ 94 %	1994/ 95% %	1995/ 96% %	1996/ 97% %	1997/ 98% %	1998/ 99% %
REC first tier	57	46	46	42	37	33	27	24	20
REC second tier	4	7	12	15	15	16	20	26	32
All others	39	47	42	43	48	51	53	50	48
Total	100	100	100	100	100	100	100	100	100

Table E.4 - Non-Franchise Market by Output Supplied - England and Wales
100 kW - 1 MW Market

	1994/95 %	1995/96 %	1996/97 %	1997/98 %	1998/99 %
REC first tier	70	59	53	49	41
REC second tier	22	30	34	38	41
All others	8	11	13	13	18
Total	100	100	100	100	100

Table E.5 - Non-Franchise Market by Sites Supplied - Scotland

Over 1 MW Market

	1990/ 91%	1991/ 92%	1992/ 93%	1993/ 94%	1994/ 95%	1995/ 96%	1996/ 97%	1997/ 98%	1998/ 99%
Scottish first tier	96	95	96	94	88	88	84	70	71
Scottish second tier	3	3	4	6	12	10	11	15	18
All others	1	2	0	0	0	2	5	15	11
Total	100	100	100	100	100	100	100	100	100

Table E.6 - Non-Franchise Market by Sites Supplied - Scotland

100 kW - 1 MW Market

	1994/95 %	1995/96 %	1996/97 %	1997/98 %	1998/99 %
Scottish first tier	96	93	89	86	79
Scottish second tier	4	6	9	8	13
All others	0	1	2	6	8
Total	100	100	100	100	100

Table E.7 - Non-Franchise Market by Output Supplied - Scotland

Over 1 MW Market

	1990/ 91%	1991/ 92%	1992/ 93%	1993/ 94%	1994/ 95%	1995/ 96%	1996/ 97%	1997/ 98%	1998/ 99%
Scottish first tier	96	93	94	92	92	90	86	79	77
Scottish second tier	4	6	6	8	8	9	11	12	13
All others	0	1	0	0	0	1	3	9	10
Total	100	100	100	100	100	100	100	100	100

Table E.8 - Non-Franchise Market by Output Supplied - Scotland

100 kW - 1 MW Market

	1994/95 %	1995/96 %	1996/97 %	1997/98 %	1998/99 %
Scottish first tier	97	93	88	82	77
Scottish second tier	3	6	8	11	12
All others	0	1	4	7	11
Total	100	100	100	100	100

APPENDIX F

SUMMARY OF RESPONSES TO THE JULY 1998 CONSULTATION PAPER ON PRICE CONTROLS AND COMPETITION – COMPETITION AND SUPPLY PRICE RESTRAINTS

Response

Fifty-three responses were received to the July 1998 Consultation Paper on Price Controls and Competition from a range of interested parties – fourteen Public Electricity Suppliers (PESs), thirteen Electricity Consumers' Committees (ECC's) and the Electricity Consumers' Committees' Chairman's Group (Chairman's Group) and twenty-five others. A list of those who responded can be found in at the end of this document.

Form, scope and duration

Of those PESs that commented most indicated that there should be no presumption that price restraints would be needed after 31 March 2000 as competition would provide adequate protection for customers. Some PESs suggested that the continuation of price restraints would distort the development of competition. Nevertheless, many PESs indicated that if price controls were necessary they would support some form of price cap.

One PES supported the extension of the current control for another year because of the uncertainty regarding competition, Pool reform and generation disposals. Two PESs commented that the re-introduction of a price control incorporating a cost pass-through mechanism would not be consistent with the development of competition.

Most PESs suggested that the scope of price restraints should be reduced. Some PESs commented that further price restraints, if required, should be restricted to a subset of domestic customers. Of these one PES commented that maximum price restraints should be restricted to two key tariffs in each PES area. Some PESs suggested that the scope of price restraints should be reduced to cover domestic prepayment meter customers only.

Three PESs commented that any further price restraints should last for no longer than two years. A number of PESs also supported the introduction of a mechanism that would allow for the removal of price restraints as competition becomes established.

A number of PESs expressed concern about the impact of competition, Pool reform and the separation of distribution and supply, on future supply business costs. Many PESs identified the unpredictability of future electricity purchase costs in light of new trading arrangements as a major concern. Many PESs commented that the uncertainty about future costs would make the formulation of appropriate price restraints extremely difficult. Two PESs argued that the present allowed margin of 1½ per cent on turnover is insufficient to encourage entry.

