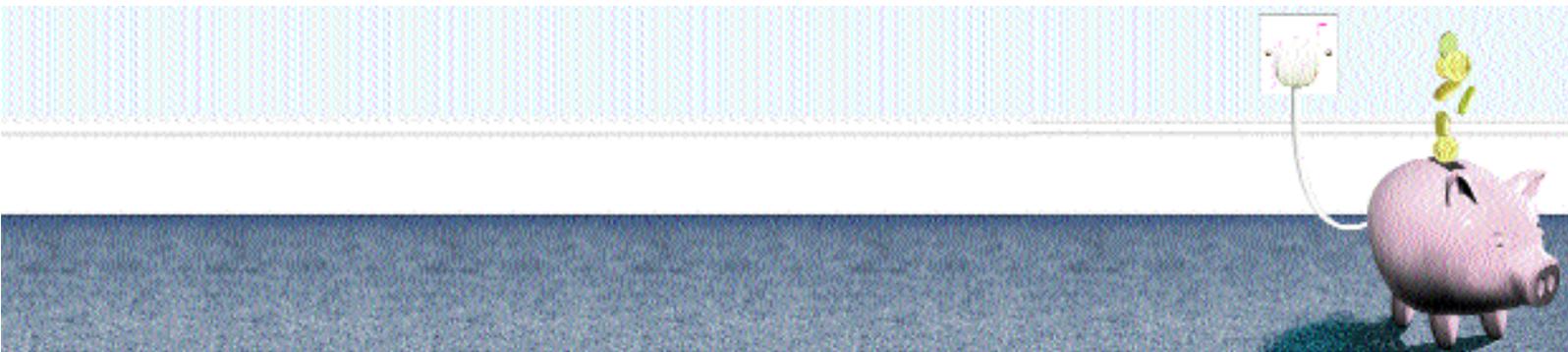


Office of Gas and Electricity Markets

Giving Domestic Customers a Choice of Electricity Supplier



REPORT BY THE COMPTROLLER AND AUDITOR GENERAL
HC 85 Session 2000-2001: 5 January 2001

This report has been prepared under Section 6 of the National Audit Act 1983 for presentation to the House of Commons in accordance with Section 9 of the Act.

John Bourn National Audit Office
Comptroller and Auditor General 21 December 2000

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This report examines the impact of electricity supply competition on domestic customers

- 1 The 26 million households in Great Britain spend some £8 billion each year on electricity. For most households electricity is a small part of expenditure, but four million low income households spend more than 10 per cent of their income on fuel to heat their homes. Since May 1999 all domestic electricity customers in Great Britain have been able to choose which company supplies their electricity. This represents a major achievement by the Office of Gas and Electricity Markets (Ofgem), the industry's regulator, which has since January 1999 been headed by Mr Callum McCarthy¹. It would also not have been possible without the co-operation of the companies involved in the supply of electricity. By June 2000, 6.5 million customers, one in four, had exercised their choice to change their electricity supplier and every month some 400,000 customers were changing supplier.
- 2 Successive Governments have taken the view that competition is the best way to protect customers' interests because it increases choice and gives companies an incentive to lower prices and improve customer service. Fourteen regional electricity distribution and supply companies were established at privatisation, in 1990 and 1991, and were initially given a monopoly of supply to domestic and smaller business customers in their areas. The sale prospectuses of these companies stated, however, that the Government were committed to introducing competition in electricity supply for all customers by 1998. Meanwhile, to protect customers from the electricity companies' local monopoly, Ofgem have regulated prices and quality standards.
- 3 In line with Government objectives, Ofgem introduced domestic electricity supply competition during September 1998 to May 1999², following the introduction of competition into the domestic gas market between 1996 and 1998. Ofgem will continue to regulate the prices and quality standards of electricity suppliers until they consider that competition is sufficient to meet their principal statutory objective of protecting the interests of consumers, having regard to their other duties including the protection of vulnerable groups.
- 4 Preparing the systems of the electricity companies for domestic competition cost the companies some £850 million and took five months longer than originally planned. In the absence of statutory powers to require electricity companies to co-operate with the implementation process, Ofgem encountered project management problems, which provide lessons for future

¹ Mr Callum McCarthy was appointed Director General of Gas Supply in November 1998 and Director General of Electricity Supply two months later. The Offices that he headed, the Office of Gas Supply (OFGAS) and the Office of Electricity Regulation (OFFER), have since merged to form Ofgem. The Director General posts will be replaced with a board, the Gas and Electricity Markets Authority. Mr Callum McCarthy is the Chairman-designate of the new Authority.

² Competition was introduced into the small business market at the same time. Larger users of electricity could already choose their supplier by September 1998.

projects of this nature. Ofgem have allowed companies to recover an additional £121 million a year from customers on average between 1998-99 and 2004-05 to meet the additional costs they incurred³.

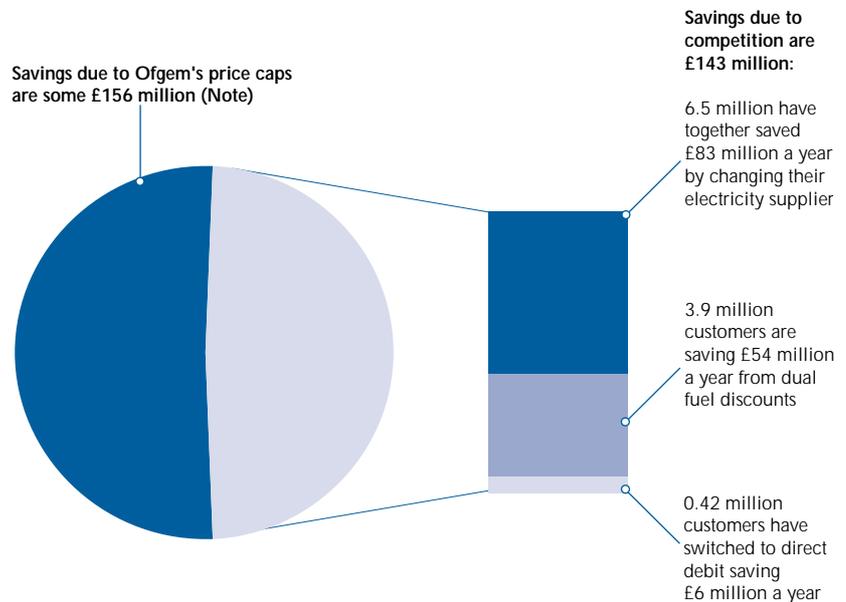
- 5 This report examines the extent to which domestic customers have benefited from electricity supply competition, through reduced prices and improved services, and what more Ofgem could do to sustain and extend the benefits. In doing so we have considered the impact on customers of changes made to the price controls that Ofgem apply to electricity distribution and supply companies. We have also compared the impact of competition with other countries and sectors of the British economy, and taken account of our previous report, and the subsequent report of the Committee of Public Accounts, on the introduction of competition into gas supply⁴.

Main Findings

Competition has reduced electricity bills for many customers although some have experienced problems

- 6 The 6.5 million customers who had changed their electricity supplier by June 2000 have together seen their bills fall by £299 million since the start of competition. This is a 15 per cent reduction in real terms, an average of £45 per customer⁵. About half of this reduction is attributable to competition (Figure 1).

- 1 The 6.5 million domestic customers who have changed their supplier have saved 15 per cent of the electricity bills in real terms since the start of competition, half of which is due to competition and half due to price cuts



Note: These savings are due to Ofgem's controls over the prices transmission and distribution businesses charge suppliers for their network services.

Source: NAO analysis

3 Ofgem had initially allowed the companies to recover £726 million over five years and gave this figure to the House of Commons Trade and Industry Select Committee in 1997. Ofgem increased the amount the companies were allowed to recover, and extended the period of recovery to seven years, after companies supplied new information on the costs they had incurred.

4 Office of Gas Supply: Giving Customers A Choice – The Introduction of Competition into the Domestic Gas Market (HC 403 (1998-99) 12 May 1999) and the Committee of Public Accounts' 8th Report, HC 171 (1999-2000) 3 February 2000. The Committee's recommendations are set out in Appendix 1.

5 The range of tariffs offered by domestic suppliers, and variations in consumption, mean that customer savings vary substantially and few customers have saved precisely this amount.

- 7 Customers who have not changed supplier have also seen their bills reduced since competition was introduced. Ofgem's reduction of price caps for the distribution and supply companies since competition began means that customers who have not switched are paying lower prices overall by some £450 million a year (eight per cent), an average of £23 per customer. Competition has allowed Ofgem to develop a clearer view of costs and available price reductions, and Ofgem believe that competition may also have helped force down the prices paid to electricity generators for the electricity they supplied. It may be therefore that supply price caps from April 2000 were lower than would have been the case in the absence of competition.
- 8 Of about 19 million customers who have remained with their existing supplier, four-fifths (15.4 million customers) have not yet, however, made any financial savings, beyond those arising from the reduced price caps, on account of supply competition. This is because most of the 'incumbent' electricity companies that supply their electricity have not reduced their prices below Ofgem's price caps in response to competition. The remaining 4.2 million customers have made savings due to competition in that their existing suppliers have reduced their tariffs a little below Ofgem's price caps. The savings to such customers have been mostly no more than £2 a year⁶.
- 9 All customers are paying an extra £4 each year on average to meet the costs companies incurred in introducing competition, which means that customers who have not switched have not benefited financially to any significant extent since competition was introduced, and some may have lost out slightly. Customers who have not switched have, however, been able to benefit from a greater range of tariffs and complementary products (such as gas) offered by their existing suppliers.
- 10 By June 2000, some 25 per cent of domestic customers had changed their electricity supplier – a slightly higher proportion of customers than had changed gas supplier one year after gas competition was introduced (23 per cent). The rate of switching in the gas and electricity markets is higher than in many other British markets and overseas electricity markets. Most customers who change supplier do so in response to direct contact from a supplier, often home visits by suppliers' sales agents and the relatively high level of switching in the electricity market is attributable to the effectiveness of this marketing technique. Doorstep selling has, however, given rise to complaints from customers, for example that sales agents had misled them about the savings they would achieve if they switched or they had been switched without giving their consent. In the first year of electricity supply competition there were some 4,900 complaints. This represented 1.06 complaints per thousand electricity switchers, a similar position as in the first year of domestic gas competition.
- 11 Although most customers who changed supplier found switching easy, there is a large variation in how long it takes to complete transfers to new suppliers. In the first two years of domestic electricity supply competition, some 18,800 customers experienced problems with the switching process. Complaint statistics suggest that the customers of some of the new suppliers are much more likely to have received a poor service after they have switched, for example inaccurate and delayed bills. The standard of service provided by the incumbent suppliers to those who have not changed their supplier has remained at a high level during the transition to competition and since.

