

July 1999

Energy efficiency

A consultation document

The Office of Gas and Electricity Markets

Energy Efficiency: A Consultation Paper

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1: Introduction

Background

- 1.1 This consultation paper describes the actions affecting energy efficiency which the Office of Gas and Electricity Markets (Ofgem) is taking; sets out our general approach to energy efficiency; and invites views on the further steps which it would be appropriate to take, particularly in terms of Standards of Performance for gas and electricity companies.
- 1.2 The bringing together of gas and electricity regulation under a single holder of both Offices of Director General of Electricity Supply and Director General of Gas Supply (the Director) reflects the Government's aim to ensure greater consistency in the regulation of the utilities. This is relevant for energy efficiency where previously there have been differences in policy for gas and electricity. A key theme of this consultation paper is therefore to apply consistent criteria to gas and electricity and to consider the scope for a common approach. Where possible we set out the steps the Director is presently minded to propose. This should not be seen as an attempt to prejudge the consultation process. Rather we hope it will help focus attention by narrowly defining the main areas for discussion as we currently see them.
- 1.3 In this introductory Chapter we outline a number of recent and prospective developments, which make it appropriate now to take stock of the role of regulation in promoting energy efficiency, and in the light of which future arrangements need to be considered. Foremost amongst these developments is the new framework for regulation which the Government is putting in place following its Green Paper "A Fair Deal for Consumers", published in March 1998¹. Government has emphasised its determination to ensure that the regulatory regime serves the need of consumers, and that the interests of disadvantaged customers are properly protected. Equally, it has underlined that economic regulation does not take place in a vacuum, and that the regulatory framework should properly reflect the Government's social and environmental objectives.
- 1.4 The Government has announced its intention to legislate in order to strengthen the obligations on the regulator with respect to the protection of the interests of customers

¹ CM3898

and with regard to social and environmental objectives, specifically including energy efficiency. Although any immediate action by the regulator must be within the current legal framework, the Government's intention to amend that framework should be borne in mind, not least to allow for effective forward planning by the various stakeholders concerned.

Climate Change

- 1.5 It is also appropriate to take into account the potential implications of the UK's Climate Change programme as set out in the Government's October 1998 consultation paper². The Climate Change programme is aimed at achieving the UK's international commitment to reduce its greenhouse gas emissions to 12½ per cent below the 1990 level by 2010, and to meet the Government's own objective of reducing carbon dioxide emissions by 20 per cent below 1990 levels also by 2010.
- 1.6 The Climate Change document reviews the contribution to the achievement of these targets expected from changes in the fuel mix for electricity generation, in the light of the Government's own 1998 review of Energy Sources for Power Generation, and other possible changes in electricity generation and in the use of gas and electricity. Amongst these various changes is a possible 10 per cent contribution from renewables to UK generation capacity by 2010, as well as a significantly enhanced role for combined heat and power (CHP). In terms of end-user energy savings, the Government's consultation paper considers the possibility of a new Standards of Performance Scheme set by Government with a capital cost of between £140m and £500m per annum and the scope for a greater emphasis on energy services, whereby gas and electricity suppliers would offer packages to customers combining fuel supply and energy efficiency measures. These developments would all have significant implications for the gas and electricity industries, their regulation and for customers.

Fuel Poverty

- 1.7 The UK Climate Change programme will be long term in its impact. Of more immediate potential impact are the Government's proposals for alleviating fuel poverty set out in its May consultation paper³ under which £300m is to be allocated during 2000-2002 to provide insulation and heating improvement measures for an estimated 500,000 households in receipt of an income or disability based benefit. Implementation

² UK Climate Change Programme, DETR, October 1998, ref: 98EP0136

³ Fuel Poverty: The New HEES, DETR, May 1999, ref: 99EP0037

of these proposals would significantly improve energy efficiency for disadvantaged gas and electricity customers, albeit mainly in the form of improved welfare and comfort levels rather than energy savings. It is important that the scope for gas and electricity companies to provide energy efficiency to customers is considered in the light of the new Homes Energy Efficiency Scheme (HEES) proposals.

- 1.8 The new HEES proposals highlight the importance of energy efficiency for the fuel poor. This is also a key issue in the discussion paper on the Social Action Plan⁴ which we published in May, and which complements the present consultation on energy efficiency. It is important that the potential contribution from energy efficiency toward achieving the goals of the Social Action Plan is properly assessed, and that the appropriate mechanisms for this are considered.
- 1.9 In addition to the Social Action Plan, other current developments in the regulatory regime for gas and electricity have an impact on energy efficiency. Completion of the process of opening up the gas and electricity supply markets to competition is one such development. Another is the separation of electricity supply and distribution, on which we are currently consulting. Additionally there are the present reviews of electricity distribution price controls from April 2000, and of gas and electricity supply price restraints also from April 2000. In this consultation paper we consider how regulation in these and other wider areas may affect energy efficiency.

Structure of Document

- 1.10 The Chapters in this consultation document are structured in the following way.
- ◆ Chapter 2 explains the regulatory regimes established by the Gas Act 1986 (the Gas Act) and the Electricity Act 1989 (the Electricity Act) and how they have dealt with energy efficiency until now. It also explains the Government's intention in respect of changes to the regulatory framework.
 - ◆ Chapter 3 sets out the various regulatory actions that affect energy efficiency.
 - ◆ Chapter 4 describes the background to the setting of Energy Efficiency Standards of Performance from 1994 – 1998, and their structure. In addition, it gives details of PES performance under the Standards and assessments of what has been achieved.

⁴ Social Action Plan: Discussion Document: OFFER/Ofgas May 1999

- ◆ Chapter 5 discusses the scope of future Standards of Performance for the interim period between the end of the current determination and the emergence of the new regulatory regime following the passage of the Utility Reform Bill and gives clear steers as to what the Director is minded to do.
- ◆ Chapter 6 summarises our proposals on Energy Efficiency Standards and sets out the next steps.

1.11 It would be helpful to receive responses to this document by 6 September 1999. Responses should be addressed to:-

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1.12 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 were provided in a form that can be placed in the Ofgem Libraries. If you have any queries concerning this document Chris Barclay on 0121 456 6221 would be pleased to help.

2: The Regulatory Regime

- 2.1 The scope for the regulator to affect energy efficiency is subject to the statutes under which he has to operate. This section reviews the duties of the Director and his functions which have a direct relevance to energy efficiency as specified in the Gas and Electricity Acts.

Duties of the Director General of Electricity and Gas Supply

- 2.2 The Director has to operate in accordance with duties prescribed in the Gas and Electricity Acts. These duties are not ends in themselves, but govern the way the Director exercises his gas and electricity functions. The primary duties placed on him by each Act are to ensure that reasonable demands for electricity and gas are met, that companies can finance their licensed activities, and to promote competition in electricity supply and generation and secure competition in gas supply and associated activities. Subject to these primary duties the Director must exercise his functions in a manner which he considers is best calculated to achieve other objectives as specified in each Act.
- 2.3 In the case of electricity these secondary duties include exercising his functions in a manner he considers best calculated to protect the interests of consumers in respect of prices charged and other terms of supply; and to promote efficiency and economy on the part of licence holders and the efficient use of electricity supplied to consumers. In exercising his functions the Director has a duty to take into account the effect on the physical environment of activities connected with the generation, transmission and supply of electricity. The Director has a specific function⁵ under the Electricity Act to monitor the development of CHP.
- 2.4 In the case of gas, the Director's secondary duties include exercising his functions in a manner he considers best calculated to protect the interest of consumers in respect of prices etc, as for electricity; and to promote efficiency and economy on the part of licence holders and the efficient use of gas conveyed through pipes. In exercising his functions the Director has a duty to take into account the effect on the environment (whether by pollution or otherwise) of activities connected with the conveyance of gas through pipes. The Director's duties are set out Annex A.

⁵ Section 47(1) Electricity Act 1989

Standards of Performance

- 2.5 The Director has discretionary powers under the Gas and Electricity Acts to set Standards of Performance relating to the efficient use of gas and electricity respectively. In the case of electricity this power allows him to set Standards for Public Electricity Suppliers (PESs) to promote the efficient use of electricity by consumers. In gas he may set Standards for any gas supplier to promote the efficient use of gas by consumers. His powers to set Standards under the Gas Act expire on 1 March 2000, but they can be extended by secondary legislation to 1 March 2002. The Director's powers to set Standards are exercisable subject to consultation with the companies and others affected and allow the Director to collect and publish information on the companies' performance against any Standards which he sets. The relevant provisions are set out at Annex B.
- 2.6 The Director does not have powers under the Electricity Act to set Energy Efficiency Standards for second tier electricity suppliers. It would, however, be possible to amend the second tier electricity licences individually so that Energy Efficiency Standards could be set by the Director. Second tier electricity suppliers in common with PESs and gas suppliers are under a licence obligation to report to the Director on, and publicise, the measures which they have taken to improve the efficient use of electricity.

Energy Efficiency Advice

- 2.7 Under the terms of their licences all electricity suppliers are required to produce Codes of Practice on the efficient use of electricity and to act in line with their Codes. The companies' Codes are subject to consultation and to the Director's approval. The purpose of the Codes is to ensure that companies can offer advice to customers, on request, on the efficient use of electricity. There are comparable provisions under the gas suppliers' licence requiring them to give domestic customers advice on request on the efficient use of gas. Gas and electricity suppliers are also under specific licence obligations covering advice, including energy efficiency advice, for customers in debt, and for elderly, disabled and chronically sick customers, and on site access. The relevant licence conditions are set out at Annex C.

Balancing Duties

- 2.8 Under the present statutory arrangements, when exercising any of his functions (except those relating to the determination of disputes) the Director must take into account his duty in relation to energy efficiency along with all of his other duties. Moreover, the

promotion of the efficient use of electricity, or of gas, cannot stand as objectives in isolation from the Director's other duties. The weight which the Director gives to his various duties in exercising his functions is a matter for his judgement. Because he cannot have regard to one duty in isolation, his decisions require a balancing of the duties in order to resolve what may be potentially conflicting objectives.

- 2.9 Under the arrangements which have hitherto applied to separate regulation of gas and electricity, it has been possible for different policies to be pursued as between gas and electricity with regard to Standards of Performance. The individual regulators reached different judgements on how to balance their very similar duties, in the light of the circumstances as they saw them. The possibility of such an outcome is inherent in the existing statutory framework. The new combined regulator will ensure that consistent criteria are applied to gas and electricity, however, this does not prejudge that the outcome should be the same.

Previous Regulators' Decisions

- 2.10 In the case of gas, the previous Director General of Gas Supply raised concerns in 1993-94 that the E factor in the then British Gas tariff formula allowed British Gas to raise prices to customers; and that it was in conflict with her duties in relation to protecting customers' interests as regards the level of gas prices. No further schemes were approved under the British Gas E factor, and Energy Efficiency Standards of Performance have not been set for gas companies.
- 2.11 In the case of electricity, the previous Director General of Electricity Supply concluded that it would be reasonable to allow public electricity suppliers to raise the equivalent of £1 per customer per annum for expenditure on approved energy efficiency schemes, and he provided for this in the electricity supply price control from April 1994. In setting the allowance for energy efficiency at £1 per customer a year the Director argued that an allowance of a substantially higher value would raise issues more appropriately dealt with through general fiscal policy rather than through price controls proposed by a regulator. He also took into account that he did not have specific authority to deal with the redistributive issues which would arise from any higher allowance, or to impose a disproportionate burden on electricity customers in contributing to Government environment targets.