The ECCs supported the continuation of price restraints beyond 31 March 2000. Many ECCs commented that price restraints are necessary for designated customers until such time that there is evidence that competition provides adequate protection.

Other interested parties supported the continuation of the present supply price restraints until competition is established. One respondent suggested that the present form of restraints should be changed to a single regulated tariff, with licence conditions preventing cross subsidy, discrimination and predatory pricing.

Non-discrimination

Some PESs commented that the Competition Act and non-discrimination provisions provide adequate protection to customers and therefore price restraints are unnecessary. One PES argued that the PESs and second tier suppliers should be subject to the same electricity supply obligations both in and out of area. Three PESs expressed concern that the existing non-discrimination provisions restrict innovation and distort the development of competition. Furthermore, four PESs commented that the non-discrimination licence condition should not continue beyond 31 March 2000.

Three ECCs supported the continuation of the non-discrimination condition beyond 31 March 2000. One ECC commented that non-discrimination conditions serve to prevent anti-competitive behaviour by dominant suppliers.

Of the other interested parties, three respondents supported the continuation of the non-discrimination provisions. One respondent argued that non-discrimination conditions are insufficient to protect the interests of customers and therefore some form of price restraint is necessary.

Prepayment meter customers

Five PESs commented that in principle supply price restraints for prepayment meter customers are not necessary. Nevertheless, one PES suggested that price restraints for prepayment meter customers if required should only apply for a short period. Several ECCs commented that there was general support for the continuation of price restraints for prepayment meter customers until competition is fully developed.

Other interested parties are concerned that prepayment meter customers pay more for their electricity supply even though there is no risk of bad debt to the PESs. One respondent commented that prepayment meter infrastructure should be subject to competition. They argued that the lack of competition has led to excessively high infrastructure costs.

Two PESs suggested that new performance standards for prepayment customers would not be required. One PES commented however that performance standards need to be company specific and reflect the past investment and infrastructure decisions taken by each company.

Standards of Performance

Eleven PESs argued that standards should be placed on all electricity suppliers. Some PESs commented that any energy efficiency standards should be imposed on the distribution business. One PES suggested that suppliers should be free to set their own standards but be required to publish performance statistics.

Most ECCs supported the continuation of the Energy Efficiency Standards of Performance. Some ECCs indicated that standards should be imposed on both PESs and second tier suppliers. One ECC suggested that voluntary Energy Efficiency Standards should be introduced for second tier suppliers. One ECC commented that the introduction of Energy Efficiency Standards for second tier

suppliers would impose an unfair burden that may distort the development of competition.

The majority of ECCs supported the continuation of £1 per customer Energy Efficiency Allowance. Of these most commented that the Energy Efficiency Allowance should apply to all suppliers to prevent distortions to competition. Several ECCs would also like to see the present standards extended to gas customers. Two ECCs suggested that the existing arrangements should be replaced by a national scheme charged via a distribution levy and administered by the Energy Savings Trust.

A number of other respondents supported the retention of the Energy Efficiency Standard of Performance. One respondent commented that the present arrangement have proven effective, although would favour standards that apply to all gas and electricity suppliers. One respondent suggested that the review of Energy Efficiency Standards provides an opportunity to consider whether standards should be funded via distribution or supply.

LIST OF RESPONDENTS TO THE JULY 1998 CONSULTATION PAPER

1. Public Electricity Suppliers

Eastern Electricity
East Midlands Electricity
London Electricity
Manweb
Midlands Electricity
Northern Electric
NORWEB – Distribution
NORWEB – Supply
Scottish Hydro-Electric
ScottishPower
SEEBOARD
Southern Electric
South Western Electric
SWALEC
Yorkshire Electricity

2. Electricity Consumers' Committees

ECCCG
Eastern ECC
East Midlands ECC
London ECC
Merseyside and North Wales ECC
Midlands ECC
North East ECC
North Scotland ECC
North West ECC
Southern ECC
South East ECC
South Wales ECC
South West ECC
Yorkshire ECC

3. Other respondents

A H Shaw

Association for the Conservation of Energy

Association of Electricity Producers

BCN Data Systems

BOC Gases

British Gas

British Steel

Chemical Industries Association

Confederation of United Kingdom Coal Producers

Connect South West Limited

Consumers' Association

Econnect Ltd

Electricity Association

Energy Action Scotland

Energy Intensive Users Group

Enron Europe

IVO Energy

Lord Jenkin of Roding

Major Energy Users Council

National Consumers Council

National Right to Fuel Campaign

Peak District National Park Authority

Public Utilities Access Forum

Royal National Institute for the Blind

Scottish Consumers Council