Customers who have remained with their existing supplier are better off due to changes to price controls, but have not otherwise benefited financially to any significant extent

Switching levels in the domestic electricity market are relatively high

Customers who have switched supplier are more likely to have complaints about the service they receive

⁶ An exception is 250,000 customers who have not switched electricity supplier but are nonetheless benefitting from dual fuel discounts worth £2.9 million a year, or over £11 a year each, because they now buy gas from their local electricity company.

Although there have been problems, most customers find changing supplier easy

12 Although problems in changing supplier reported by customers are likely to understate the number of customers experiencing problems, surveys nevertheless suggest that those experiencing problems are a relatively small proportion. Responsibility for maintaining supply to customers rests with distribution businesses and has not, therefore, been directly affected by competition among suppliers. In September 2000, Independent Energy, a new supplier with 240,000 electricity customers, went into receivership but these customers continued to receive a supply of electricity on the same terms, because another company agreed to take them on.

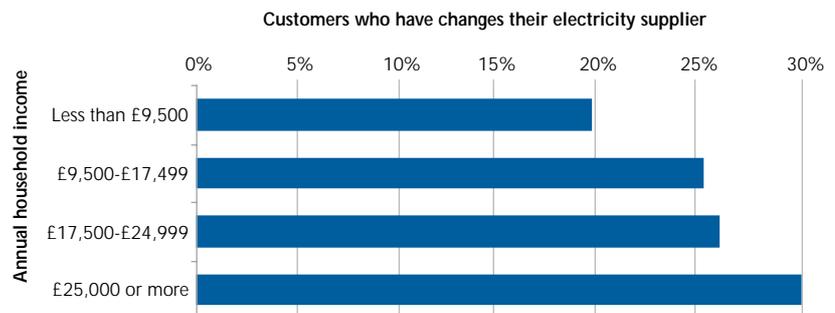
There are variations in the proportion of customers who have benefited financially from competition between different parts of the community

How customers pay for their electricity and where they live has a significant effect on the likelihood that they will change their electricity supplier

13 A survey in May/June 2000, which we commissioned in association with Ofgem, disclosed significant variations in the proportion of customers who had switched electricity supplier:

- a) Rural customers are less than half as likely to have changed their electricity supplier than those who live in urban areas. This is probably because many customers change their electricity supplier in response to a visit from a sales agent, and direct marketing of electricity has so far been less intensive in rural areas.
- b) The proportion of domestic customers switching supplier, and hence paying lower bills, is lower than average amongst poorer households (Figure 2). A major reason for this disparity is that a higher than average proportion of poorer households use a prepayment meter. Customers who use a prepayment meter cost more to serve (even allowing for the greater certainty of income), and few companies compete with the incumbents' tariffs. Ofgem allow the incumbents to recover some of the additional costs of supporting such meters by charging up to £15 a year more to the customers concerned⁷.
- c) Scotland has relatively more rural customers and customers using a prepayment meter than the rest of Britain. Even after allowing for this, a smaller proportion of customers in Scotland have changed their supplier than in England and Wales. This may be because fewer electricity suppliers have actively marketed electricity in Scotland, which reflects the smaller size of the market, the high degree of customer loyalty to the two incumbent suppliers and the more limited scope to offer dual fuel deals due

2 Fewer customers on low incomes have changed their electricity supplier than others have



Source: NAO/Ofgem survey May/June 2000

7 In October 2000, the average additional charge was £12, ranging from £0 in one case to £15 in six cases.

to the lower penetration of gas in northern Scotland. The different market structure whereby the incumbent suppliers also own the generation, transmission and distribution businesses in Scotland may also have had an effect.

Ofgem are acting to help more customers benefit from competition

- 14** The 19 million customers who have not switched supplier could save up to £674 million, or 13 per cent of their annual bills were they to switch. Before that happens there should come a point when incumbent suppliers' reduce prices in their home regions to stem the loss of customers, as has already happened in the domestic gas market. Ofgem have therefore sought to help domestic customers benefit from electricity supply competition:
- a) They have sought media coverage for the savings available to domestic customers in the electricity market. Most customers are aware that they can choose their electricity supplier. Research commissioned by the Department of Trade and Industry has shown, however, that many do not know the level of savings available or the names of alternative suppliers, and hence few customers shop around for the best deal and switchers have tended not to obtain the largest savings available in the market.
 - b) They have made increasing amounts of comparative price and service information available to the public via a freephone helpline and website. These services reach relatively few customers, but Ofgem are investigating whether requiring suppliers to disclose prices in a standard format would make it easier to draw comparisons, a task many customers find difficult. Information on quality of service is, however, still hard to obtain.
 - c) They introduced new licence conditions governing selling practices in September 1998 following earlier complaints about the doorstep selling of gas. Complaints about unfair selling practices in the first year of electricity competition were at a similar level to the first year of gas competition and Ofgem therefore continue to monitor and take action on such problems.
 - d) They are considering, in a fundamental review of the transfer process, how far aligning the different gas and electricity transfer processes could reduce the delays experienced by some customers.
- 15** Domestic electricity suppliers have so far competed mainly on price rather than on service, but Ofgem believe supply competition should eventually remove the need for specific regulation of customer service. Meanwhile, Ofgem regulate the quality and range of services suppliers provide. Ofgem recognise the need to improve their monitoring of customer service, and will be working with the new Gas and Electricity Consumer Council⁸, known as energywatch, to develop appropriate mechanisms.
- 16** The market is less well developed for prepayment meters and fewer prepayment customers have switched. Many suppliers consider prepayment meter customers to be unprofitable at current price levels and competition should tend to make tariffs more closely reflect costs. If Ofgem lift price controls over the incumbents' prepayment meter tariffs they may, therefore, need to develop other ways of protecting such customers if they wish to avoid increases in the relative prices they pay. Ofgem are already taking or considering several actions to help protect prepayment meter customers:

Ofgem have sought to alert customers through the media to the savings available by changing supplier

Ofgem are seeking to help customers identify the best deal

Ofgem have sought to combat high pressure and misleading selling practices

Ofgem are seeking to streamline the transfer process

Ofgem are seeking to improve their monitoring of customer service

Ofgem will need to continue to protect customers who pay by prepayment meter until the market is competitive

⁸ The Gas and Electricity Consumer Council was established under the Utilities Act 2000. The Council, also known as energywatch, will take over from Ofgem the handling of complaints from electricity consumers, advising and informing them, and representing their views.

Ofgem are seeking to protect the interests of prepayment meter customers and help them benefit from competition

- a) They believe that competition would be strengthened if suppliers lost their right to block customers with outstanding debt from changing supplier, and are consulting on removing or curtailing this right, while protecting suppliers' rights to recover debt.
- b) From October 2000, they have required suppliers to inform prepayment meter customers who are not in debt about cheaper ways to pay for their electricity. Many customers begin to use a prepayment meter when they move into a new home already equipped with one. Because suppliers incur costs when customers change their meter there was before then a risk that they might not tell customers about cheaper alternatives.

17 Ofgem research shows that many customers using prepayment meters prefer this method of payment, and some cannot switch to paying by cheque or direct debit because they do not have a bank account. New technology, however, offers opportunities to reduce the costs of prepayment meters, and Ofgem are exploring alternative payment methods for those without a bank account.

Ofgem are seeking to minimise barriers to entry and ensure all suppliers are able to compete on an equal footing

18 The possibility that new companies will enter the market places competitive pressure on existing suppliers, but fewer new companies have so far entered the domestic electricity market than the domestic gas market and entry barriers are higher than in the gas market. The Utilities Act 2000 provides Ofgem with powers to reduce barriers to competition and help ensure that suppliers can compete on equal terms. For example:

- a) Ofgem are empowered by the Act to prevent the same company from both supplying electricity and providing electricity distribution services, which should reduce the risk of distribution businesses giving their own supply business preferential treatment.
- b) Ofgem consider that the lower rate of switching in Scotland relative to England and Wales is due in part to the dominance of the two incumbent electricity suppliers in Scotland (paragraph 13c above), and the different wholesale trading arrangements in Scotland. The Act provides for separating the ownership of distribution and supply businesses in Scotland, and for creating separate electricity transmission companies for Scotland. Ofgem plan to align the wholesale trading framework in Scotland with that in England and Wales in 2002.

Ofgem are addressing issues in Scotland, where a smaller proportion of customers have switched supplier than in the rest of Great Britain

Ofgem expect that price reductions arising from competition will be sustainable

19 Ofgem expect the competitive market to continue to deliver choice and value for customers. They consider that larger savings could be achieved if suppliers seek to build a competitive advantage by driving down the 'wholesale' cost of electricity they buy from generating companies, as wholesale electricity prices are about half of the price of electricity to customers. They believe that the new framework they plan to introduce in 2001 for buying and selling electricity on the 'wholesale' market⁹ will aid this process. 'Wholesale' prices are, however, also affected by other factors such as fuel costs and Government encouragement of generators to switch to renewable fuel sources, which could cause prices to rise.

⁹ The new framework for trading electricity is known as the New Electricity Trading Arrangements. Ofgem had intended to introduce the new trading framework in November 2000. Following problems with systems testing, in October 2000 they announced a new target date of 27 March 2001 for implementing the new framework.