Government Guidance

- 2.12 In March 1998, the Government published a Green Paper, 'A Fair Deal for Consumers: Modernising the Framework for Utility Regulation'. This set out its strategic proposals for ensuring fairness and efficiency and securing a long term, stable and effective regulatory framework. Following consultation, the Government issued its response in July 1998⁶ confirming its proposals for action, subject to new legislation. A number of the Government's proposals concern energy efficiency, and are aimed at providing a clearer regulatory framework in this area.
- 2.13 The Government intends to issue statutory guidance on the social and environmental objectives, including energy efficiency objectives, relevant to regulation. This statutory guidance will be subject to full consultation, including consideration by Parliament, and is intended to last for a set duration. The Director will be placed under a general duty to have regard to guidance in the exercise of his statutory functions. The Government has said that where it wishes to implement social or environmental measures which would have significant financial implications for consumers or for regulated companies, these would be backed by a new, specific legal provision. In the case of new energy efficiency Standards of Performance to deliver further energy and carbon savings, the Government has made clear in its consultation paper on UK Climate Change Programme (para 66) that this "would fall into the category of measures which should be implemented through new specific legal provision rather than relying on guidance to the regulator". The Government expects that future Standards will be set by Government not the regulator, and has indicated that the planned Utility Reform Bill is to include a power for Government in future to set Energy Efficiency Standards for gas and electricity.
- 2.14 The Government has indicated that, in drafting statutory guidance, it will consider carefully the general issue of how to combine energy efficiency objectives with competitive energy markets. The Director has welcomed the Government's intention to set guidance on energy efficiency, which should provide a clearer framework for regulatory action.
- 2.15 The Government also proposes to amend the Director's statutory duties to include a new single primary duty. This will require the Director to exercise his functions in a manner best calculated to protect and promote the interests of consumers, wherever

⁶ Response to consultation , DTI, July 1998

possible and appropriate through promoting effective competition. The Government says the interests of consumers should be interpreted to include prices and other terms of supply. It is intended to retain the existing secondary duty in respect of energy efficiency, and the elderly and disabled, but to extend the latter duty to cover low income customers, and the chronically sick in the case of electricity. In fulfilling the new primary duty, Government proposes that the Director should take into account in particular the interests of the disabled, consumers of pensionable age, low income consumers and the chronically sick.

Environmental Audit Committee

2.16 The Environmental Audit Committee published their seventh report "Energy Efficiency" on 20 July 1999. Ofgem are considering the contents of the report and the Committee's recommendations. In the context of this consultation we would draw attention to the Committee's recommendations regarding obligations to achieve efficiency improvements. These are:-

"(xiv) We recommend that all necessary steps be taken to extend the existing Standards of Performance scheme for electricity supply until the advent of the new utilities legislation including, if necessary, securing the voluntary participation of suppliers outside the ambit of the existing legislation. We urge the Director General of Electricity and Gas Supply to establish a Standards of Performance scheme for gas suppliers as soon as possible using the successful electricity scheme as a model (and we recommend that his statutory powers to do so are not allowed to lapse by the Secretary of State for Trade and Industry). (Paragraph 82)

(xv) We support the establishment of an enhanced Standards of Performance scheme for energy efficiency and we strongly recommend that obligations, for both electricity and gas, be imposed on the supply function rather than the distribution function in order to encourage the development of energy services provision. (Paragraph 84)"

Interim Arrangements

2.17 The Government's intention to set a new regulatory framework will have major implications for energy efficiency in the longer term. In the shorter term, it is important

⁷ HC159-1

that any new regulatory initiatives are consistent with the Government's stated policy. To be able to make the most effective contribution on energy efficiency, gas and electricity companies need to be able to plan ahead, as do other stakeholders, so that programmes can be managed successfully. A key criterion is therefore to ensure a smooth transition to the future regulatory regime.

- 2.18 In terms specifically of Standards of Performance, although Government has accepted responsibility for setting any new Standards scheme once new legislation is in place, it has indicated that it would wish to see the regulator make interim arrangements covering gas and electricity. The Government's position supports the view that it would not be appropriate for the regulator to contemplate major changes to the present basis of the Standards, whilst allowing for gas to be covered, provided this is consistent with other regulatory objectives. Chapter 5 of the present consultation paper considers in greater detail the criteria for transitional Standards.
- 2.19 **In meeting its responsibilities for energy efficiency the new regulatory office for gas and electricity will wish to work closely with other organisations with a stake in energy efficiency, building on the close links which OFFER and Ofgas have developed with stakeholders, including Department of the Environment, Transport and the Regions (DETR) and the Energy Saving Trust (EST).** Future obligations on the gas and the electricity companies should not be set in isolation but should be geared, and provide additionality, to other initiatives, as the present Standards for electricity companies are designed to complement the existing HEES scheme.
- 2.20 Key criteria for any future obligations are that they are set at a reasonable level and within the capacity of the companies to deliver cost effectively. Obligations on companies should be consistent with the resources available nationally from the private and public sectors to meet UK Climate Change targets through energy efficiency. Standards and other regulatory actions can in principle continue to provide a valuable input to the nation's energy efficiency, alongside action on other fronts for which other agencies have lead responsibility, particularly DETR for Climate Change and housing stock issues, the Environment Agency in relation to power station emissions, and the Treasury for fiscal policy, including the proposed business energy tax.

3: Regulatory Actions Affecting Energy Efficiency

3.1 The Energy Efficiency Standards of Performance in electricity as determined by the Director have attracted attention. They are, however, by no means the only action taken by the Electricity and Gas Regulators to affect energy efficiency. Indeed, action in areas such as price control may have a more significant impact on energy efficiency objectives than the Standards. This Chapter outlines the other regulatory actions so as to provide a full background to decisions about the Standards of Performance.

Price Controls

3.2 In carrying out his price control functions the Director is required to act in the light of his various primary and secondary duties as set out in the Gas and Electricity Acts. Previous price controls have been driven mainly by a concern to improve the efficiency of the gas and electricity industries and to deliver price reductions for customers. Regulators have taken the view that using the regulatory system to put downward pressure on prices is not necessarily incompatible with energy efficiency, and have not seen it as their role to allow prices to rise in order to reduce the level of demand for gas or electricity. **This is an approach which the new regulatory office for gas and electricity proposes essentially to continue.**

3.3 The Government's proposals for a Business Energy Tax reflect that use of the fiscal system to influence the level of energy charges in order to achieve its energy efficiency and environment purposes is the responsibility of Government. It would not be appropriate for the regulator to duplicate the Government in this respect. Against this background price control decisions still need to be fully informed by the Director's statutory duties including those for energy efficiency.

(a) Revenue Driver

3.4 Price controls can be designed so that the permitted level of total revenue varies with changes in volume as well as being indexed to RPI. Under the original electricity distribution price control which ran until March 1995, PESs' allowed revenue increased in direct proportion to units distributed. In the review of that price control, in order to promote energy efficiency, OFFER modified the revenue driver. The weight on units distributed in the revenue driver of the price control was halved, from 100 per cent to 50 per cent. The remaining 50 per cent was fixed by relating it to a predetermined projection of customer numbers. This change was intended to reduce any artificial

incentive on the PESs to promote increased sales of electricity. The retention of a weighting for units distributed, albeit at a reduced level, was intended to maintain the normal commercial incentives on companies to seek out and meet the needs of their customers. It also avoided undue fluctuations in distribution charges per unit as the volume of output varied.

- 3.5 In the present PES distribution reviews we have given careful consideration to the revenue driver from April 2000 and have indicated that it would be appropriate to continue with a revenue driver based on 50 per cent units and 50 per cent customer numbers.
- 3.6 With regard to the Transco price control which runs from April 1997 to March 2002, Ofgas made changes to the revenue driver so that it is split 50:50 between fixed and per therm revenue. The future form of the revenue driver will be an important issue in the next Transco price control review.
- 3.7 With regard to the present electricity and gas supply price restraints, they set maximum tariffs for domestic and small business customers. As such they do not include a revenue driver. In competitive supply markets it would not be practicable to set a revenue based control. We are currently consulting on the form of restraint on gas and electricity supply charges appropriate from April 2000.
- 3.8 With regard to electricity transmission the present price control removed the link between National Grid Company's (NGC) allowed revenue and the level of maximum demand on the transmission system.

(b) *Distribution Losses*

- 3.9 The treatment of distribution losses in the price control affects energy efficiency. Over the four year period leading up to the first price control review, (1990/91 - 1993/94) average PES distribution losses fell from 7.6 per cent to 7 per cent. Concern was expressed that PESs had insufficient incentive to reduce these losses. As part of the present distribution price control the incentive on companies to reduce distribution losses was therefore increased by roughly doubling the benefit retained by companies from reducing losses. The form of this revised incentive continues to allow customers to see the benefit of reduced losses over time.

3.10 Losses were still at 7 per cent in 1997/98. In the light of this, and given the apparently significant differences in the level of losses between individual companies (Midlands 5.5 per cent , Hydro 9.1 per cent), in the present PES reviews we are reviewing the incentive arrangements for reducing losses. Ofgem's technical consultants have been asked to assess the likely effect of each company's capital expenditure programme on the level of electrical losses. This should help establish whether each distribution business is taking reasonable steps to minimise losses. Previous price controls, including those on NGC, have been set on the assumption that licensees will invest in energy efficient equipment, such as low loss transformers, where possible.

(c) Demand Management

3.11 One potential means of reducing the costs of distribution is to encourage demand management by suppliers and their customers in areas where system reinforcement might otherwise be required. The practical scope for such action is unclear. However, under new arrangements distributors must for the first time alert suppliers to areas where any demand growth is difficult to meet. This provides a new opportunity for suppliers together with distributors to target energy efficiency measures where they can have most beneficial effect.

Competition in Supply and Energy Services

3.12 The completion of the process of opening the gas and supply electricity markets to competition provides an important opportunity for energy suppliers to offer energy efficiency services as a means of gaining or retaining customers. Previously, there were no great incentives for incumbent suppliers to offer these services, and potential new entrants who might have wanted to offer energy efficiency were excluded from the market. In overseeing the arrangements for the gas and electricity supply markets we have therefore ensured that it is open to suppliers to offer contract packages combining energy supply and energy efficiency services. This widens customer choice and helps energy efficiency. Energy Service Companies (ESCO) contracts could be potentially attractive to customers, and the provision of ESCO services could give suppliers a marketing advantage and serve to differentiate them from their competitors. The take-up of ESCO contracts will depend on the imagination and vigour with which suppliers market energy efficiency services. **We propose specifically to monitor ESCO activities as part of our wider monitoring of the gas and electricity supply market.**

3.13 In our recent document on the Social Action Plan, we referred to the interest on the part of social housing providers in developing ESCOs to serve low income households, and to recent Ofgas guidance for social housing landlords. We have specifically sought views on the actions which might be taken by the regulator and others to promote good practice and stimulate innovation in providing ESCOs for disadvantaged customers; and on the ways in which the regulatory regime might incentivise innovative schemes.

Responses to these issues will contribute to the development of policy for ESCOs.

3.14 At present there is little evidence that energy suppliers are seeking actively to market energy services to domestic customers. Suppliers have reported that energy efficiency is not perceived as a strong marketing point and they see more potential in selling other home services. One constraint on the development of energy services is said to be customer expectations of grant assistance. Against this background, the EST is running a DETR funded programme to pump-prime a range of ESCO pilot projects and feasibility studies aimed at stimulating the market for ESCOs. We are involved in the management of this programme, and will wish to consider any lessons which arise which may have implications for regulation. An important issue is the role of Standards of Performance in relation to ESCOs. Would it be appropriate to widen the scope for ESCOs to be supported under the Standards of Performance beyond that which is allowed at present? Or are Standards, on balance, likely to delay the development of ESCOs on commercial terms? These points are considered further in Chapter 5.