Recommendations

For customers and suppliers

20 The achievement of the Government's objectives for introducing competition into the domestic supply of electricity ultimately relies on customers. We recommend that customers, if they are to benefit fully from electricity supply competition, should review whether their current electricity supplier best meets their needs. They should take into account prices, quality of service and the scope for deals that can provide a range of services, including gas, from a single supplier, especially where the supplier offers a discount for doing so. We recommend suppliers to help by keeping customers informed of the scope for benefits and of the latest developments. Suppliers may also be able to take advantage of changes in the way that electricity generators sell electricity and the availability of new technology, such as the internet, to offer customers better deals.

For Ofgem

21 Ofgem have an important role to play in helping customers and suppliers make the most of the new market in domestic electricity. While Ofgem have taken many actions to help develop a competitive market for electricity, we consider that there are other actions that might prove worthwhile:



- i **Improve customers' awareness of how to benefit from competition.** If customers are to benefit from competition, they need to be able to make informed decisions as to whether it is worth changing supplier. Although most are aware of competition, many are not aware of the savings available, alternative companies in the market, and the different ways of paying for electricity. Many customers who have switched have relied on doorstep selling for their information, which has meant that switching levels have been lower in rural areas. Ofgem have sought media coverage for the financial savings available and have published comparative price information on their website. Ofgem in 1999 distributed a leaflet, produced jointly with the National Audit Office, to gas customers, and we have recommended that Ofgem should help us to produce a similar leaflet for energywatch to distribute to electricity customers.
- ii **Improve the accessibility of price and service information.** The increasing range of tariffs and services available from suppliers has made it harder for customers to compare prices. Information on quality of service is hard to come by, and competition has largely been on price so far. Ofgem should press ahead with their research on the feasibility of requiring suppliers to disclose prices in a standard format to make comparisons easier, and consider extending this to include customer service information. They and energywatch should also consider raising the profile of the comparative price and service data they continue to produce to the extent that energywatch have not taken on these responsibilities.
- iii **Act to reduce the problems customers experience when they change suppliers.** Some customers have experienced problems when switching supplier such as misleading information from sales agents or delays in the transfer process. Although such problems have so far affected a small proportion of customers, the bad publicity engendered could erode consumer confidence. Ofgem therefore need to be able to quickly identify and remedy problems with the switching process, and should continue developing other sources of information such as mystery

shopping¹⁰. They should take timely action against suppliers that provide a sub-standard service. Once Ofgem have reviewed the transfer process they should also act to streamline it, possibly by removing any unnecessary differences between the electricity and gas transfer processes.

- iv **Continue to work with the industry to reduce the costs borne by prepayment meter customers.** Prepayment meters are the most expensive payment method both for customers and suppliers, and the limited competition to serve customers using these meters helps to explain why lower income households have so far benefited less from competition than others. Some customers use prepayment meters because they moved into a property already equipped with one, and Ofgem should continue to encourage suppliers to make clear to these customers that they could save money by changing payment method. Research shows, however, that some customers prefer to use a prepayment meter, while some cannot pay in other ways because they do not have a bank account. Obtaining the full benefits of competition for these customers will probably require the development of cheaper ways to serve them. Ofgem should therefore continue to support the development of cheaper payment options, for example by promoting the development of cheaper prepayment metering technology.
- v **Press ahead with measures to strengthen competition in Scotland.** The different market structure in Scotland has contributed to lower rates of customer switching than in the rest of Great Britain. To make the market in Scotland more competitive, Ofgem should press ahead with separating the ownership of distribution, supply and transmission businesses and bringing the framework for trading wholesale electricity into line with that in England and Wales.
- vi **Minimise barriers to entry to the electricity supply market.** The possibility of new companies entering the market is an important source of competitive pressure on existing suppliers and new entrants can be an important source of innovation. Fewer companies have so far entered the domestic electricity market than have entered the domestic gas market. Barriers to entry are higher than in the domestic gas market and Ofgem are aligning the regulation of the two markets so that companies can compete on an equal footing. Ofgem need to continue to monitor the impact of entry barriers, and pay particular attention to the impact of changes such as the new wholesale electricity-trading framework in England and Wales to be introduced in 2001.

¹⁰ Mystery shopping involves seeking first hand experience as a consumer of the services companies are delivering. The mystery shopper does not reveal to the company that they are evaluating the standard of service provided.

For energywatch

The Utilities Act 2000 has established the Gas and Electricity Consumer Council, which will be known as energywatch. Their focus will be on the needs of electricity and gas consumers. They will have a key educational role to play in raising consumers' awareness of the competitive electricity market, and hence in taking forward some of the actions recommended above. In particular, we recommend that energywatch:



- vii **Improve customer awareness of electricity competition and how to make an informed choice.** There would be a role for energywatch in ensuring that any leaflet produced by the National Audit Office (see recommendation i above) receives wide circulation and publicity. They should also seek to secure greater consumer awareness of the website, currently run by Ofgem, and the helpline for which energywatch are now responsible, and to develop the value for consumers of these and other communication tools.
- viii **Develop clear and consistent processes for monitoring and reviewing the performance of electricity companies.** This will be an important rôle for energywatch working alongside Ofgem. As part of their remit, energywatch should seek to put quality of service information into the public domain in such a way that consumers can better understand it and make choices about different levels of performance.
- ix **Help ensure that all parts of the community take advantage of the competitive market.** Access to a competitive electricity supply market is not consistent across all classes of domestic consumers, and it might be unrealistic to expect this to be the case. There is, however, a role for energywatch to keep under review how the market is developing and whether there are groups of consumers who are being excluded from the full benefits of competition, and to propose remedies.

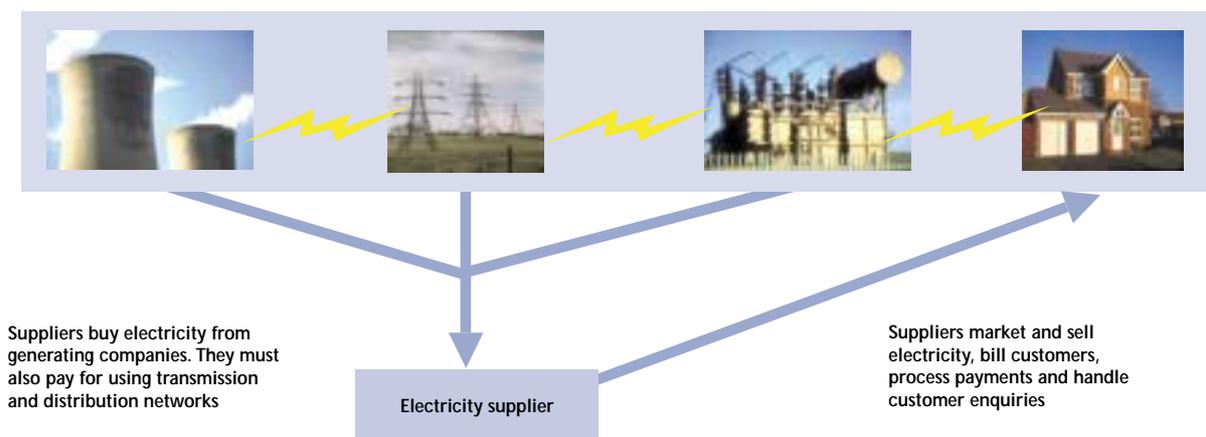
Part 1

Domestic electricity supply competition is intended to benefit customers

- 1.1 There are over 26 million households in Great Britain which altogether spent £7.7 billion on electricity in 1998 or about £4 a week. Lower income households spend proportionately more on electricity than higher income households do and the poorest tenth of households spend on average four per cent of their income on electricity. Overall, the Office of Gas and Electricity Markets (Ofgem) estimate that some four million households spend more than 10 per cent of their incomes on fuel to heat their homes.
- 1.2 Electricity supply involves buying electricity from generators, arranging with the transmission and distribution companies for it to be transmitted and distributed, and selling it on to customers (Figure 3).
- 1.3 The Electricity Act 1989 provided for privatising the electricity industry and established competing generating companies. The then Government viewed transmission and distribution as "natural monopolies", because it would not be cost-effective for new companies to duplicate the existing networks. In England and Wales, the Government established the National Grid Company to operate the transmission network and 12 regional companies to operate distribution networks and supply electricity. In Scotland, responsibility for transmission rests with two regional distribution and supply companies who also generate electricity. Figure 4 overleaf shows the 14 incumbent electricity suppliers.

3 Electricity supply involves buying electricity from generating companies and selling it to customers

Electricity reaches customers from power stations through the transmission and distribution networks (Note)



Note: The bulk transmission network uses high voltages to minimise losses. The voltage is reduced in electricity sub-stations and distributed to customers through "local wires". In England and Wales different companies operate the transmission and distribution networks.

4 The 14 incumbent electricity suppliers in Great Britain

The Figure shows the regions of the 14 incumbent electricity suppliers in Great Britain.



1.4 The Government were committed at privatisation, to introducing competition into supply. Larger businesses were able to choose their supplier at the outset, and prospectuses for the sale of the distribution and supply businesses stated that all customers would be able to choose their supplier from 1998. The key dates in the development of the electricity industry are set out below.

Ofgem are responsible for protecting the economic interests of electricity and gas customers

1.5 Ofgem are a non-ministerial government department responsible for the economic regulation of the electricity and gas industries. Ofgem were created following the merger in 1999 of the gas and electricity regulators¹¹. Their running costs in 2000-01 will be some £75 million and they have about 330 staff. Further details about Ofgem's resources and organisation are set out below.

11 The Office of Gas Supply and the Office of Electricity Regulation. Note that throughout this report we refer to the electricity regulatory office as Ofgem, including when referring to action by the electricity regulatory office before the merger on 1999.