3.15 In terms of the present regulatory rules affecting ESCOs, some suppliers and others have said that the Licence requirement that suppliers allow customers the right to terminate the energy supply element of the contracts on giving 28 days' notice is a barrier to ESCO contracts being marketed, because of the risk that the customer may not pay off sums due in respect of the energy efficiency services provided. To meet this concern, the gas and electricity supply licences provide that the supplier with whom the customer has signed an ESCO contract may demand reasonable security in respect of such debts in the event of the customer switching supplier. These arrangements are intended to strike a reasonable balance between protecting customers by safeguarding the right to switch supplier, and reassuring potential ESCO providers. The present arrangements rightly place the onus on ESCO providers to offer attractive energy supply terms which will continue to appeal to customers. Removing the 28 day rule in the case of ESCO contracts would risk customers being locked into taking supply from incumbents which would not help competition either in energy supply or in the

provision of energy efficiency services. **We do not therefore favour any change to the present 28 day provision but would welcome views on how ESCOs might be assisted without risks to competition or customer protection.**

Renewable Energy – Accreditation

- 3.16 The Energy Saving Trust has recently launched its Renewable Energy Accreditation Scheme called Future Energy, along with an Accreditation Scheme Helpline – 0345 277200 – which provides information including details of the green tariffs being offered.
- 3.17 The purpose of the scheme is to verify suppliers' claims about renewable tariffs. So far accreditation has been given to a total of 11 suppliers. Six of those accredited (London, PowerGen, SWALEC, SWEB, Yorkshire and WRE) offer, or intend to offer, a green tariff whereby the amount of electricity supplied is matched by the purchase of electricity from renewable sources. Accreditation has also been given to five suppliers (Eastern, MEB, Seaboard, SP/Manweb and SWALEC) who offer, or intend to offer, a green tariff whereby the premium paid by customers is paid into a fund to support future investments in renewable energy.
- 3.18 Similarly, Amerada Gas offers a green gas tariff under which they arrange for trees to be planted that will 'fix' as much carbon dioxide as the customer will release from the burning of the gas supplied. Customers choosing this tariff should therefore have a neutral effect on the addition of green house gases.

Other Developments

- 3.19 A key feature of competition in gas and electricity supply is the opportunity which it presents for multi-fuel supply. Many suppliers now active in the market are offering customers contracts embracing gas and electricity supply. This is a potentially important development for energy efficiency, in that it may improve the information available to customers on the most efficient fuels to use and encourage the offering of tariffs which promote fuel switching, where this is economical.
- 3.20 In order to strengthen competition, the separation of electricity supply and distribution is being introduced and the Government has indicated that it intends to legislate to take forward this process. (We are currently consulting on the steps to be taken ahead of legislation). An important element of separation will be to remove the distinction in law between PES supply businesses and second tier suppliers and to put all electricity

suppliers on the same legal footing. Separation of supply and distribution should sharpen the business focus for each, including with regard to energy efficiency and embedded generation, and any regulatory obligations should be in line with this. This is relevant to how Standards should be set, particularly to which business they should apply.

Renewable Generation

- 3.21 Renewables are expected to play an important part in meeting environmental objectives and reducing greenhouse gases. Since 1990 support for renewables has been provided through Non Fossil Fuel Obligation (NFFO) Orders which require the PESs to secure the availability of generating capacity from renewable sources. Before an Order is made the Director is responsible for advising the Secretary of State on the means of meeting an Order and considering whether the projects proposed by the PESs will secure such capacity. To date there have been five NFFO Orders in England and Wales, under which contracts were awarded to 794 projects with a total contracted capacity of 3,271 MW, and three Scottish Renewable Orders (SRO), under which contracts were awarded to 109 projects with a total contracted capacity of 336 MW. To date 258 of these projects with a total contracted capacity of 651 MW have been commissioned.
- 3.22 NFFO and SRO projects together with hydro schemes in Scotland contribute approximately 2 per cent of total electricity supplied. As further projects that have been awarded NFFO and SRO contracts become operational the proportion of electricity generated from renewable sources is expected to rise to about 5 per cent by 2003.
- 3.23 Projects that are awarded contracts under NFFO and SRO are paid a guaranteed price per unit of output. The additional cost of this above Pool Selling Price is met by the Fossil Fuel Levy. The prices paid to generators under the five NFFO Orders have reduced considerably - in 1998 the NFFO5 average contract price was 2.71p/kWh. This represents a 26 per cent reduction on the NFFO4 average contract price and a 45 per cent reduction on the NFFO3 average contract price.
- 3.24 A consultation paper issued by the DTI in March 1999⁸ considers what measures are needed to achieve a target of 10 per cent of electricity from renewables. The paper

⁸ New & Renewable Energy: Prospects for the 21st Century

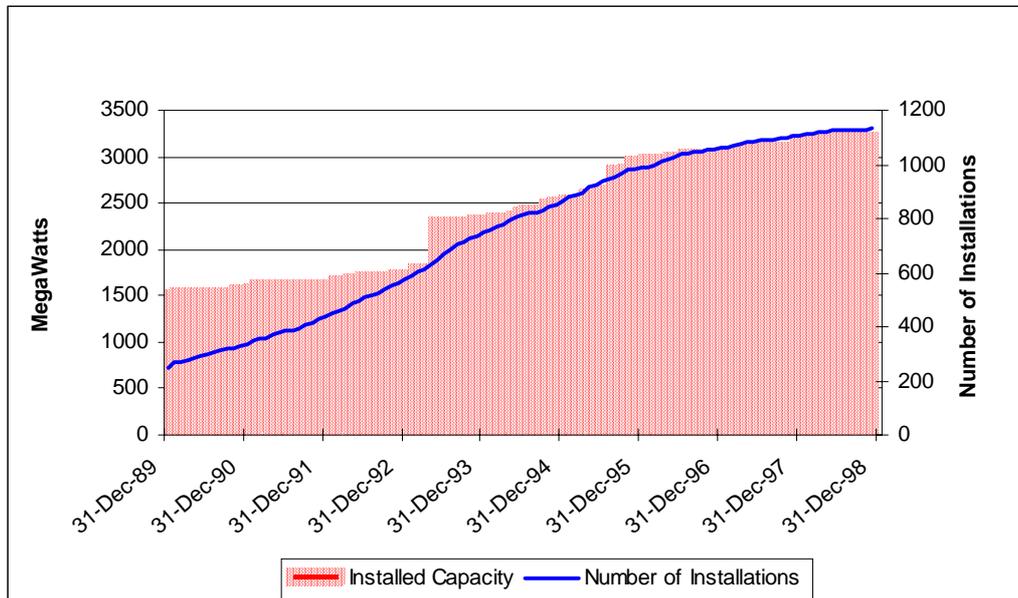
recognises that the target is unlikely to be met without further support for renewables and considers what form of support might be provided through revised NFFO arrangements. Important issues under consideration include: the nature of any future obligation - whether it should be set in terms of capacity or electricity supplied; how funding for renewables should be provided - whether through a levy or some other means; whether the obligation should be placed on supply or distribution companies; and how the reference price should be set.

Combined Heat and Power

- 3.25 CHP can provide a secure and efficient method of generating electricity and heat for local use. It significantly reduces primary energy use, energy costs and emissions. On new installations, efficiencies of about 70 per cent are common and 80 per cent or more are achievable. The Government's Review of Energy Sources for Power Generation concluded that there should be a stricter consents policy for new power stations, but made a clear exception for CHP in view of the environmental and other benefits.
- 3.26 CHP is an important component of the Government's Climate Change strategy. DETR's October 1998 Consultation Paper suggested possible savings of 5 million tonnes of carbon by 2010 from the increased use of CHP (out of a total national savings requirement from all sectors of 29 million tonnes beyond the savings already in the pipeline). The UK's present installed CHP capacity is around 3,700 MW; the Government has a target of achieving 5,000 MW by the end of 2000, against a long term potential use estimated to be in the range of 12,000 - 19,000 MW. The level of installed CHP capacity assumed by 2010 in the Climate Change projects implies a significant increase in the use of CHP. The achievement of these CHP targets will be affected by movements in gas and electricity prices and by the regulatory regime.
- 3.27 Ofgem maintains a public register of CHP schemes. According to the register, CHP capacity in Great Britain more than doubled between 1990 and 1998 from 1,570 MW to 3,300 MW, and the number of installations increased from roughly 250 to 1140. (Ofgem's figures are lower than the Government's estimates mainly because some CHP operators do not wish to place details on the public register). The significant increase in the number of CHP installations reflects the increasing penetration of CHP amongst non-industrial users, including hotels, hospitals and residential users. Figure 1 and Figure 2 give details of the growth in CHP and user categories. **We would**

welcome suggestions on how the register might be best developed to improve the service provided to its users.

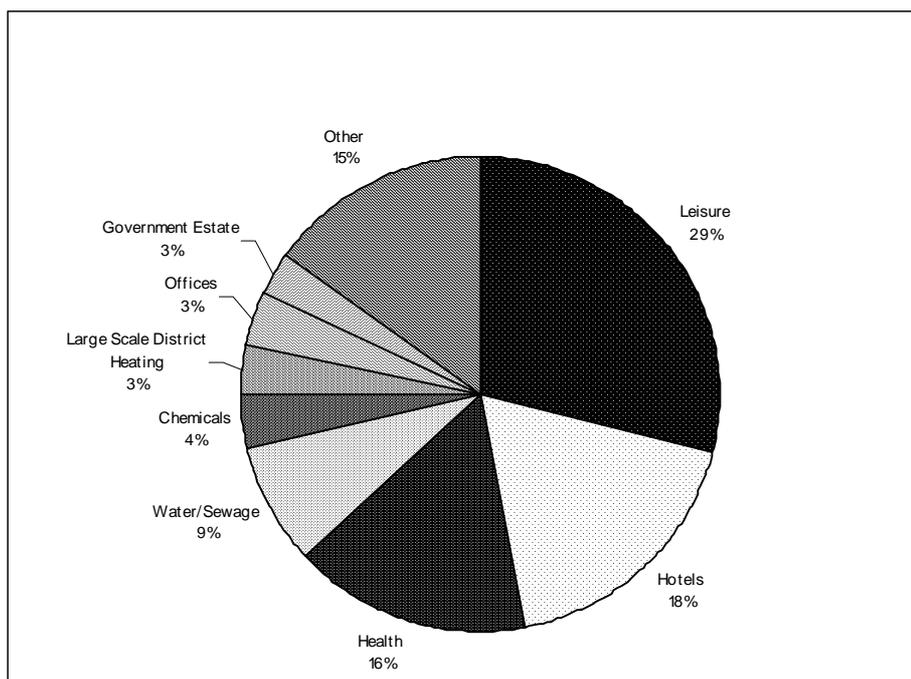
Figure 1 – Growth in CHP 1990-1998



Source: Ofgem

3.28 In addition seven CHP waste burning schemes were supported under NFFO in 1998, to provide capacity of 70 MW. Eleven CHP projects have been supported under the Energy Efficiency Standards, to provide heat and power in residential buildings which previously had old inefficient electric heating systems.

Figure 2 - Number of CHP installations by Economic Sector



Source: Ofgem

Trading Reform and Embedded Generation

- 3.29 Ofgem is working with the DTI to consider the special needs of CHP and renewable generators in the context of the Reform of Electricity Trading Arrangements (RETA). In addition, we are working with the DTI to identify particular problems faced by embedded generators. Embedded generators (often are, but not exclusively, renewable and CHP operators) have previously been limited to selling electricity to end users within a bounded site and selling any excess to their local PES. Embedded generators have argued that the prices paid by PESs have not reflected the full value of the output from their plant.
- 3.30 The opening of the electricity supply market to competition has given renewable and CHP operators new opportunities to sell to a wider market. Provisions have also been made for fairer arrangements for local trading, giving embedded generators greater choice of purchasers. Work on top up and standby charges and the rules for connection charges have also benefited embedded plant. The separation of distribution and electricity supply will provide additional safeguards for embedded generators by removing incentives on distribution businesses to discriminate in favour of their supply and generation interests. Further work may be required to ensure that the charges made by distribution businesses reflect appropriately the costs and benefits of distribution business of embedded plant.

Social Action Plan

- 3.31 Energy efficiency is a key strand in the discussion document on the Social Action Plan published in May. This includes consideration of how best to ensure that energy companies take appropriate steps to help disadvantaged customers reduce their energy bills and enjoy better heated homes. We have sought views on improving the targeting of advice to customers in debt and the fuel poor; and on the role of the electricity and gas companies in helping disadvantaged customers achieve affordable warmth.
- 3.32 The Social Action Plan discussion document notes the significant help which has been provided to the fuel poor and special needs customers under the Energy Efficiency Standards of Performance. Low income customers accounted for some 60 per cent of PES expenditure on projects during 1994 - 1998, and this is forecast to reach 65 per cent during 1998 - 2000. The procedures for assessing projects have been set so that companies are not discouraged from targeting low income customers, even though

projects for low income customers provide lower energy savings than do projects for other customers. To this extent the Standards have made a valuable contribution to the delivery of affordable warmth.

- 3.33 The Social Action Plan discussion document indicates that, if new Standards are to be set, it will be important to consider the appropriateness of focusing the benefits on one set of customers; and that, if significant focus is to be given to disadvantaged customers, the implications for environmental policy will also need to be considered. These issues are explored in detail in the next section of the present document.

Energy Efficiency Advice

- 3.34 Gas and electricity suppliers have important responsibilities to offer energy efficiency advice to customers in order to assist customers to make informed decisions on how best to improve their use of gas and electricity. As indicated above it is particularly important that suppliers should provide advice to disadvantaged customers, including customers in debt and the fuel poor, on how to reduce their fuel bills and obtain grants for energy efficiency. We shall be examining the scope for strengthening services in this area in the review of the Social Action Plan.
- 3.35 Under the present requirements, suppliers have to make arrangements to ensure that advice is available. They have to promote their advice service and use properly trained staff. The service should include a telephone help line; printed literature with practical hints and examples; and referral to other agencies where appropriate. Some suppliers offer home visits, particularly for elderly and disabled customers.
- 3.36 Service delivery can be sub-contracted, and some companies use the network of Energy Efficiency Advice Centres (EEACs) which DETR, EST and a number of local authorities have helped to set up. Several PESs have had their service independently accredited by the EST. OFFER and Ofgas have taken steps to ensure that companies provide a high level of service, and there is close local monitoring by Electricity Consumers' Committees including mystery shopping. Nonetheless, concerns have been raised in various quarters, including by the EST and the Consumers' Association, whether companies promote their advice services effectively and over the range of advice which is offered.

- 3.37 Energy efficiency advice is now widely available through the publicly funded EEAC network, which is due to be expanded further. Any change to the companies' present responsibilities should be seen in that light. The main issue to consider is whether under the present arrangements gas and electricity companies provide a useful source of advice additional to that available from EEACs, or whether it would be better to base the giving of advice entirely on the EEACs by requiring companies to transfer service delivery to EEACs.
- 3.38 There may be customers who are reluctant to approach an energy supplier for objective advice on how to save energy, but who would be comfortable with receiving advice from an EEAC. Would such customers be more likely to seek advice (and receive better advice) if the supplier has subcontracted the provision of advice to an EEAC, or would he have gone to the EEAC anyway? Would subcontracting to an EEAC make a difference to the number of customers seeking advice if, as now, the advice is still marketed under the company's name? Overall, it is not clear that requiring companies to outsource the provision of advice would increase the number of customers who obtain advice, though it ought to remain open to companies - particularly new entrants - to go down this route. **However, we would welcome views on this and on how best to promote and deliver high quality energy efficiency advice**

4: Standards of Performance: 1994-2000

- 4.1 This Chapter describes the arrangements under the current Standards of Performance set on the Public Electricity Suppliers since they were introduced in 1994. To date no Standards have been set on other electricity suppliers or on gas suppliers.

Purpose of Present Standards

- 4.2 The objective of the Standards on PESs when initially set for 1994-98 (known as SOP1) was to stimulate investment in energy efficiency by providing the PESs with an obligation and the funding to implement cost effective energy efficiency measures which would provide benefits for customers. In justifying the arrangements the Director emphasised the distinction between 100kW and above customers, who were outside the franchise during 1994-98, and franchise customers. Second tier suppliers and energy management companies and others had the ability and incentive to bring to non-franchise customers' attention the scope for energy efficient measures to reduce electricity costs. There was, nonetheless, opportunity for improved energy efficiency by franchise customers. The fact that competition between electricity suppliers was not allowed in this market meant fewer sources of advice to customers and less variety in the terms on offer. Franchise customers might be less informed about the potential for energy efficiency, and less able to finance the necessary initial investment. It was therefore reasonable to oblige the PESs to do more in this area provided that the benefits went to franchise customers, who would be paying the cost in the first instance. Within this group of customers, due account should be taken of the needs of the elderly, the disabled and low income groups.
- 4.3 OFFER consulted during 1997 on whether it would be appropriate to continue to support energy efficiency by means of Standards from 1998. The majority view, particularly amongst consumer and environmental groups was that, on the available evidence, the previous Standards had proved to be effective, and that they should be extended. Against this, most PESs were concerned about whether new Standards would be compatible with supply competition, particularly insofar as this would expose them to costs and obligations not faced by second tier suppliers. Another PES concern was that uncertainties over the number of customers who would switch to second tier suppliers would make it difficult to set Standards based on the number of customers supplied by PESs.

4.4 The Director concluded that it would be possible to continue with the Standards without any significant adverse effect on the PESs' competitive position. Whilst the opening up of competition from 1998 would allow suppliers to offer a variety of terms to customers, not least terms relating to the provision of energy services and energy efficiency packages, competition would take time to develop. Therefore, there was a case for continuation of the Standards, and arrangements to fund them, for a transitional period after 1998, provided this could be done in a manner and on a scale which did not unduly distort competition or adversely affect the interests of customers. The Director indicated that schemes should be focused on domestic customers covered by the supply price restraint, particularly those least likely to benefit from competition initially. New Standards, known as SOP2, were accordingly set to run until March 2000, but without any presumption that they should be extended further.

Structure of Present Standards

4.5 The present Standards as determined by the Director, set individual energy savings targets expressed in gigawatt hours (GWhs) for each PES, which have to be met by projects implemented by 31 March 2000. The energy savings are calculated on the basis of the savings which those projects are forecast to deliver over their lifetime. The EST plays an important role in independently assessing, and advising OFFER on, the energy savings which it is reasonable for PESs to claim from individual projects. The Trust assesses each project both before it is launched and when it is completed. On the basis of these assessments the companies' performance against the Standards is measured.

4.6 The Standards set criteria for the selection of projects, including value for money and cost-effectiveness, and the need to take into account the interests of customers (in particular elderly and disabled customers, those in rural areas and those who have payment difficulties). Other criteria include the need to take into account the effect of projects on the physical environment and the desirability of demonstrating a variety of methods of achieving energy savings. PESs are responsible for achieving the Standards in accordance with these criteria. The majority of projects under the present Standards are projects which PESs have themselves developed. The Trust advises PESs on potential projects which might be undertaken and has itself developed various framework schemes which PESs implement locally, as well as developing and arranging national projects on behalf of all PESs. Projects are required to include arrangements for monitoring energy savings (as well as customer satisfaction and quality) in order to

allow the effectiveness of projects to be assessed and to inform future energy efficiency policy.

- 4.7 Attached at Annex D is an outline example of the Director's determination in respect of setting the Standards of Performance for a PES for the period 1998-2000.

Performance under the Standards

- 4.8 Figure 3 shows the energy savings required of each PES and the cost to the PES of meeting the Standards assumed for the PES's supply business. Figure 4 shows the energy savings forecast from, and the actual cost of, projects carried out by PESs under the 1994-98 Standards. The average cost to the PESs of saving one kWh of electricity through these projects was 1.42p and the range for individual PESs was 1.27p to 1.66p. This variation is due to a number of factors, including regional cost differences, the type of measures undertaken, and the contribution to the cost of projects provided by other parties. All companies entered into an agreement with OFFER during 1996 that any funds which remained from the £1 per customer allowance after achieving the Standards would be spent on energy efficiency, and OFFER allowed more flexible criteria for such expenditure.

Figure 3 - Electricity Standards of Performance

PES	1994-98		1998-2000		1994-2000	
	Funding £m	GWh Target	Funding £m	GWh Target	Funding £m	GWh Target
Eastern	12.5	758	5.8	332	18.3	1,090
East Midlands	9.1	556	4.3	238	13.4	794
London	7.9	461	3.5	188	11.4	649
Manweb	5.5	330	2.5	137	8.0	467
Midlands	9.0	550	4.2	246	13.2	796
Northern	5.8	348	2.5	153	8.3	501
NORWEB	8.8	538	4.1	223	12.9	761
SEEBOARD	8.0	469	3.7	220	11.7	689
Southern	10.5	622	5.0	274	15.5	896
SWALEC	3.8	224	1.8	100	5.6	324
South Western	5.3	319	2.4	150	7.7	469
Yorkshire	8.2	500	3.8	208	12.0	708
Hydro-Electric*	1.9	102	1.2	59	3.1	161
ScottishPower*	5.4	326	3.3	185	8.7	511
TOTAL	101.7	6,103	48.1	2,713	149.8	8,816

Source: Ofgem

Note*: funding was 1995/98 for SOP1

Figure 4 - Standards of Performance 1 – Project Summary
Schemes Completed to 30 June 1999

PES	Savings achieved under Standards GWh	Cost to PESs (£) £'000	Average cost to PES (p/kWh)	GWh as % of target	Number of schemes completed	Number of schemes outstanding
Eastern	890	12,500	1.40	117	28	0
East Midlands	588	8,213	1.40	106	18	0
London	497	7,727	1.55	108	62	1
Manweb	367	5,129	1.40	111	28	0
Midlands	622	7,919	1.27	113	49	1
Northern	388	5,342	1.38	111	47	0
NORWEB	599	8,385	1.40	111	75	0
SEEBOARD	560	7,465	1.33	120	26	0
Southern	653	10,163	1.56	105	31	0
SWALEC	232	3,859	1.66	104	27	0
South Western	360	4,914	1.36	113	41	1
Yorkshire	538	7,598	1.41	108	21	0
Hydro-Electric	117	1,819	1.55	115	36	0
ScottishPower	264	3,847	1.46	81	15	1
Total	6,675	94,880	1.42	109	504	4

Source: EST

- Notes:
1. Savings and costs refer to projects completed.
 2. In the case of Scottish Power the outstanding scheme is largely completed and is expected to contribute savings which ensure the company meets the target.

4.9 Figure 5 gives details of the forecast costs and energy savings of schemes approved under the 1998-2000 Standards as at 30 June 1999. Several companies have received approval for schemes which would exceed their required energy savings targets, but they would not be expected to carry out all these schemes on the scale approved. As the approved schemes are completed and project completion reports submitted the performance data for each company are adjusted accordingly.

Figure 5 - Standards of Performance 2 – Project Summary

Schemes Approved to 30 June 1999

PES	GWh Target	GWh in Approved Schemes	% of Target	Estimated Cost to PESs (£'000)	Average cost in p/kWh to PES
Eastern	332	424	128	6,391	1.51
East Midlands	238	217	91	3,795	1.75
London	188	204	108	3,085	1.52
Manweb	137	156	114	2,318	1.49
Midlands	246	184	75	2,551	1.39
Northern	153	218	142	2,718	1.25
NORWEB	223	267	120	4,306	1.61
SEEBOARD	220	158	72	2,515	1.59
Southern	274	358	130	4,791	1.34
SWALEC	100	106	106	1,572	1.48
South Western	150	140	93	1,985	1.42
Yorkshire	208	186	89	3,662	1.97
Hydro-Electric	59	52	88	810	1.56
ScottishPower	185	195	105	2,989	1.53
Total	2,713	2,863	106	43,488	1.52

Source: EST

4.10 The present Standards encourage companies to undertake a variety of approaches to promote the efficient use of electricity. Cavity Wall and loft insulation together with low energy lighting account for a substantial proportion of the measures which PESs have undertaken, and within these categories companies have carried out a diverse range of projects, of varying sizes aimed at different customer groups, and in collaboration with a wide range of parties, including local authorities, housing associations and charities. Figure 6 (a) indicates the number of planned and actual installations within each category of project in respect of approved projects as of 30 June 1999. Figures 6 (b-c) show number of other applications and breakdown of non-domestic measures respectively under the Standards set for 1998-2000.