Key developments in the electricity industry since the Electricity Act 1989

- 1989** The Electricity Act provides for privatising the electricity industry.
- 1990** The Government sells the 12 regional distribution and supply businesses in England and Wales (known as public electricity suppliers). They have a franchise in their areas to supply all customers with a peak load of up to 1 MW (the franchise limit). This gives the 5,000 largest customers in Great Britain with a peak load above the limit the ability to choose their electricity supplier. The electricity companies own the National Grid Company, which controls electricity transmission in England and Wales.
- 1991** The two Scottish integrated generation, transmission, distribution and supply businesses are privatised. Also known as public electricity suppliers, they have a supply franchise similar to the public electricity suppliers in England and Wales. The Government also sell 60 per cent of the two main generators in England and Wales, National Power and Powergen.
- 1994** The public electricity suppliers' franchise limit is reduced to 100kW and 45,000 more business customers are able to choose their supplier.
- 1995** The public electricity suppliers float their shares in the National Grid Company on the London Stock Exchange and transfer these shares to their own shareholders. The Government also sell their remaining 40 per cent stake in National Power and Powergen.
- 1996** The Government privatise British Energy plc, who operate the eight most modern nuclear power stations in the UK. The older nuclear stations remain publicly owned.
- 1999** All remaining customers are allowed to choose their electricity supplier in a phased roll out from September 1998 to May 1999. Opening the market was delayed because not all suppliers were ready by April 1998, the original start date.

1.6 Ofgem have statutory responsibility for licensing companies in the electricity industry. They have a duty to exercise their functions in a manner best calculated to secure that: all reasonable demands for electricity are met; licence holders are able to finance the carrying on of their licensed activities; and to promote competition in the generation and supply of electricity. Ofgem can use licence conditions to cap prices and a combination of licence conditions and standards of performance to set quality standards in the industry. The Utilities Act 2000 made Ofgem's principal objective protecting the interests of consumers, wherever appropriate by promoting effective competition. The Act also requires that Ofgem consider the interests of certain groups including the disabled, pensioners, people on low incomes and people who live in rural areas. Under the Act, Ofgem share all these responsibilities with the Secretary of State. In practice, however, the Government have defined their rôle as setting the objectives and the framework of regulation, while the regulators, including Ofgem, independently fulfil their duties within this framework.

- 1.7 Licence conditions are the basis of price controls limiting the charges made to electricity suppliers by distribution and transmission companies, and the overall prices paid for electricity by domestic and small business customers¹². Ofgem monitor whether the companies comply with their licences, and can order them to comply. Where licensees do not consent to proposed changes, Ofgem can refer the matter to the Competition Commission. The Commission rule on whether companies' existing licences operate or may be expected to operate against the public interest; and whether this may be remedied by modifying the licence.
- 1.8 The Utilities Act 2000 changes the framework of the regulation of the electricity and gas industries. With effect from November 2000, the Act:
 - a) Made protecting consumers' interests Ofgem's principal objective, wherever appropriate by promoting competition, and made other changes referred to in paragraph 1.6 above.
 - b) Replaced the posts of Director General of Gas Supply and Director General of Electricity Supply with the Gas and Electricity Markets Authority, consisting of a chairman and at least two other members, appointed by the Secretary of State.
 - c) Gave responsibility for electricity consumer representation, previously handled by Ofgem's regional Electricity Consumer Committees, to energywatch, a new independent Gas and Electricity Consumer Council which takes over from Ofgem the handling of complaints from consumers¹³, advising and informing them, and representing their views.
 - d) Provided for aligning the licensing of operators in the electricity and gas industries to simplify regulation for suppliers, many of whom operate in both markets.
 - e) Gave Ofgem powers to impose financial penalties on companies for breaches of their licences and to modify licence conditions with the consent of a majority of companies.

Key facts about the resources and organisation of Ofgem

- Running costs in 2000-01 will be £75 million, including £30 million for the reform of the wholesale electricity market and £22 million for the costs of the merger of OFGAS and OFFER, and the move to the new headquarters in London.
- Their 330 staff include economists, lawyers, analysts and support staff.
- They service the Gas and Electricity Markets Authority which comprises the Chairman, who is also Ofgem's Chief Executive, and members who are appointed by the Secretary of State for Trade and Industry.
- Ofgem are organised into three policy divisions, each headed by Managing Director, handling customers and supply, competition and trading arrangements, and regulation and financial affairs.
- To ensure that Scottish needs are fully reflected in Ofgem's work, the work of their Glasgow office is integrated with that of the three policy divisions in London.

12 From April 2000 Ofgem's controls over overall prices cover domestic customers only.

13 Energywatch will, however, refer to Ofgem any complaints from consumers that allege a breach of licence conditions or that concern Ofgem energy policy.

- f) Requires the Secretary of State to provide Ofgem with guidance on any of the Government's social or environmental policies "in order that the Authority can make an appropriate contribution to the attainment of these policies".
- g) Required that different companies should own the regional electricity distribution businesses and the incumbents' supply businesses.

1.9 Ofgem also have powers concurrently with the Office of Fair Trading:

- a) Under the Competition Act 1998, to prohibit anti-competitive agreements and the abuse of a dominant position in the gas and electricity industries. These powers include the ability to fine companies for breaches.
- b) Under the Unfair Terms in Consumer Contract Regulations 1999, to act against contract terms which unduly favour companies where this could cause consumer detriment.

Ofgem do not regulate advertising by electricity and gas companies. The Advertising Standards Authority regulates advertisements in print, posters, cinema and video, and direct marketing.

Ofgem introduced competition into the domestic electricity market during 1998-99

- 1.10 The Government and Ofgem believe competition is the best way to protect customers' interests, and Ofgem aim to introduce competition into the electricity industry wherever possible. Ofgem judge that competition in the supply of electricity should spur suppliers to offer lower prices, provide innovative new tariffs and customer services, and improve efficiency.
- 1.11 Ofgem devoted about 55 staff-years of effort to introducing competition in electricity supply. They determined the implementation strategy, arranged the necessary amendments to licences, and developed arrangements for resolving disputes between suppliers. Between September 1998 and January 1999 competition was introduced in the areas served by Eastern Electricity, Manweb, Scottish Power and Yorkshire Electricity and by May 1999 all customers were able to choose their supplier.
- 1.12 Ofgem have allowed the electricity distribution businesses to recover some £850 million from customers over the seven years 1998-99 to 2004-05 to meet their costs of implementing competition. The main costs the companies incurred were for developing new information technology systems so that companies could register and exchange information.

1.13 The introduction of competition into electricity supply is complemented by two other important Ofgem initiatives:

- a) Reform of the wholesale electricity market, to be implemented in 2001 in England and Wales (and known as the New Electricity Trading Arrangements). The reforms replace a Pool system, in which all electricity generators received the same price for electricity, with a system based on commodity trading practices. Ofgem believe that the reforms will ensure that electricity prices more closely reflect costs and should bring down prices. Wholesale electricity prices in Scotland are tied to prices in England and Wales. Ofgem plan to extend the new wholesale market to Scotland in 2002.
- b) The Social Action Plan, a programme of work intended to contribute to the Government's efforts to tackle fuel poverty. This includes a new energy efficiency scheme from April 2000 which should assist some low-income households, and changes to the licences of electricity and gas suppliers to oblige them to offer payment methods that suit the needs of their customers.

In addition, Ofgem have introduced competition to all meter, data and connections services provided by the electricity distribution and supply businesses.

Competition had already been introduced into the domestic gas market

- 1.14 Between April 1996 and May 1998 competition was introduced into the domestic gas market. In 1999, we reported¹⁴ that by February 1999 twenty-five new companies were selling gas and over four million customers had exercised their choice and switched from British Gas Trading, the former monopoly supplier. We also found that the total reduction in customers' bills since the introduction of competition was the equivalent of £1 billion each year. The Committee of Public Accounts took evidence on the Report in July 1999. In their Report¹⁵, the Committee said that they were concerned that low income customers who use prepayment meters to pay for their gas were not benefiting as much as other customers from the introduction of competition. They also recommended further action by Ofgem to improve the information available to gas customers on the choices available to them in the gas market; and action to deal with problems in the processes for changing supplier. Appendix 1 shows the Committee's main conclusions and recommendations.

¹⁴ Office of Gas Supply: Giving Customers A Choice – The Introduction of Competition into the Domestic Gas Market, HC 403 (1998-99) 12 May 1999.

¹⁵ The Committee of Public Accounts' 8th Report, HC 171 (1999-2000) 3 February 2000.

Several other countries are also introducing competition into their domestic energy markets

1.15 Under a European Community Directive, member states are obliged to open at least 26 per cent of their electricity supply market to competition by February 1999, rising to 33 per cent by 2003. Twelve out of 15 member states met the 26 per cent target (Figure 5). By 1999 three European Union countries besides the UK (Finland, Germany and Sweden) had fully opened their electricity markets to competition.

5 Progress by European Union countries in implementing EC Directive 96/92

	26 per cent of the electricity market open to competition by February 1999
Austria	Yes
Belgium	Met the target in 2000
Denmark	Yes
Finland	Yes
France	Yes
Germany	Yes
Greece	Aim to meet the target by 2001
Ireland	Met the target in 2000
Italy	Yes
Luxembourg	Yes
Netherlands	Yes
Portugal	Yes
Spain	Yes
Sweden	Yes
UK	Yes

Source: European Commission

1.16 In the United States, California was the first State to open its electricity markets to competition in 1998. Pennsylvania introduced competition in 1999. To date, States representing over 50 per cent of the U.S. population have established target dates for initiating retail competition.

We examined the impact of electricity supply competition on domestic customers

1.17 Against this background, we examined:

- a) Whether domestic customers have benefited from the introduction of competition in electricity supply (Part 2); and
- b) What more Ofgem can do to help domestic customers benefit (Part 3).

1.18 Appendix 2 describes our study methods. The main features were:

- a) We commissioned a joint survey with Ofgem of 4,600 electricity customers in May/June 2000 to assess the financial impact of competition on customers.
- b) We considered developments in other markets, including the domestic gas market and overseas electricity markets.
- c) We consulted consumer representatives.
- d) We consulted electricity and gas suppliers, including several suppliers who had chosen not to compete in the domestic electricity market.

1.19 We are grateful for the help and co-operation we received from Ofgem, energywatch and companies in the electricity and gas industries, and the support we received from the expert advisory panel we established for this examination.