Figure 6 (a) - All Standards of Performance data for all approved schemes to 30 June 1999. Number of Measures Undertaken

Measures	(SoP1)	(SoP2)	Total
Cavity Wall Insulation	115,000	36,000	151,000
Energy Saving Lightbulbs	6,508,000	2,579,000	9,087,000
Loft Insulation	79,000	26,000	105,000
Heating Controls/Storage Heaters	25,000	4,000	29,000
Hot Water Cylinder Insulation	45,000	10,000	55,000
Efficient Refrigeration	85,000	110,000	195,000
Public/Commercial Lighting	197,000	7,000	204,000
Other Non-domestic Measures	8,000	53,000	61,000
Draught Stripping	36,000	5,000	41,000
Other Appliances	13,000	34,000	47,000
Combined Heat and Power	8	3	11
Other Insulation Measures	6,000	5,000	11,000
Total	7,117,008	2,869,003	9,986,011

Figure 6 (b)

Breakdown of "Other Appliances" (SoP2)	
Dedicated domestic luminaires	25,000
Washing Machines	8,000
Other	1,000
Total	34,000

Figure 6 (c)

Breakdown of non-domestic measures (SoP2)	
Church Lighting Schemes	29,500
Insulation	500
Heating and lighting controls	1,000
Energy efficient lighting	22,000
Total	53,000

Source: EST

4.11 Figure 7 (a) gives details of the customers by category who stand to benefit from projects approved as of 30 June 1999. Seven per cent of PES expenditure is on projects for non-domestic customers (below 100kW). An estimated 65 per cent of PES expenditure on projects for domestic customers is accounted for by projects for lower income groups. Figure 7 (c) shows by property type the numbers with one or more insulation measures.

Standards of Performance data for all approved schemes to 30 June 1999

Figure 7(a): Customers

Sector	PES Cost (£'000)	%
Domestic		
Lower Income	83,935	65
Other Income	44,502	35
Sub-Total	128,437	93
Non-Domestic		
Sub-Total	9,930	7
Total	138,367	100

(b) Tenure

Tenure	PES Cost (£'000)	% of domestic total
Owner Occupier	67,274	52
Social Housing	55,531	43
Private Rented	5,632	4
Total Domestic	128,437	100

Figure 7 (c): Property

Property Type	No. with one or more insulation measures	%
Bungalow	47,297	21
Flat	71,020	31
Detached House	14,645	6
Semi-Detached House	52,745	23
Terraced House	41,858	18
Total	227,565	100

Source: EST

Note: "Lower Income" is assessed on a individual scheme basis and includes customers eligible for HEES.

Assessing the Standards

- 4.12 In terms of achievements under the Standards, EST has estimated that projects under the 1994-1998 Standards will over their lifetime save 13.4 billion electricity units, equivalent to the annual consumption of over three million homes; reduce electricity bills by £410 million; improve the comfort of over 200,000 homes, worth over £70 million; and reduce CO₂ emissions by over 6 million tonnes. In terms of costs, EST calculates that (counting PESs' and other parties' costs) it cost just 1.7 pence to save a unit of electricity through projects carried out under the 1994-98 Standards. During 1998-2000 Standards projects are planned to deliver around 2.5 million energy saving light bulbs, 80,000 insulation measures, and 100,000 energy efficient appliances.
- 4.13 Based on a national sample of over 2000 homes insulated under the 1994-98 Standards, the results of monitoring the actual energy savings show that on average each household has saved £65 each year on its electricity bill. Moreover, without the insulation improvements, it would have cost each household an average of £75 a year to achieve the higher comfort level it now enjoys. Counting both the savings in electricity charges and the value of improved comfort levels, the monitored total benefit for each household is around £140 a year.
- 4.14 National Audit Office (NAO) carried out a detailed independent value for money examination of the Standards in 1998, and calculated that the 1994-98 Standards would produce a net economic benefit of £250 million. NAO commented on the fact that overall companies were expected to exceed their targets by 12 per cent, and that the bills of over three million customers would be reduced by an average of around £120 each. NAO made recommendations aimed at increasing further the benefits for customers by reducing the cost of the more expensive projects; and concerning the appropriate balance between energy savings and cost savings for customers (this would affect the relative weight given to lighting, appliances and insulation in companies' programmes). NAO's recommendations have already informed the arrangements for the Standards until 2000, and they will continue to be taken into account when setting and operating any future Standards.
- 4.15 Overall there is evidence that the Standards have proved to be an effective mechanism in providing useful energy savings and comfort improvements for customers, and in demonstrating the potential for promoting the efficient use of electricity. The response to OFFER's July 1998 PES Reviews consultation paper was broadly in support of

continuation of the Standards after 2000, based largely on the recognised success of the present Standards. In terms of customer support, market research⁹ carried out for OFFER indicates that on balance customers are in favour of £1 being added to electricity bills to fund energy efficiency (54 per cent were in favour, 32 per cent opposed it, and the remainder did not express a view). There was greater support amongst home owners, higher socio-economic groups and the middle aged than amongst lower income groups and the young.

⁹ Electricity Competition Review February/March 1999: Research Study Conducted by MORI for OFFER. June 1999.

5: Future Standards of Performance

5.1 Against the background set out in the previous chapters, this chapter considers whether Standards should be set in future for electricity and gas and, if so on what basis.

Continuing Justification for Standards

5.2 The main factors in the previous Director's decision to set Standards for PESs were:

- ◆ the lack of competition in supply to domestic and small business customers, leading to less variety in terms and fewer sources of energy efficiency advice than were available to customers in the competitive market; and
- ◆ the fact that domestic and small business customers were less informed about the potential for energy efficiency and less able to finance initial investment than were other customers.

Whether these factors continue to apply for electricity and whether they are present in the case of gas need to be considered.

5.3 With the gas and electricity supply markets now fully open to competition, it is open to all customers to access variety of terms and greater energy efficiency advice from suppliers. However, as mentioned earlier in this document there is little evidence at this early stage in the market's development that suppliers are actually offering ESCO packages. Moreover, PESs and Centrica remain dominant in their respective core markets and new ESCO providers have not entered the market. We should not rule out that the dynamics of the market may lead to suppliers more actively promoting energy services. However, as yet, there is no basis for presuming that this will occur in the near term.

5.4 In terms of the ability of customers to finance initial investment in energy efficiency, we have no evidence that the position is any different from when Standards were introduced. Indeed since 1994 there has been growing recognition of the difficulties faced by those in fuel poverty in meeting their energy bills. Attention has also focused on the problem of the separation of the costs and benefits of investment in energy efficiency, and how this tends to discourage investment by private landlords and owner-occupiers who expect to move house.

- 5.5 In terms of the availability of energy efficiency advice, since the Standards were introduced a national network of EEACs has been established with DETR funding which has extended the sources of advice available to customers. In addition gas and electricity companies continue to be required by licence to offer energy efficiency advice and information to customers. As far as the provision of advice under the Standards is concerned, companies provide advice to customers who take part in specific projects (eg advice on where best to use an energy efficient lightbulb to customers who receive a lightbulb) but stand-alone advice does not qualify for support under the Standards. Overall, the case for continuing Standards in order to improve customer access to energy efficiency advice is not strong.
- 5.6 In the present circumstances two further considerations are relevant. First, the success of the standards in addressing environmental concerns and the energy needs of low income households and other disadvantaged customers. Performance under the standards was set out in the previous Chapter. Whilst further monitoring and analysis of the savings actually achieved would be desirable, the standards appear to have delivered worthwhile benefits for customers and contributed to the achievement of government's wider environmental objectives.
- 5.7 Second, as indicated earlier, the Government has said that it proposes to take responsibility for setting future Standards, and that the planned Utility Reform Bill will include a power for Government to set energy efficiency Standards for gas and electricity. The Government has also made it clear that in the meantime it would wish the regulator to continue the present Standards arrangements for electricity and to apply similar arrangements to gas. To allow the Director to determine gas related Standards of Performance the Government will need to arrange for the continuation of section 33BB of the Gas Act by the laying of the necessary Statutory Instrument. It would therefore be fully consistent with the Government's stated policy for the regulator to set continuing Standards for electricity and to introduce them for gas to cover the period until the Government's own Standards can come into effect.
- 5.8 Given the Government's stated intention of introducing new and potentially extensive new standards once the necessary legislation is in place, continuation of the existing standards in electricity would be desirable in terms of continuity of regulation for the companies and in order to retain and build upon existing experience developed since 1994. Similarly, and in the light of the increasing convergence of the electricity and gas

markets, the existence of Standards for electricity and their absence for gas is increasingly incongruous with the same companies now serving both markets. In terms of energy efficiency nationally, the absence of Standards for gas has reduced the range of available projects, particularly by excluding the important area of insulating gas heated homes, and has limited the benefits for customers. The EST's initial estimate suggests that setting Standards on gas suppliers on the basis £1 per customer, could lead to discounted energy savings of some 3,600GWh and 350,000 tonnes of carbon over a two year period.

- 5.9 In terms of other regulatory priorities, as set out earlier, the Director cannot consider the promotion of energy efficiency in isolation from his wider duties. It is therefore important that Standards should be on a scale which does not add unduly to costs for customers, and that they are applied so as not to distort competition. As discussed below, it should be possible to proceed with Standards on this basis. In addition, further Standards can make a valuable contribution to the Social Action Plan, and the detailed arrangements for Standards need to facilitate this.

Responsibility for Meeting Standards

- 5.10 Should Standards be set on supply or distribution/transportation businesses? The supply of energy to customers includes the capacity to help customers make best use of the energy which they need. It includes advice and information for customers on how best to use energy - including fuel switching. Because of the supplier's day to day contact with customers, the supply business is best placed to handle the provision of energy efficiency schemes including home insulation, and energy efficient lighting and appliances either under Standards or within an ESCO contract. In contrast the distribution function includes load management and maximising the efficient use of the network. To be effective, energy efficiency needs to be based on contact with customers and an understanding of their energy needs. This is clearly a supply function rather than a job for distribution/ transportation and Standards should therefore be placed on the supply businesses for gas and electricity.
- 5.11 Separation of electricity supply and distribution could have a number of implications for energy efficiency. With separation, no supplier should be concerned about the lost distribution revenue arising from reduced electricity usage. This could increase the incentive for suppliers to provide energy services. Equally, separate distribution businesses will not have a concern about losing supply revenue and customers. This

may lead to distribution businesses giving greater recognition to the reduced network costs and lower losses available from many CHP and other forms of embedded generation plant.

- 5.12 The Government has itself indicated that, whilst the proposed Utility Reform Bill will allow Standards to be set on distribution and on supply, the Government's present intention is to set Standards on supply in line with the wider objective of creating a strongly customer-focused energy market. **Our view is that supply is the appropriate business for carrying out Standards.**

Scope of the Standards

- 5.13 The Gas Act provides for the Director to set Standards for all gas suppliers, though he can differentiate between suppliers provided this does not put a supplier at a competitive disadvantage. Setting Standards for PESs is covered by the Electricity Act but no provision is made under the legislation for other electricity suppliers. However, second tier electricity suppliers, as indicated earlier, are under an existing licence obligation to report to the Director, and to publicise, the measures which they have taken to improve the efficient use of electricity. **We propose to strengthen this licence obligation by requiring second tier suppliers to meet a specific and enforceable Energy Efficiency Standard of Performance. A copy of the proposed licence amendment is at Annex E.**
- 5.14 Under the present Standards, projects have to be for designated customers within the PES's own area but customers need not be supplied by the PES. Designated customers comprise all domestic customers and those business customers with annual demand under 12,000 kWh. There are several reasons, some of which are set out below, for focusing new Standards for electricity and gas exclusively on domestic customers. However, at the same time it is recognised that differentiating between small business customers and "real" domestic ones might prove very difficult in practice particularly in the gas market.
- ◆ targeting domestic/household customers would allow greater concentration on assisting the fuel poor and improve linkage with the Social Action Plan;
 - ◆ business customers' energy efficiency requirements seem at present more likely to be met through competition than do those of domestic customers;

- ◆ the proposed Business Energy Tax and the associated incentives for energy efficiency will provide a new framework for business users to improve energy efficiency; and
- ◆ in practice it has been difficult for PESs to develop a range of cost effective projects for business customers whilst meeting additional criteria.