Part 2

Domestic customers have benefited from competition

Summary

2.1 Ofgem are encouraging competition to put suppliers under pressure to offer tariffs and services that customers find attractive, with a view to delivering:

- a) Lower prices through lower generation and supply costs which companies will have an incentive to pass on to customers.
- b) More choice for customers, including a greater range of tariffs, payment methods and payment frequencies that suit customers' needs.
- c) Improved customer service. In particular, suppliers should have an incentive to concentrate on improving those aspects of their service that are most important to customers.

2.2 In this Part we examine the effect of competition on the prices domestic customers pay and the range and standard of services on offer. Competition has resulted in lower prices for the 6.5 million customers who have changed electricity supplier. The market has seen the emergence of greater choice in the types of service available and ways of buying electricity alongside other commodities such as gas. Standards of service have yet to improve overall and the level of complaints against some new suppliers is higher than before competition. The 19 million customers who have not switched supplier have yet to benefit to a significant extent financially, beyond the reductions in price caps from which all customers have benefited.

The one in four customers who have changed their electricity supplier have benefited financially from competition

2.3 When the domestic electricity market was opened to competition all of the incumbent electricity suppliers entered the market in other suppliers' areas. Five other companies have also entered the market. Some of the incumbents' supply businesses are now part of larger groups, while established generators have purchased others. By September 2000, 13 companies were selling electricity to domestic customers in Great Britain (see below).

There were 13 companies active in the domestic electricity market by October 2000

Incumbent Electricity Suppliers

1. Eastern Energy/Norweb Energi (owned by TXU Europe)
2. Innogy (who trade as Npower) (Note)
3. London Electricity/SWEB (owned by Electricite de France)
4. Northern Electricity and Gas
5. Powergen
6. Scottish Hydro-Electric/Southern Electric/SWALEC (owned by Scottish and Southern Energy)
7. Scottish Power/Manweb
8. Seeboard
9. Yorkshire Electricity

New entrants

10. British Gas Trading (who trade as Scottish Gas in Scotland and are owned by Centrica)
11. Energy Supplies UK
12. Utility Link
13. Amerada Hess

Note: In September 2000, Innogy purchased the major supply business assets of the new entrant Independent Energy.

Source: Ofgem

6 Annual savings available by switching electricity supplier in Merseyside and North Wales region as at June 2000

The Figure shows the savings available to customers in the Merseyside and North Wales region if they switch from the incumbent, Manweb, to the cheapest electricity supplier in their region. Some suppliers offer further discounts to customers who opt to buy both electricity and gas from them (dual fuel discounts) and customers can also save by changing their payment method.

	Monthly Direct Debit	Quarterly credit	Prepayment meter
Incumbent	Annual Bill £ 264	Annual Bill £ 271	Annual Bill £ 287
Cheapest supplier	222	230	268
	Saving £42	Saving £41	Saving £19

Notes: 1. Bills include Value Added Tax at 5 per cent.
2. Bills are based on annual consumption of 3,300 kWh.

Source: Ofgem

- 2.4 Nearly 80 per cent of domestic customers pay for their electricity by cheque quarterly in arrears or by direct debit. For these customers, most companies operating in the domestic electricity market are offering tariffs lower than the incumbent electricity suppliers. This includes the incumbents themselves operating outside their home areas. **Figure 6** illustrates the savings available from changing electricity supplier in one region, as at June 2000.
- 2.5 By June 2000, 6.5 million customers had changed their supplier (25 per cent of all domestic customers). With Ofgem, we commissioned a survey of 4,600 electricity customers in May/June 2000. We used the results to estimate the savings achieved by customers since the start of competition in 1998. By June 2000 customers who had changed supplier were saving a total of £299 million a year since competition started (15.5 per cent), an average of £45 a year. Just under half of the savings are attributable to competition (**Figure 7**).
- 2.6 Around half of the reductions in customers' electricity bills have resulted from changes made by Ofgem in the price caps on electricity transmission and distribution charges that suppliers pay. These costs represent some 44 per cent of the price customers pay for electricity. Details of Ofgem's price controls are set out below.

- 2.7 Eighty-four per cent of customers who have changed their electricity supplier (some 5.5 million people) have taken advantage of offers to buy electricity and gas from the same company. Customers opting for these "dual fuel" contracts have the advantage of only having to deal with one company, and seven suppliers offer further discounts benefiting some 3.9 million customers. Despite these further discounts, however, dual fuel contracts are rarely cheaper than the lowest price single fuel contracts.
- 2.8 By the summer of 2000, some 400,000 customers were changing their electricity supplier each month (1.5 per cent of all domestic customers). Based on savings achieved so far, for each additional 1.5 per cent of customers that change their supplier, the annual saving would increase by a further £8.7 million¹⁶.
- 2.9 Competition was introduced into the domestic gas market during 1996-98. By June 2000, some 5.6 million gas customers, some 28 per cent, were receiving their gas supply from one of the new suppliers. Between them they had seen their gas bills fall by some £533 million a year since competition started (26 per cent), an average of £95 per customer.

How price controls work

Ofgem's price controls prevent the average price, or revenue, increasing by more than a specified level. This level has been set below the rate of inflation, as measured by the Retail Price Index, hence this is known as "RPI - X" price regulation. Ofgem usually revise the price controls every five years. They set price controls to allow companies to recover the anticipated levels of operating costs and capital expenditure over the period and ensure that returns are sufficient to allow companies to continue to finance their activities.

Customers have benefited from RPI-X price controls through lower prices. Price controls also give companies an incentive to improve efficiency. They have generally been based on the assumption that companies could improve their efficiency during the five years of the control. Companies have therefore been required to improve their efficiency to maintain their returns to shareholders. Companies can retain any gains from efficiency improvements over and above those anticipated in the price control. Ofgem have considered efficiency improvements when setting price controls for the next five-year period.

16 This estimate takes account of savings from dual fuel discounts and from switching to paying by direct debit.

7 Annual reduction in electricity bills since the start of competition for people who have changed their electricity supplier

This Figure shows that savings due to electricity supply competition total some £143 million, and that these are due to switching electricity supplier, dual fuel discounts and changing payment method. It also shows that since the start of competition customers who have changed supplier have also benefited from savings of £156 million due to Ofgem's price controls.

	£ Millions	Per cent of electricity bills before the start of competition
6.5 million customers have changed their electricity supplier	83	
3.9 million customers are benefiting from dual fuel discounts	54	
0.42 million customers have switched to direct debit (Note 1)	6	
Annual savings due to competition	143	7.6
Annual savings due to price caps (Note 2)	156	7.9
Annual savings since the start of competition	299	15.5

- Notes: 1. Most customers are able to change the way they pay for their electricity, whether or not they also change their supplier. Suppliers' efforts to retain or win customers in the competitive market are, however, likely to have contributed significantly to these further savings.
2. Ofgem control the charges levied by the monopoly distribution and transmission businesses and paid by all electricity suppliers, including the new entrants. We calculated the savings customers had achieved since the introduction of competition from this source.

Source: NAO Analysis

Some customers are benefiting from new tariffs and services offered by alternative suppliers

2.10 Ofgem believe that an important benefit of competition will be that companies will develop new tariffs and services to attract customers. There have already been innovations (Figure 8). For instance, several companies offer special, higher, tariffs for electricity procured from renewable sources.

8 Suppliers are now offering a number of new tariffs

The Figure illustrates some of the new services available to domestic electricity customers.

- **Dual fuel tariffs**, where customers buy gas and electricity from the same company. Some suppliers offer a further "dual fuel" discount.
- **Prompt payment discounts** (for quarterly credit customers).
- **Affinity deals**. For example, Southern Electric offers vouchers, based on the size of the bill, which can be used to purchase goods at Argos.
- Utility Link offer a "**Green tariff**" where the company offer to match their retail sales with wholesale purchases of electricity from renewable sources.
- Most suppliers' electricity charges are based on a **fixed standing charge** and a unit charge. Some suppliers have adopted a two-tier unit charge, with no standing charge. This tariff should benefit customers who use small amounts of electricity, such as single householders and pensioners.
- TXU is testing a new tariff designed for households with low incomes based on a **fixed annual charge** for electricity regardless of consumption. This approach may be particularly attractive to customers who prefer to know in advance what they will be paying for electricity.
- Servista.com and Virgin Energy offer to sell electricity and gas to domestic customers over the **internet**. Servista.com sell electricity in association with Utility Link, gas in association with CPL British Fuels, and telephone services in association with BT and others. Virgin Energy sell electricity and gas in association with London Electricity and SWEB. Servista.com and Virgin Energy operate under the electricity supply licences of their associated suppliers.

Suppliers are now offering a number of new tariffs

Customers who have switched supplier are more likely to have complaints about the service they receive

2.11 Ofgem expect electricity suppliers to provide a good level of service to their customers, in particular:

- Accurate and prompt bills
- Arrange direct debits promptly and accurately
- Frequent and accurate meter readings
- Easy to contact in the event of queries
- Deal promptly and effectively with customer queries

2.12 We examined the complaints to Ofgem about the service provided by new suppliers. In the year to July 2000, electricity customers who had changed their supplier made 7,900 complaints about ongoing services, mostly concerning delays in receiving bills or arranging direct debits, and the accuracy of bills. We compared the level of such complaints with the number of customers that had changed their supplier, and found that the number of complaints was six times greater than from customers who had not changed their supplier.

2.13 Responsibility for maintaining the supply of electricity to customers rests with distribution businesses and should not, therefore, be directly affected by competition. Ofgem have arrangements designed to protect customers in the event of the failure of their electricity supplier. When Independent Energy, a gas and electricity supplier, went into receivership in September 2000¹⁷ these arrangements were not tested because Innogy¹⁸ purchased the major supply business assets of Independent Energy UK Limited with effect from the date the company went into receivership. The failure of Independent Energy did not, therefore, affect continuity of supply to customers. The Utilities Act 2000 establishes formal supplier of last resort arrangements for electricity, which will be commenced shortly. Electricity supply competition should have no direct effect on public safety. Responsibility for public safety rests mainly with the electricity distribution businesses for each area, and the Department of Trade and Industry and the Health and Safety Executive are responsible for regulating health and safety in the industry.

Most customers find changing supplier easy, although there have been problems

2.14 Ofgem periodically survey customers to find out about their experiences and perceptions of the competitive market. Their autumn 1999 customer survey showed that:

- a) Eighty-eight per cent of customers who had changed their electricity supplier¹⁹ found it very easy or fairly easy to leave their last supplier, about the same level as for gas (86 per cent).
- b) Five per cent of switchers had found it fairly difficult to change electricity supplier and two per cent said it had been very difficult, for example because of poor communications with the supplier (not answering letters, for instance) and problems with billing. The sample size was too small, however, to draw firm conclusions.

2.15 By August 2000, Ofgem had received 18,800 complaints from customers about the service that they received while changing electricity supplier, or about 2.6 complaints per thousand customers who have switched. More complaints arose after the opening of the domestic gas market to competition (45,000 complaints were received by OFGAS in the first ten months of 1998).

2.16 Ofgem monitor the transfer process using information from suppliers. By comparison with the gas market, there have been fewer cases where customers have been transferred against their will or where customers' existing supplier has prevented them from switching. Nonetheless, of the some 510,000 customers who signed contracts to change their electricity supplier in March 2000:

- a) 4,000 customers (one per cent) subsequently denied that they had signed a contract to change supplier (for example, they said that they had merely indicated their interest in further information).
- b) 16,000 (three per cent) were prevented from changing their supplier, usually because they were in debt to their existing supplier or had given insufficient notice to their existing supplier of their intention to switch. Ofgem are considering whether to remove suppliers' right to prevent their customers from switching in these circumstances.

¹⁷ Independent Energy called in receivers primarily because of financial problems arising from their difficulty in billing customers.

¹⁸ Formerly National Power.

¹⁹ MORI interviewed 667 customers who had changed their electricity supplier in September/October 1999.

2.17 Ofgem do not monitor routinely how long customer transfers take. Ofgem began a fundamental review of the transfer process in May 2000, however, and collected relevant data from suppliers. They found that there were no significant backlogs of customers waiting to transfer, although they believed that there had been backlogs during the early stages of competition when suppliers' workloads were very high. They also found that the largest proportion of electricity transfers (37 per cent) take place between 31 to 40 days after customers enter into a contract. Electricity suppliers reported average transfer times ranging from 6 days to more than 60 days. Ofgem will be considering these findings during their fundamental review of the transfer process.

Customers will pay an average of £121 million each year during 1998-99 to 2004-05 to pay for the introduction of competition

2.18 The programme to deliver supply competition involved developing a legal and commercial framework for the market, and developing systems to enable information to be passed between different industry bodies and electricity companies. Each of the 14 distribution businesses had to design and build their own systems. The programme aimed to open the market to competition in full on or before April 1998. It was agreed in January 1998 to delay market opening for five months. The main reasons for the delay were the scale of the project and the large number of participants involved in the programme, coupled with the lack of a single point of authority who could take decisions. Implementation was achieved from September 1998 to May 1999.

2.19 More than 18 organisations were involved from the start of the programme in 1996. These were the 14 incumbent suppliers, other suppliers including British Gas Trading, two industry-owned bodies²⁰, and the Regulator. Ofgem appointed PA Consulting to co-ordinate work by the industry. Ofgem devised the timetable for the programme, but had no power to ensure companies kept to it. By contrast, the Gas Act 1995 gave OFGAS statutory powers to introduce competition in gas between 1996 and 1998. The need to gain agreement within the electricity industry slowed progress in a number of areas, including resolving design inconsistencies and finalising the market's legal framework. To encourage progress by the incumbents, Ofgem introduced financial penalties in 1997 for incumbent electricity suppliers who were not ready for competition on time. Ofgem imposed penalties of some £50 million during 1998-99 and 1999-2000, which reduced the distribution charges paid by suppliers and therefore benefited all electricity customers.

2.20 To ensure that competition could be introduced in 1998, many activities that would ideally have been progressed in series had to be completed in parallel. For example, the legal and commercial framework was developed alongside participants' systems and processes. This meant that participants' systems had to be modified in 1998 to reflect changes in the form of the legal framework, and this increased costs. Suppliers have expressed concern that the design changes were not subject to cost-benefit appraisals before being approved. Ofgem told us that they had consulted participants on the requirements for each design change and to ensure changes were timely, simple and effective.

2.21 Ofgem's monitoring of the transfer process suggests that the systems enabling customers to change their electricity supplier have, so far, worked largely as intended. Many of the suppliers we consulted were, however, critical of the way Ofgem handled the implementation programme. In Ofgem's view, the absence of statutory powers of compulsion over the electricity companies concerned resulted in the problems experienced, from which the following lessons could be learned for large-scale regulatory projects in the future:

- a) Ensure that a single point of authority is able to take key decisions and maintain progress. For this programme, Ofgem devised the timetable for the programme in light of the Government's April 1998 target for the introduction of competition, but initially had no power to ensure companies kept to it.
- b) Ensure time is allowed to agree information technology requirements before systems are built. Not doing so carries the risk that, as happened in this case, information technology systems have to be modified to meet new requirements at a late stage in the programme. The costs and benefits of modifying the design of systems after they have been built should also be carefully assessed before going ahead.

2.22 Ofgem took into account the costs of implementing competition in their controls over distribution businesses' charges for network services, and the incumbent electricity suppliers' tariffs. Ofgem allowed companies to recover some £850 million from customers over the seven years 1998-99 to 2004-05, some £121 million each year, to meet the extra costs the companies incurred. This is equal to about £4 on the average electricity bill (some two per cent). The overall savings customers have realised due to competition are greater than the extra costs charged to bills (see paragraph 2.5).

²⁰ The two bodies were the Electricity Pool of England & Wales (an industry-owned body which at the time managed the wholesale electricity market), and Scottish Settlements (a new company established by the Scottish public electricity suppliers).

Customers who have remained with their existing supplier have not yet saved significantly due to competition, but Ofgem expect them to save in the future

2.23 By June 2000, some 19 million domestic customers were still being served by their existing electricity supplier. Ofgem believe that competition should benefit all electricity customers whether or not they change supplier. Incumbent electricity suppliers are likely to reduce their prices in their home areas once they consider that the benefits of retaining market share exceed the revenue they would lose from offering lower prices. One of the key tests of the effectiveness of competition is therefore whether the incumbents have responded to the lower tariffs being offered by their competitors by reducing their own prices. Ofgem aim to end price controls over the incumbents' tariffs once competition has developed sufficiently to protect customers' interests. Ofgem believe this is already the case in the direct debit market and removed price controls over the incumbents' direct debit discounts with effect from April 2000. They aim to end price controls over the incumbents' other tariffs in April 2002, provided that they consider that competition has continued to develop satisfactorily.

2.24 Ofgem monitor the incumbent electricity suppliers' tariffs for their home areas to ensure that they comply with price controls. Ofgem's analysis shows that, by October 2000, of the incumbent electricity suppliers only one offered a quarterly credit and four offered a prepayment meter tariff below the caps that Ofgem have placed on them. Some 1.7 million customers have benefited in this way, although the amounts are small, about £1 - £2 a year. We calculated the effect of competition on the incumbents' direct debit tariffs by examining how far they had changed since April 2000, when Ofgem removed the price cap, by comparison with the incumbents' quarterly credit tariffs, which are still controlled. The findings suggest that competition has yet to benefit some 6 million of the 8.5 million direct debit customers who have remained with their existing supplier:

- a) In three areas, direct debit tariffs had fallen by a greater amount than the same suppliers' quarterly credit tariff, suggesting that competition had already begun to affect incumbents' prices. In a further area²¹, where the incumbent's quarterly credit was below the price cap, the direct debit tariff had moved in line with it. These additional reductions have led to savings for 2.5 million customers totalling some £5 million (one per cent of their bills).
 - b) In three areas incumbents direct debit tariffs had fallen in line with the quarterly credit tariffs, and in seven areas direct debit tariffs had fallen by less than quarterly credit tariffs.
- 2.25 Some 250,000 customers who have not switched electricity supplier are nonetheless benefiting from dual fuel discounts worth £2.9 million a year, because they now buy gas from their local electricity company. These deals have become more widely available since the introduction of electricity supply competition.
- 2.26 All customers are paying for the cost of introducing competition through their electricity bills, including those who have not changed their electricity supplier (see paragraph 2.22). The 19 million domestic customers who have not changed their electricity supplier between them paid an extra £112 million each year during 1998-99 to 2002-03, and will pay £82 million each year during 2003-05, to meet the costs²². These costs represent some two per cent of their electricity bills, on average £4 a year.

The cost of electricity for domestic customers who have not switched supplier has, however, fallen due to price controls

2.27 Customers who have not changed their supplier have together saved some £450 million since the introduction of competition (7.8 per cent) due to the impact of Ofgem's price controls. These are controls over distribution and transmission costs to suppliers, which benefit all domestic customers, and controls over the prices charged by incumbent suppliers. These savings include the additional amounts distribution businesses were allowed to recover from customers to pay for the cost of implementing competition. Nearly all domestic customers are paying less for their electricity since the start of competition, on average by £29 per customer a year. It is highly probable, however, that they would have made these savings in the absence of competition.

2.28 Competition was introduced into the domestic gas market between 1996 and 1998. By June 2000, some 14.3 million gas customers, some 72 per cent, were still buying their gas from British Gas Trading (the incumbent supplier). Between them domestic gas customers' were saving £1,017 million a year since competition started (20 per cent), an average of £71. Some of these savings arose because British Gas Trading had reduced their direct debit prices below Ofgem's price caps. Ofgem removed price caps for direct debit prices from April 2000.

21 East Midlands.

22 This includes the penalties imposed on suppliers by Ofgem (paragraph 2.19).

Most customers continue to receive a good standard of service from incumbents

2.29 Customers of the incumbent electricity suppliers mostly received a good standard of service during the transition to competition. For example, the level of complaints to Ofgem about services did not increase in the 18 months before competition. And incumbents' compliance with Ofgem's service standards, notably ensuring that all meters are read once a year and replying to customers' correspondence within ten working days, remained at a high level in the four years to March 2000 and improved between 1998-99 and 1999-2000. We compared the level of complaints to Ofgem in the year to July 2000 with the year before competition. We found that while complaints had doubled, to 250 per million customers, they were still at a very low level. These trends suggest that the service to customers who had not changed their electricity supplier was still of a generally good standard.