5.15 It would be helpful to have views on whether the Standards should focus on householders or include small industrial and commercial customers. We would welcome views, on the practical feasibility of separating small businesses from domestic customers for the purposes of providing targeted energy efficiency help. **Can the rate at which VAT is charged (ie 5 per cent for domestic customers and 17.5 per cent for industrial and commercial customers) be used to differentiate the customer base to help target the scheme?**

Criteria for Measures under the Standards

(a) Disadvantaged Customers

- 5.16 Our discussion paper on the Social Action Plan envisages that energy efficiency should play a key role in assisting disadvantaged customers. This means that future Standards should make particular provision for disadvantaged customers; the fuel poor, the elderly, the disabled, chronically sick and rural customers. Under the present Standards the procedures for assessing projects have been set so that companies have every incentive to target disadvantaged customers, despite the fact that projects for such customers tend to be more costly for the companies. They also tend to yield lower energy savings because customers take comfort benefits from improvements.
- 5.17 The present Standards provide for some two thirds of their total expenditure to be allocated to projects aimed at disadvantaged customers, and for almost three quarters of the energy savings from insulation schemes to be for disadvantaged customers. The PESs and the EST have also developed a number of innovative appliance and lighting schemes specifically aimed at disadvantaged customers, such as the Fridgsavers project, which provides energy efficiency fridges to replace old, inefficient models for those on benefits.
- 5.18 It is important that new Standards should be in terms which continue to ensure that assistance is significantly focussed on disadvantaged customers. The targets and criteria

for the Standards should be set accordingly. **We would welcome views on how best to ensure that the fuel poor and other disadvantaged customers benefit. Should companies be required to go further than the 65 per cent of expenditure targeted on these customers? Should there be closer targeting of the fuel poor specifically, rather than low income customers more broadly? What account should be taken of the proposed new HEES programme to be focused on the fuel poor?**

b) Range of Projects

5.19 PESs are now required to achieve a minimum level of energy savings through a mix of projects, including those in lighting, appliances and insulation. Overall the PESs' programmes for the present Standard envisage 39 per cent of the energy savings target coming from lighting, 41 per cent from insulation, and 20 per cent from appliances and other schemes. The main arguments for requiring a mix of projects are that

- ◆ it ensures that companies deliver energy savings in most of the main areas in which customers use electricity;
- ◆ it saves electricity charged at day and at night rates and allows a reasonable balance to be struck between cost savings for customers and energy savings;
- ◆ it allows a range of potentially valuable new schemes to be explored.

5.20 Broadly speaking on the basis of experience under the Standards to date:

- ◆ energy efficient lighting has proved the most cost-effective project area in terms of the value of energy saved in relation to project costs;
- ◆ insulation, particularly cavity wall, has been the most effective in terms of the volume of energy saved in relation to project costs;
- ◆ appliances have been the least effective all round;
- ◆ insulation schemes have allowed help to be concentrated on those with the highest electricity bills, not least the fuel poor;
- ◆ lighting schemes have been a means of ensuring that large numbers of customers have benefited;
- ◆ in many cases appliance schemes can provide help to customers only at the point when they come to buy an appliance, tending to concentrate benefits on relatively few customers at random;
- ◆ the assessment of the cost-effectiveness of appliance schemes is more difficult than for other project areas;
- ◆ appliance projects have been designed to assist the development of the market for

- energy efficient appliances;
- ◆ there is a question whether further appliance schemes would be redundant in the light of tighter product standards; and
- ◆ appliance schemes may however be particularly useful for disadvantaged households who may otherwise be using old and inefficient appliances.

5.21 When drawing up their programmes for the present Standards, PESs were allowed considerable freedom regarding the mix between appliances, insulation and lighting as well as some discretion regarding the proportion of assistance which they would be able to offer to low income customers. Each PES's programme was costed to ensure that it matched the £1 per customer funding provision and taken into account when setting the Standard for that PES. **In carrying out the Standards PESs are expected to broadly follow the mix and the targets for specific customer groups which have been agreed** This ensures that each PES undertakes a balanced range of projects, and helps to ensure that funds raised from customers for energy efficiency are actually used for that purpose. It is likely that a broadly similar arrangement would be appropriate for any extension of the Standards. **Before setting any Standards we would propose to seek EST's detailed advice on these matters. In the meantime we would welcome views on the general points raised.**

c) Cost Effectiveness

5.22 The present Standards require all projects to meet specific cost effectiveness criteria. Namely, in selecting Projects the Supplier must-

- (i) select only Projects under which the aggregate benefits to Consumers generally under the Project in question are expected to exceed the aggregate costs of that Project; and
- (ii) shall give priority to proposals for Projects which can be expected to exert downward pressure on the charge per kilowatt-hour to Consumers generally.

5.23 As indicated above, NAO's review of the Standards highlighted the importance of achieving cost-effectiveness alongside other requirements. Overall PESs have been successful in this regard. However, their response to OFFER's July 1998 consultation raised concerns over whether there are the opportunities for further cost-effective

schemes in electricity, based on their assessment that the most cost-effective projects have now been undertaken, and the fact that most customers with electric heating have already been offered home insulation.

- 5.24 The cost-effectiveness criteria is an important safeguard for customers to ensure that the projects carried out under the standards are focused on those likely to bring maximum benefit to customers. This factor needs to be balanced with the other criteria for project selection which might otherwise tend to focus the projects on areas where cost effectiveness is most difficult to achieve. **Accordingly, we propose that any extension of the standards should include a requirement on project cost-effectiveness.**

d) *Regions*

- 5.25 The present electricity standards, by setting separate requirements on each PES already provide for a good spread of projects across Scotland and Wales and the English regions. Under the new Standards the position will not be so clear as the Standards will apply to companies offering supply across the country. It would be desirable to ensure that projects continued to be carried out across all parts of the country. **It is for consideration whether the project selection criterion under the standards should be extended to achieve this. We would welcome views on how to achieve a regional spread of projects.**

e) *Physical Environment*

- 5.26 The present electricity standards require that Suppliers in selecting projects take into account the effect of the project on the physical environment. In practice this has meant that suppliers demonstrate to the EST how many tonnes of carbon the project will save. Suggested projects which would result in more carbon being produced would not be approved. **We therefore propose that any extension of the Standards should include a requirement that the effect of projects on the environment should be taken into account.**

Gas Issues

- 5.27 Extension of Standards to gas will raise specific issues. In particular, should the structure and level of Standards for gas be comparable to those for electricity? In addition, given that gas companies will not have systems in place to meet Standards, should an allowance be made for this in setting the level of the Standards or should an allowance be made in the other direction because of the greater scope for saving gas by insulation projects, owing to gas being the main form of heating in significantly more homes than

is electricity? **Before setting Standards for gas, we would propose to invite the EST to assess the scope for cost-effective projects.** A key question would be to assess the type of projects available and whether funding for gas would go further, or less far, than for electricity in terms of the level of energy savings achievable. In terms of project categories, would it maximise cost savings for customers and best reflect the opportunities for projects, for electricity to concentrate on lighting and appliance schemes, and gas on insulation and heating? **We would welcome initial views on these points.**

- 5.28 The present electricity Standards count end-use energy savings. Would this also be appropriate for gas, or should Standards for gas and electricity be set in terms of primary energy savings, whilst making due allowance for the difference in the ratio of primary to final energy usage as between electricity and gas? In broad terms, end-use energy savings measure customer benefits, whilst primary energy savings indicate environmental effects. In principle, the terms in which performance is measured should reflect the activities of the business on which the Standards are imposed. **This strongly implies that Standards on suppliers should be framed in terms of energy supplied to final customers, rather than energy used higher up the supply chain.** Another consideration is the degree of importance attached to being able to compare between gas and electricity, and the best way to achieve this.
- 5.29 In terms of cost effectiveness, the present Standards require all projects to show a positive return, ie the discounted value of the energy saved has to exceed the full cost of the project: within this there are limits on the level of PES expenditure of 3.4 pence per kWh saved for insulation projects and 4 pence per kWh saved for other projects. In setting Standards for gas it will be necessary to consider how best to ensure cost effectiveness, taking account of the costs of saving and buying gas and how this compares with electricity. This in turn may influence the overall level at which an obligation on gas should be set, and the relative size of the obligation as between gas and electricity. In general it is desirable that the burden of the obligation is broadly equal for gas and electricity companies even if this should result in different levels of final or primary energy savings. **We would welcome any comments on these issues.**

Fuel Switching

- 5.30 The present electricity Standards require that most savings are achieved directly through a reduction in electricity use. Fuel switching schemes are provided for but cannot

account for more than 25 per cent of the overall savings. In addition, the supplier must demonstrate that electricity is the lowest cost to the consumer compared with all other fuels. PESs have argued that these restrictions should be relaxed as beneficial schemes in electricity are increasingly difficult to identify. Conversely, some environmental groups have stressed the potential benefits to environmental objectives of encouraging fuel switching to gas.

- 5.31 A particular concern with fuel switching projects is whether they meet additionality requirements or whether they are a natural part of a supplier's marketing strategy. Retaining the focus on the individual fuel is in keeping with the present legislative requirements. It also minimises the scope for confusing the objectives of the schemes and emphasises the importance of a range of schemes to be adopted.
- 5.32 Some suppliers have argued that the retention of separate fuel requirements restricts beneficial schemes which involve savings of both fuel. This does not appear likely. The present flexibility in the standard is designed to provide for such cases. In addition, most suppliers are increasingly offering supplies on a dual fuel basis. Under these proposals, they will in future have to make savings in the use of both fuels which is likely to allow a further element of flexibility in the design of schemes.
- 5.33 **Our present intention on fuel switching therefore is to set the new Standards on a similar basis to the present Standards and restrict the extent to which fuel switching is allowed under the Standards. We would however welcome views on these issues.**

Project Marketing

- 5.34 As to which domestic customers should be covered, the present Standards are on the basis that PESs should offer projects only to customers within their own area and should not discriminate between their own supply customers and customers of second tier suppliers. PESs are not required to market projects to customers of other suppliers, but equally they should not turn a customer away because he happens to use another supplier. **The present arrangements for offering projects are based on the principle that market dominant suppliers should not discriminate. It seems likely that the same principle would need to underpin the arrangements for new Standards for electricity and gas.**
- 5.35 It is also important that the terms on which projects are offered do not risk distorting

competition. To guard against this the present rule is that to count for the Standards any ESCO contracts (involving the supply of electricity by a PES and the supply of energy efficiency) must be on the basis that the energy efficiency is provided on arms length commercial terms. This ensures that subsidised energy efficiency is not offered to customers as an inducement to take supply from the PES, and that customers are not required to take their supply from the PES as a condition of receiving energy efficiency assistance. Apart from this restriction, the Standards allow PESs to count energy savings from ESCO projects. Eligible ESCO projects are therefore those which are financially supported by the PES but where the PES does not provide the electricity supply, or where the PES does provide the electricity supply but no financial assistance to the customer is involved and the terms for electricity supply are not more favourable than those offered to non-ESCO customers of the PES. These arrangements are designed to ensure that the Standards properly reflect the contribution which ESCOs can potentially make to energy efficiency consistent with the promotion of competition. **We would expect that broadly similar criteria would need to apply to ESCO projects under new Standards and would welcome views on this.**

Setting the Standards

- 5.36 In terms of the timescale of any extension of the Standards, electricity companies and the EST have emphasised the risks to scheme cost effectiveness from any failure to bridge the gap between the present Standards, which cease on 31 March 2000, and any new Standards set by Government. Extending the Standards for less than two years would probably provide too short a period for the effective programmes to be implemented, particularly by gas companies. We would therefore propose to set new Standards for a period of two years starting 1 April 2000.
- 5.37 In setting the level of savings to be achieved it will be necessary to consider the overall level of expenditure likely to be required to meet the Standards. The present Standards for electricity are based on the assessment of the savings achievable by each company for a set level of expenditure equivalent to £1 per customer per year.
- 5.38 Some parties have suggested higher levels of expenditure would be appropriate. In particular, the Regulator in Northern Ireland (Ofreg) is presently consulting on Standards based on £2 per year for both electricity and gas customers¹⁰. It should be noted however that few households have both fuels in Northern Ireland.