Ofgem expect all domestic electricity customers to save from competition in future

2.30 Competition gives suppliers an incentive to reduce their supply costs and pass on savings to customers. The incentive to reduce prices may lead companies to achieve economies in their supply costs, for instance if they can realise economies of scale by increasing their customer base. Supply costs and margins are about 17 per cent of the price customers pay. If companies were able to reduce their supply costs by 50 per cent, and passed this saving on to customers, a typical bill of £245 would be reduced by £21.50, or nine per cent. Suppliers may reduce their costs through, for example, providing customers with both electricity and gas and issuing a single bill. Further cost savings are possible from combining extra services with electricity and gas, for example fixed line telephones, and some multi-utility tariffs are now available.

2.31 Ofgem believe, however, that the main source of savings from competition will be through the greater incentive that suppliers have in the competitive market to buy electricity more cheaply on the wholesale market, given that generation costs are around half of the price customers pay for electricity. Suppliers were formerly able to pass on the costs of generation to customers, although before doing so they needed to satisfy Ofgem that their wholesale purchases were reasonably economical. Hence suppliers had little incentive to drive down the prices they paid to the generating companies. Ofgem believe that reform of the wholesale market was necessary before customers could realise the savings possible from this source. Ofgem therefore developed with the Department of Trade and Industry a new framework for the wholesale market, the New Electricity Trading Arrangements, which they originally planned to implement in Autumn 2000 in England and Wales. In October 2000, Ofgem announced that due to problems highlighted by testing of the New Electricity Trading Arrangements' computer system, the start date would be deferred from November 2000 to March 2001. Ofgem plan to align the wholesale electricity trading arrangements in Scotland with those in England and Wales in 2002. Ofgem believe that the framework will make the wholesale market more efficient and should put significant downward pressure on electricity prices.

Part 3

Domestic customers could benefit more

Summary

3.1 Ofgem aim to develop sufficient competition in the domestic electricity market to render price caps and some other controls redundant. This part of the report considers what more Ofgem need to do to ensure that competition becomes sufficiently well developed to protect the interests of domestic customers without the need for price controls over supply. Our main findings were:

- a) A greater proportion of electricity customers have changed their supplier than at the equivalent stage in the development of the domestic gas market and in overseas electricity markets. The 19 million customers who have not switched could, however, save up to £674 million a year between them if they did so. Many customers do not feel it is worth the effort to change supplier, and rural customers are less likely to switch partly because suppliers have so far concentrated their marketing efforts in urban areas.
- b) Ofgem are addressing the difficulty many customers encounter in identifying the best deal, and continue to make improvements in the processes for changing supplier. But there is further scope to improve customer awareness of the savings on offer and counter the risk that problems with changing supplier or abuses in the selling process may reduce consumer confidence.
- c) Low-income groups have so far benefited less from competition than others, mainly because many are among the 4 million customers who pay for their electricity by prepayment meter. Ofgem are seeking to make it easier for prepayment meter customers to change supplier, but electricity suppliers view them as less profitable than other types of customer.

- d) Fewer new companies have so far entered the domestic electricity market than the domestic gas market. Some entry barriers are higher than in the gas market. This is, however, partly due to differences in the structure of the two industries. Ofgem are restructuring the wholesale electricity market in England and Wales and are planning to extend the new arrangements to Scotland.

Customers could save money by changing supplier, but many customers are reluctant to switch

- 3.2 By June 2000, a year after all domestic customers had been able to change electricity supplier, 6.5 million people (25 per cent of customers) had done so. One year after full competition in the domestic gas market some 23 per cent of customers had changed gas supplier. A greater proportion of domestic customers have changed their electricity and gas suppliers than in the fixed line telephones market and other domestic electricity markets overseas ([Figure 9 overleaf](#)). A survey in May 2000 by KPMG found that in the past year, six per cent had moved their current or credit card account, 14 per cent had moved their landline or mobile service provider and 16 per cent had changed their preferred supermarket.
- 3.3 Nearly all of the 19 million people who have not changed their electricity supplier would save money by doing so. If they all changed to the cheapest supplier in their area, together they would save some £674 million a year (13 per cent of their bills). Additional savings are also available to those willing and able to pay by direct debit (8.5 million customers already pay for their electricity in this way). A further 3.5 million customers would be able to switch to direct debit and could save a further £51 million between them (five per cent of their bills).

9 The proportion of customers who have changed their electricity supplier in the first year of competition compares favourably with switching levels in other markets

The Figure shows the switching levels in the domestic electricity market, other utility markets in Great Britain and electricity markets overseas, and how long the market has been open to competition.

	How long has the market been open to competition?	How many domestic customers have changed supplier?
	Years	Per Cent
Utilities markets in Great Britain		
Electricity	1 - 1 ¾	25
Gas	2 - 4	30
Fixed line telephones	8 (Note 1)	25 (Note 2)
Overseas electricity markets		
Germany	4 ¼	1
Sweden	4 ½ (Note 3)	7
California	2 ¼	2
Pennsylvania	1 ½	26

- Notes:
1. Cable companies were permitted to offer voice telephony services from 1992. The market had, however, been opened to limited competition in 1985.
 2. This figure reflects the proportion of fixed line telephone customers who have ever switched supplier and includes customers who have switched back to BT.
 3. Although the market opened in January 1996, until November 1999 switchers had to change their electricity meter if they wanted to change supplier.

Source: Center for the Advancement of Energy Markets, European Commission, FT Business Services, German Federal Ministry of Economics and Technology, OFTEL, Public Utility Commission and Swedish Electricity Association

3.4 By October 2000, few incumbent electricity suppliers had reduced their prices significantly in response to the lower prices on offer from competitors (see paragraph 2.23). At this time, the incumbents had an average of 80 per cent of the domestic and small business electricity market in their home areas²³, although the shares vary between 89 per cent in the North of Scotland and 75 per cent in the North East. British Gas Trading have also maintained a large share of the domestic gas market (72 per cent). British Gas Trading had reduced their direct debit gas tariffs below Ofgem's price cap in response to competition, and Ofgem subsequently removed price caps over British Gas Trading's direct debit gas tariffs with effect from April 2000. British Gas Trading's other gas tariffs have continued broadly in line with Ofgem's other price caps. As more customers switch electricity supplier there will be increasing pressure on incumbents to reduce the difference between their prices and those of their competitors, which would benefit customers who do not wish to change supplier.

3.5 We therefore examined the reasons why three in four domestic electricity customers had not switched, using a variety of sources of evidence:

- a) Our analysis of the results of our survey of 4,600 customers in May/June 2000.
- b) Ofgem's Autumn 1999 survey of 2,315 electricity customers in England, Wales and Scotland.
- c) Research commissioned by the Department of Trade and Industry into the barriers to customers switching suppliers in a range of markets, including gas and electricity. The research included an interview survey of 1,000 adults in May 2000 and in-depth interviews with a further 60.

There are variations in the proportion of customers in different parts of the community who have benefited financially from competition

3.6 Our survey in May/June 2000 showed that 30 per cent of customers with household income above £25,000 a year have changed supplier. By comparison, 20 per cent of customers with household income of less than £9,500 a year have changed supplier. Our analysis of our survey results show the following significant variations in switching levels which help explain the smaller proportion of lower income groups who have changed their supplier:

23 Ofgem's market share statistics do not separately identify domestic customers.

- a) Rural customers are less than half as likely to have changed their electricity supplier than those who live in urban areas, irrespective of income.
- b) Customers who pay for their electricity by prepayment meter are much less likely to have changed supplier than others regardless of income. The use of prepayment meters is concentrated among lower income groups.
- c) Customers who live in Scotland are less likely to have changed supplier than those in England and Wales. This may be due in part to the smaller number of electricity suppliers actively competing in the Scottish market.
- d) People who have relatively low bills are less likely to have changed supplier. Customers with lower bills have less in absolute terms to gain financially from switching, and this result appears to confirm that the level of savings available has a significant effect on the decision to switch.

Many customers are not aware of the benefits or machinery of switching supplier

- 3.7 Research commissioned by the Department of Trade and Industry has indicated the importance of doorstep selling in raising awareness of competition and persuading customers to change supplier, and customers' perceptions of risk in dissuading themselves from switching (Figure 10). The researchers concluded that, to maximise the benefits of competition, customers need to be aware of alternative providers and perceived or actual barriers to switching must be removed or reduced. To increase switching rates, it is necessary to enhance customers' appreciation of benefits and reduce their perceptions of risk.
- 3.8 Ofgem's customer survey in Autumn 1999 indicated that most customers were aware that they could now buy electricity from suppliers other than their local electricity company. Many customers were not aware of the level of savings available in the domestic electricity market, and saw no reason to change their electricity supplier, either because they are happy with their existing supplier or do not think it would be worth the effort. Consumers are likely to obtain the deal that best suits their circumstances when they can easily compare the prices and terms of competing offers, but many customers find it difficult to compare prices and few customers shop around for the best deal (Figure 11 overleaf).

10 Research commissioned by the Department of Trade and Industry indicates that perceptions of risk are an important factor discouraging customers from changing electricity supplier

During 2000, the Department of Trade and Industry commissioned research into the barriers to switching suppliers in a range of markets, including gas and electricity. This included telephone interviews with 1000 adults and in-depth interviews with a further 60, which were carried out in May 2000. The research was designed to increase the Department's knowledge of customer switching behaviour by making comparisons between markets. Researchers compared switching rates and customer perceptions in five markets (domestic gas and electricity; home and car insurance; current and savings accounts; mortgages; and fixed-line and mobile telephones).