¹⁰ Energy Efficiency and Fuel Poverty. A Consultation Paper OFREG June 1999

- 5.39 Setting a Standard significantly above £1 per customer would clearly provide further scope for energy efficiency savings under the Standards. It would, however, represent a very significant increase in the overall level of expenditure in this area and would have a direct impact on customers' bills.
- 5.40 Other parties have suggested different levels of expenditure should be allowed for the different fuels. For example, higher expenditure on gas would reflect the higher level of typical gas bills and reflect the important role of gas in home heating. Conversely, electricity companies have greater experience of operating the Standards and may be better placed to achieve higher levels of savings. Saving electricity may also bring greater environmental benefits.
- 5.41 **We would welcome views on these issues. Our initial view, however, is that Standards should be set on the basis of expenditure of about £1 per domestic customer a year for electricity and the same for gas. On this basis the total expenditure assumed under the Standards would amount to over £40 million a year, and the required savings under the Standards over a two year period might amount to about 6,000GWh.**
- 5.42 Setting Standards on this basis would ensure that nearly all customers, whoever their supplier, would have access to assistance on energy efficiency in both gas and electricity. This would be in line with growing convergence in gas and electricity markets and, reflect the fact that gas and electricity suppliers are increasingly operating on a national basis. However, Standards need to be at a reasonable level taking account of the circumstances of each supplier and the scope for cost effective projects. In particular account will need to be taken of the circumstances of smaller suppliers.
- 5.43 Ofgem recognises that smaller suppliers, who are new to the gas and electricity market, may well lack the resources and sufficient numbers of customers to be able to meet Standards cost effectively. **It is therefore suggested that the standards may not have effect where the supplier is supplying a relatively small number of customers. We would welcome views on this. In particular on where the cut-off should be placed – 100,000 customers?** In the gas market, for example, the suppliers to domestic customers with less than 100,000 customers, supply less than 1 per cent of the market.
- 5.44 The Standards may also need to take account of factors such as the distribution of the

suppliers' customers, the activities of related undertakings to the supplier (for example, a small gas supplier closely associated with a large electricity company may be better placed to meet Standards, than an independent gas supplier), and the supplier's experience of projects of this nature.

- 5.45 The present Standards in electricity give an incentive on suppliers to encourage third party funding for schemes. Rather than simply divide the savings achieved from a scheme by the proportion of funding provided by the supplier, an additional proportion of the savings are allocated to the supplier. This facilitates work with other bodies and incentivises the supplier to seek other sources of funds for projects. At present it is estimated that about 25 per cent of funding for schemes comes from third parties, including local authorities and customers. Some parties have suggested that all the savings arising from schemes in which the supplier participates should be allocated to the supplier under the Standards. We do not favour such an approach as it seems likely to exaggerate the suppliers' contribution to achieving energy savings, and will tend to unduly distort scheme design and make the level of savings to be achieved under the Standards more difficult to assess. We therefore propose to continue with the present third party funding incentive arrangements.
- 5.46 **Targets for individual suppliers will be set following further discussion with suppliers and advice from the EST. We would welcome views on the general issues involved in setting such targets.**

Customer Numbers

- 5.47 In setting the present Standards it was assumed that PESs would lose 5 per cent of their designated customers during 1998-2000. The energy savings target for each PES were set at a correspondingly lower level to reflect this. Forecasting customer numbers for each gas and electricity supplier for the purpose of Standards is likely to become progressively more difficult as competition develops. An alternative therefore would be to work on the basis of actual customer numbers as far as possible. This could be done by linking energy saving targets to the number of customers supplied at the start of each year, or by linking it to the average number of customers supplied during the year.
- 5.48 A disadvantage of this approach may be to increase uncertainty about the precise level of savings an individual supplier will need to achieve. It may be preferable to make some general forecasts about the path of customer numbers and provide for some

automatic adjustment up or down if this forecast proves to be significantly inaccurate. **We would welcome views on the best way to reflect changing customer in the Standards.**

Funding and Price Controls

5.49 All major suppliers will be subject to obligations under the Standards. Inevitably, the costs of meeting the Standards will be reflected in suppliers' prices. This will need to be taken into account in setting any supply price controls on the PESs and BGT from 1 April 2000.

6: Summary and Next Steps

Summary

- 6.1 This section summarises the main proposals made on Energy Efficiency Standards of Performance.
- 6.2 Our proposals are made in the light of the Government's intention to introduce new legislation to enable it to set new Energy Efficiency Standards of Performance on gas and electricity companies. The Government has indicated that it expects to set these Standards on suppliers. Ofgem is expected to have a continuing role in advising on the Standards and enforcing compliance.
- 6.3 The present Standards on the PESs, as set by OFFER, end in March 2000. There are currently no such Standards on gas suppliers or on second tier electricity suppliers. To bridge the gap between the demise of the existing Standards and the introduction of the Government's new ones the Director is presently minded to extend the present Standards on public electricity suppliers for a period of two years from 1 April 2000. In view of the increasing convergence of the electricity and gas markets and the development of competition in both markets the Director is also presently minded to set Standards over the same period for all gas suppliers and for all second tier suppliers.
- 6.4 Setting Standards for gas suppliers can only be achieved if the Government extends the Standard setting powers under the Gas Act (which otherwise would expire at the end of March 2000). Setting Standards on second tier electricity suppliers will require a new licence condition to be agreed by all such suppliers. Our initial views on the form of that condition are set out at Annex E.
- 6.5 In general we expect the arrangements for the new standards in both electricity and gas to mirror the present arrangements in electricity. In particular standards should be set on the basis of the lifetime savings assessed as arising from projects undertaken by or on behalf of suppliers. The precise level of savings to be achieved will be assessed following advice from the Energy Saving Trust on the opportunities for savings that meet the requirements of the Standards.
- 6.6 We propose that schemes under the Standards should meet various project criteria. These will include requirement to select projects which:

- ◆ Are cost-effective;
- ◆ Take into account the interests of disadvantaged customers (we envisage that over 60 per cent of project expenditure may be focused on disadvantaged customers) ;
- ◆ Provide for a mix of project types in order to demonstrate a range of different means by which customers can save energy;
- ◆ Take into account the effect of a project on the physical environment.

6.7 We invite views on whether a requirement to ensure a regional spread for projects should be included in future. We propose to retain present project requirements on the scope of energy advice and fuel switching projects to be allowed under the Standards. The Standards will continue to require careful monitoring to ensure that dominant suppliers do not take actions through schemes under the standards (including scheme marketing) which are likely to distort competition.

6.8 We envisage that the standards should only apply in respect of domestic customers and we invite views on whether it is practicable and desirable to restrict the scope of the standards to exclude supplies to small business and commercial customers.

6.9 We envisage setting standards on the basis of the savings that should be achievable for expenditure of around £1 per fuel per year. In setting standards we will need to consider with particular care the position of smaller suppliers. We envisage that the Standards may not have effect where a supplier is supplying only a small number of customers (perhaps 100,000). However, we may also need to take into account factors such as the distribution of the supplier's customers, the activities of related undertakings of the supplier and the supplier's experience to date with energy efficiency projects.

6.10 The arrangements under the Standards should continue to incentivise suppliers to identify third party sources of finance. The costs of meeting the Standards will need to be taken into account in setting any supply price controls from April 2000.

6.11 Ofgem would welcome your comments on what is proposed. It would help us if responses could be received by 6 September.

Next steps

6.12 Following consideration of the comments received in response to this consultation document the Director will announce his key decisions. This will confirm issues such as:-

- ◆ whether there will be an extension of electricity standards beyond March 2000;
- ◆ whether there will gas Standards;
- ◆ how long any interim Standards will last;
- ◆ how much money suppliers will be able to raise from customers;
- ◆ which suppliers, if any, will be unaffected; and
- ◆ what actions will be required to enable the Director to set Standards for second tier electricity suppliers.

6.13 In late September and October it is the intention that Ofgem will meet with companies, the EST and other stakeholders to discuss issues connected with introducing Standards in accordance with the Director's announcement of his key decisions. In November it is expected that the EST will advise the Director on the details of the individual company standards. This advice will include details of energy saving targets, cost-effectiveness tests, project mix and the methodology for assessing the effectiveness of the Standard.

6.14 Following consideration of the EST's advice and other representations the Director will publish his final decisions in January 2000.

6.15 Changes to Electricity Supplier Licences to enable the Director to set enforceable Energy Efficiency Standards on second tier suppliers, equivalent to those he can set on PESs, will be negotiated with the relevant licensees in good time. This will allow all suppliers to be able to share the same start date of 1 April 2000.

Annex A - Director General's Main Statutory Duties

Gas

- (1) The Secretary of State and the Director shall each have a duty to exercise the functions assigned to him by or under this Part in the manner which he considers is best calculated -

- (a) to secure that, so far as it is economical to meet them, all reasonable demands in Great Britain for gas conveyed through pipes are met;
- (b) to secure that licence holders are able to finance the carrying on of the activities which they are authorised or required by their licences to carry on; and
- (c) to secure effective competition in the carrying on of activities the carrying on of which is required to be licensed under section 7A below.

(2) Subject to sub-section (1) above, the Secretary of State and the Director shall each have a duty to exercise the functions assigned to him by or under this Part in the manner which he considers is best calculated -

- (a) to protect the interests of consumers of gas conveyed through pipes in respect of the prices charges and the other terms of supply, the continuity of supply, the quality of the gas supply services provided and the exercise of rights under this Part to enter their premises;
- (b) to promote efficiency and economy on the part of persons authorised by or under this Part to carry on any activities, and the efficient use of gas conveyed through pipes; and
- (c) to secure effective competition -
 - (i) in the conveyance of gas through pipes to pipe-line systems and to areas to which it has not previously been so conveyed;
 - (ii) in the supplying and laying of service pipes; and

- (iii) in the carrying on of activities ancillary to those mentioned in sub-section (1)(c) above;

and a duty to take into account, in exercising those functions, the effect on the environment (whether by way of pollution or otherwise) of activities connected with the conveyance of gas through pipes.

(3) In performing his duty under sub-section (2) above to exercise functions assigned to him in the manner which he considers is best calculated to protect the interests of consumers of gas conveyed through pipes in respect of the quality of the gas supply services provided, the Secretary of State or, as the case may be, the Director shall take into account, in particular, the interests of those who are chronically sick, disabled or of pensionable age.

(4) In this section 'environment' and 'pollution', in relation to the environment, shall be continued in accordance with section 1 of the Environmental Protection Act 1990.

Electricity

(1) The Secretary of State and the Director shall each have a duty to exercise the functions assigned or transferred to him by this Part in the manner which he considers is best calculated -

- (a) to secure that all reasonable demands for electricity are satisfied;
- (b) to secure that licence holders are authorised by their licences to carry on; and
- (c) subject to subsection (2) below, to promote competition in the generation and supply of electricity.

(2) The Secretary of State and the Director shall each have a duty to exercise the functions assigned or transferred to him by this Part in the manner which he considers is best calculated to secure -

- (a) that the prices charges to tariff customers by public electricity suppliers for electricity supplied in pursuance of section 16(1) below to premises in any area of Scotland specified in an order made by the Secretary of State are in accordance with tariffs which

do not distinguish (whether directly or indirectly) between different parts of that area;
and

- (b) the public electricity suppliers are not thereby disadvantaged in competing with persons authorised by a licence or exemption to supply electricity to such premises.

(3) Subject to subsections (1) and (2) above, the Secretary of State and the Director shall each have a duty to exercise the functions assigned or transferred to him by this Part in the manner which he considers is best calculated -

- (a) to protect the interests of consumers of electricity supplied by persons authorised by licences to supply electricity in respect of
 - (i) the prices charged and the other terms of supply;
 - (ii) the continuity of supply; and
 - (iii) the quality of the electricity supply services provided;
- (b) to promote efficiency and economy on the part of persons authorised by licences to supply or transmit electricity and the efficient use of electricity supplied to consumers;
- (c) to promote research into, and the development and use of, new techniques by or on behalf of persons authorised by a licence to generate, transmit or supply electricity;
- (d) to protect the public from dangers arising from the generation, transmission or supply of electricity; and
- (e) to secure the establishment and maintenance of machinery for promoting the health and safety of persons employed in the generation, transmission or supply of electricity;

and a duty to take into account, in exercising those functions, the effect on the physical environment of activities connected with the generation, transmission or supply of electricity.

(4) In performing his duty under subsection (3)(a)(i) above, the Secretary of State or the Director shall take into account, in particular, the protection of the interests of consumers of electricity in rural areas.

(5) In performing his duty under subsection (3)(a)(iii) above, the Secretary of State or the Director shall take into account, in particular, the interests of those who are disabled or of pensionable age.

Annex B - Director General's Powers to Set Standards of Performance

Electricity

(1) The Director may, after consultation with public electricity suppliers and with persons or bodies appearing to him to be representative of persons likely to be affected, from time to time -

- (a) determine such Standards of Performance in connection with the promotion of the efficient use of electricity by consumers as, in his opinion, ought to be achieved by such suppliers; and
- (b) arrange for the publication, in such form and in such manner as he considers appropriate, of the Standards so determined.

(2) Different Standards may be determined under this section for different public electricity suppliers.

Gas

(1) The Director may, after consulting gas suppliers and persons or bodies appearing to him to be representative of persons likely to be affected, from time to time-

- (a) determine such Standards of Performance in connection with the promotion of the efficient use of gas by consumers as, in his opinion, ought to be achieved by gas suppliers; and
- (b) arrange for the publication, in such form and in such manner as he considers appropriate, of the Standards so determined.

(2) Different Standards may be determined for different gas suppliers if the Director is of the opinion that the differences are such that no gas supplier would be unduly disadvantaged in competing with other gas suppliers

Annex C - Licence Conditions Relating To Energy Efficiency Advice

Condition 16: Advice on efficient use of gas

The arrangements shall provide for the provision, at the request of any of the licensee's domestic customers, of advice on the efficient use of gas given or prepared by a suitably qualified person and, in particular, advice as respects –

- (a) the restriction of heat loss from existing buildings;
- (b) the selection of gas heating systems or controls for such systems for use in either existing or new buildings;
- (c) the operation of gas heating systems in either existing or new buildings which is best calculated to make an efficient use of gas;
- (d) the efficient use of gas supplied to a domestic customer but used for the purposes of trade or business;
- (e) organisation which may provide further advice, training or other services in connection with the efficient use of gas, and
- (f) sources of possible financial assistance in meeting the cost of works calculated to improve the efficient use of gas in existing dwellings.

Condition 22. Efficient use of electricity

1. The Licensee shall, no later than 1 January 1998, prepare and submit to the Director for his approval a Code of Practice setting out the ways in which the Licensee will make available to customers such guidance on the efficient use of electricity as will, in the opinion of the Licensee, enable them to make informed judgements on measure to improve the efficiency with which they use the electricity supplied to them. Such Code of Practice shall include, but shall not be limited to:

- (a) the preparation and making available free of charges to any customer who requests it of a statement, in a form approved by the Director, setting out information and advice for the guidance of customers in the efficient use of electricity supplied to them;
- (b) the making of arrangements for maintaining sources from which customers may obtain further information about the efficient use of electricity supplied to them, including the maintenance of a telephone information service; and
- (c) the preparation and making available free of charge to any customer who requests it of a statement or statement or statements of sources (to the extent that the Licensee is aware of the same) outside the Licensee's organisation from which customers may obtain additional information or assistance about measures to improve the efficiency with which they use the electricity supplied to them, such statement or statements to include basic information which is publicly available on financial assistance towards the costs of such measures available from Central or Local Government or through bodies in receipt of financial support from Government in connection with measures to promote the efficiency of energy use.

2. Where the Director (who may have regard to the need for economy, efficiency and effectiveness before giving directions under this paragraph) gives directions to do so, the Licensee shall:

- (a) review and prepare a revision of the Code of Practice;
- (b) take steps to bring to the attention of customers information on the efficient use of electricity supplied to them; and
- (c) send to each customer a copy of any information published by the Director pursuant to Section 48 of the Act

in such manner and at such times as will comply with those directions.

Annex D - Determination

STANDARD OF PERFORMANCE FOR THE PROMOTION OF THE EFFICIENT USE OF ELECTRICITY

The Director General of Electricity Supply ("the Director"),

- (a) in exercise of the power conferred upon him by section 41 of the Electricity Act 1989 ("the Act") and after the consultations required by that section, hereby determines the standard of performance in connection with the promotion of the efficient use of electricity by consumers to be achieved by [PES] plc ("the Supplier") as set out in Part I below;
- (b) in exercise of the power conferred upon him by section 42 of the Act, directs the Supplier to furnish information in accordance with Part II below;
- (c) in exercise of the power conferred on him by paragraph 2 of Condition 22 of the licence ("the Licence") granted to the Supplier under section 6(1)(c) of the Act, gives to the Supplier the directions in Part III below; and
- (d) declares that the interpretation provisions in Part IV below shall apply to this document.

PART 1

The Standard

- 1(1) The standard of performance is that between 1 April 1998 and 31 March 2000 the Supplier shall have caused such Projects, selected as provided in paragraph 2, to be implemented in accordance with paragraph 3 as will achieve (whether before or after 31 March 2000 Savings of Energy, calculated in accordance with paragraph 4, of [] GWh, provided that
 - (a) all Savings of Energy are achieved by the efficient use of electricity by Consumers; and

- (b) at least three quarters of the Savings of Energy are savings of electricity supplied by Consumers.
- (2) The Standard of Performance fixed by paragraph (1) is in addition, and not in substitution for the Standard of Performance fixed by the determination dated March 1994.

Selecting Projects

- 2(1) In selecting Projects the Supplier shall
 - (i) select only Projects under which the aggregate benefits to Consumers generally under the Project in question are expected to exceed the aggregate costs of that Project and
 - (ii) shall give priority to proposals for Projects which can be expected to exert downward pressure on the charge per kilowatt-hour to Consumers generally.
- (2) Subject to sub-paragraph (1), in selecting Projects the Supplier shall take into account -
 - (i) the interests of Consumers and in particular the interests of those Consumers who are elderly or disabled, who are in rural areas or who may have difficulty in meeting their obligation to pay for electricity;
 - (ii) the desirability of demonstrating a variety of methods of achieving Savings of Energy; and
 - (iii) the effect of a Project on the physical environment.
- (3) In selecting Projects the Supplier shall seek to meet the obligation imposed by paragraph 1 at the best effective price reasonably obtainable having regard to the alternatives available and to the factors to be taken into account by virtue of sub-paragraphs (1) and (2).
- (4) The Supplier shall not select Projects under which a Consumer will use electricity for a purpose for which he previously used another form of energy unless the change

produces greater savings in overall cost to the Consumer than are achievable by undertaking projects using other forms of energy.

- (5) The Supplier, having prepared a specification of the Project and submitted that specification to the Energy Saving Trust to enable the Energy Saving Trust to express its views thereon, including its views on the extent to which the Supplier has met the criteria set out in sub-paragraphs (1) to (4), shall not select a Project until either the Energy Saving Trust has expressed its views on that Project or three months has elapsed since the Project was submitted to the Energy Saving Trust.

Implementing Projects

- 3(1) The Supplier shall cause Projects to be implemented at the best effective price reasonably obtainable having regard to the alternatives available.
- (2) The Supplier shall cause each Project to be designed and implemented in a way that maximises its contribution to the efficient use of electricity.
- (3) The Supplier shall (so far as it is practicable to do so) provide such assistance and information as the Energy Saving Trust or its agents shall reasonably require for the purpose of assessing the savings of energy actually achieved in implementing projects.

Calculation of Savings Achieved

- 4(1) The Savings of Energy achieved by a Project shall be calculated after it has been implemented, and subject to sub-paragraph (4), shall be the Savings of Energy actually achieved by implementing that Project.
- (2) Where, as a consequence of a Project being implemented, there is an increase in the consumption of electricity or other forms of energy, that increase shall be taken into account in calculating the Savings of Energy.
- (3) Before a Project is implemented the Supplier may prepare a statement, in consultation with the Energy Saving Trust, of the method which it considers is appropriate for calculating the Savings of Energy to be achieved by that Project.

- (4) Where a statement of method has been prepared in accordance with sub-paragraph (3) and approved by the Director, the Savings of Energy achieved by the Project when it has been implemented shall be deemed to be the Savings of Energy calculated in accordance with that statement of method.

PART II

Reporting

5. The Supplier shall on or before 30 June 1999, and on or before 30 June in each subsequent year send to the Director a report setting out -
- (a) the level of performance of the Supplier against the standard set by paragraph 1;
 - (b) a description of each Project that it is proposing, has been arranged to be implemented or has caused to be implemented during the previous financial year including
 - (i) the type of Consumers involved;
 - (ii) the objective or objectives;
 - (iii) the name of the person by whom it was or is to be implemented; and
 - (iv) the Savings of Energy which the Project is to achieve;
 - (c) an explanation of how Projects have been selected and how the criteria in paragraph 2 have been met;
 - (d) so far as is reasonably practicable the total cost of implementing each Project, and the contribution made by the Supplier to that cost; and
 - (e) the amount of money spent by the Supplier in preparing Projects and causing them to be implemented during the financial year to which the report relates.

PART III

6. The Supplier shall give or send a copy of any report prepared in accordance with Part II to any person who requests it and make a copy available for inspection at its premises during normal working hours.

PART IV

Definitions

7. In this document, words and phrases defined in the Act or the Licence shall (unless the context otherwise requires) have the same meaning;

“Consumer” means an owner or occupier of Designated Premises within the authorised area of the Supplier;

“Energy Saving Trust” means the Energy Saving Trust Limited, a company incorporated under the Companies Act 1985 and having registration number 2622374;

“Project” means (subject to a paragraph 8) an arrangement or series of arrangements described in a specification which complies with paragraph 2(5), intended to promote the efficient use of electricity by Consumers (but not necessarily all Consumers) and caused to be implemented in its entirety after 1 April 1998 and before 31 March 2000 whereunder goods, services and financial incentives (or any of them) are provided to those Consumers; provided that where a single contract of a PES covers both a Project and a supply of electricity the goods, services or financial incentives comprised in the Project are provided on arms-length commercial terms.

“Savings of Energy” means

- (a) savings of electricity supplied to Consumers and
- (b) savings of other forms of energy consumed by Consumers.

8. If a material change is made to an arrangement or series of arrangements which constitute a Project, that arrangement or series of arrangements shall thereafter constitute a different Project.

Annex E – Draft Licence Condition. Energy Efficiency Standards of Performance

1. The Director may, after consultation with the Licensee, all other Electricity Suppliers and with persons or bodies appearing to him to be representative of persons likely to be affected, from time to time:
 - (a) determine such standards of performance in connection with the promotion of the efficient use of electricity by Designated Customers as, in his opinion, ought to be achieved by the Licensee; and
 - (b) arrange for the publication, in such form and in such manner as he considers appropriate, of the standards so determined.
2. The Licensee shall, in such form and manner and with such frequency as the Director may direct, take steps to inform its Designated Customers of:
 - (a) the standards determined under this Condition; and
 - (b) the Licensee's level of performance against those standards.
3. The Licensee shall conduct its Supply Business in the manner which it reasonably considers to be best calculated to achieve the standards of performance determined under this Condition.
4. On or before such date in each year as may be specified in a direction given by the Director, the Licensee shall furnish to the Director, as regards each standard determined under this Condition, such information with respect to the level of performance achieved by the Licensee as may be specified in the direction.
5. The Director may, in such form and manner and with such frequency as he considers appropriate, arrange for the publication of such of the information furnished to him under this Condition as it may appear to him expedient to give to Designated Customers

or potential Designated Customers of the Licensee.

6. In arranging for the publication of information by virtue of paragraph 5 the Director shall have regard to the need for excluding, so far as that is practicable:
 - (a) any matter which relates to the affairs of an individual, where publication of that matter would or might, in the opinion of the Director, seriously and prejudicially affect the interests of that individual; and
 - (b) any matter which relates to the affairs of a particular body of persons, whether corporate or unincorporate, where publication of that matter would or might, in the opinion of the Director, seriously and prejudicially affect the interests of that body.