They found that three factors affect whether customers are likely to change their supplier:

- **Opportunity, including the accessibility of information.** In the electricity and gas markets, most switching occurs as a consequence of contacts by sales agents. A common theme was interviewees' inability to remember the names of more than two energy suppliers (the interviewee's local electricity company and British Gas).
- **Inclination, including customers' perception of the benefits of switching** (e.g. savings) or dissatisfaction with service from their existing supplier. Interviewees' awareness of savings in the energy market varied, although few expect to make major savings if they switch supplier.
- **Disinclination, including perceptions of risk.** Risks include losing a previously reliable supplier, inconvenience, and the possibility of something going wrong. Across markets most customers think it makes more sense to use established companies rather than newer companies offering better deals. High levels of satisfaction with existing suppliers, as in the electricity market, reduce inclination to switch and increase the perceived risk of changing.

In all but one of the markets they studied they found that the scales were balanced in favour of the existing supplier. The exception was home and car insurance where customers must renew contracts annually if they wish to stay with the same company. In the insurance market it is therefore only slightly easier to stay than to switch. Many customers in the domestic energy markets are faced with balancing the prospect of relatively small savings against the potentially greater inconvenience or uncertainty involved in changing supplier.

11 Ofgem's autumn 1999 customer survey shows that although most customers are aware of competition many see no reason to switch supplier

The Figure shows important results from Ofgem surveys of customer perceptions and experience of the electricity market.

Most customers are aware that they are able to change their electricity supplier

- 95 per cent of customers were aware that they could now buy electricity from suppliers other than their local electricity company – a similar level of awareness as the survey found in respect of gas customers (96 per cent).

Many customers were not aware of the level of savings available in the domestic electricity market

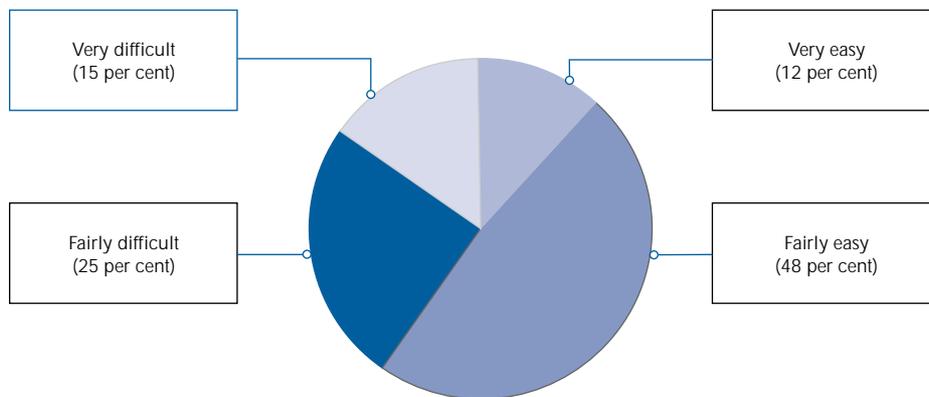
- Customers were asked whether the prices offered by the new electricity suppliers were higher or lower than those offered by their local electricity company. Twenty-three per cent thought that the prices offered by new suppliers were all lower than those offered by their local electricity company. Thirty-four per cent said that they were about the same and 31 per cent did not know.

Most customers see no reason to switch supplier

- Customers who had not switched electricity supplier were asked why. Nearly two-thirds (65 per cent) said they saw no reason to change or that they were happy with their current supplier, while 22 per cent did not think it would be worth the effort. The next most important factors were "waiting to see what happens" (five per cent) and "suspicious that lower prices would not be maintained" (four per cent).

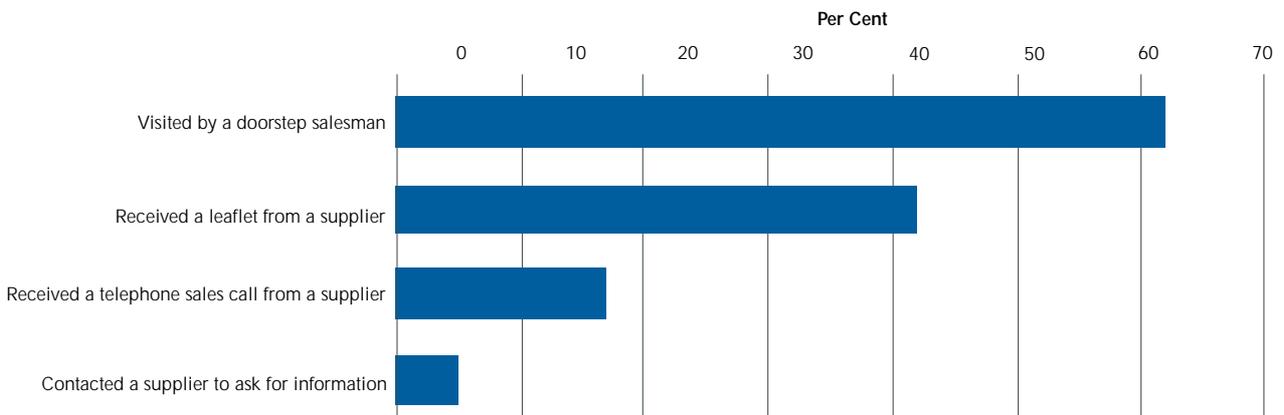
It can be difficult to identify the best deal in terms of price or quality of service

- 40 per cent of customers who expressed a view said it was very or fairly difficult to compare prices:



Few customers shop around for the best deal

- Many customers have been contacted by suppliers, but few customers approach suppliers for information.



Source: Ofgem

- 3.9 The Department of Trade and Industry's research showed that many customers were only aware of two energy suppliers, their local electricity company and British Gas. The suppliers we consulted told us that they mainly use doorstep selling, direct mail and telephone sales to recruit new customers, and most customers who change supplier do so in response to direct contact from a supplier. Analysis of our survey in May/June 2000 of 4,600 electricity customers showed that rural customers are less than half as likely to have changed their electricity supplier than those who live in urban areas. This may be because many customers change their electricity supplier in response to a visit from a sales agent, and direct marketing of electricity has so far been less intensive in rural areas.
- 3.10 Customers' reliance on sales agents is unlikely to maximise the savings that they may be able to achieve in the market. However, we found that, once the names and telephone numbers of alternative suppliers had been obtained, shopping around for the best deal in the electricity market is relatively easy. All suppliers were able to quote prices over the telephone for a given level of consumption, and most were willing to provide written quotations.
- 3.11 Not surprisingly given customers' reliance on sales agents for information, and the difficulty of drawing comparisons, we found that many of those who had changed their electricity supplier were not on the cheapest available tariff for their preferred payment method. By changing supplier again, some 88 per cent of switchers could save a further £103 million between them. This may be partly because suppliers had launched many new offers over preceding months: some customers may have opted for the best price at the time. Others may have chosen their new supplier on criteria other than price. It may also, however, be because many customers do not shop around for the best deal.

Ofgem are seeking to make it easier for customers to switch supplier

3.12 Ofgem sought to alert customers to the introduction of competition through national and local press advertisements and articles. They also published a leaflet available to customers on request, Customer Choice in Electricity Supply. Since the market opened, they have issued frequent press notices highlighting the savings on offer in the market; the savings switchers have achieved, and advice on how to change supplier (see Figure 12). To help customers identify the best deal, Ofgem also publish comparative price and service information on their web site (www.ofgem.gov.uk) and via the freephone helpline (0800 88 77 77) which is now operated by energywatch.

12 Ofgem's top ten tips for switching supplier, published in May 2000

1. Find out how much you spent on gas and electricity during the last year – this will help you compare prices
2. Ask for suppliers' prices and what savings are available for different payment methods, e.g. it is usually cheaper to pay your bill by monthly direct debit
3. Make sure you compare like with like, e.g. direct debit with direct debit (and that prices include VAT) as suppliers have different prices depending on how much gas and electricity you use
4. If a salesperson visits your home, you will be asked to agree a contract on the doorstep so always ask who they are working for and for identification
5. If you agree a contract either on the doorstep or on the telephone - remember, by law there is a seven day cooling-off period during which you can change your mind
6. If you agree a contract – either on the doorstep or on the telephone – the supplier should contact you within a fortnight to make sure you understand that you have a contract and that you're happy with the way the sale was made – if you're not, you have the right to cancel the contract
7. If you do not tell your existing supplier you have signed up to a new supplier, they may stop you from switching
8. Make sure you have paid any outstanding bills from your existing supplier if you don't, they may stop you from switching
9. Your new supplier will read your meter (or ask you to read it) when you transfer and your old supplier will use the reading to work out how much you owe them – keep a note of the reading in case you don't agree with the final bill from the old supplier
10. All gas and electricity suppliers must provide special help, on request, to people who are elderly, disabled, chronically ill, blind, partially-sighted or deaf

Source: Ofgem Press Notice, May 2000

3.13 Ofgem had not always kept this information up to date, but in June 2000 they launched an improved package of information and advice, including on their web site comparative gas and electricity price information and, for the first time, information on dual fuel offers and complaints against individual suppliers. Ofgem's advice does not highlight how easy it is for customers to shop around for electricity over the telephone, although customers could benefit from doing so. Some 7,500 people visited Ofgem's website in July 2000, and they issued about 50,000 information packs to customers during July and August. Although Ofgem have not measured the extent to which their information and advice is helping the public, Ofgem's survey in Autumn 1999 indicated that only three per cent of the public had found out about competition in the domestic electricity market from Ofgem. Since June 2000, Ofgem have concentrated upon distributing information for consumers through local advice agencies and consumer bodies. Ofgem consider that this is more cost-effective than alternatives such as press advertisements.

Original designs

New designs

3.14 To facilitate price comparisons by customers Ofgem proposed, in February 2000, that when a company compared their prices with those of a competitor, it should present both prices in a standard format using an "Energy Cost Index". The Index would work in a similar way to Annual Percentage Rate of Interest (APR) and fuel consumption (MPG) indices in the financial services and car markets. Suppliers and consumer groups have expressed concerns about this approach, such as the cost to suppliers of complying with any mandatory requirements. Ofgem therefore intend to commission market research to test the cost-effectiveness of an Index and to obtain evidence about what type of pricing information customers find it easiest to use. The research will also compare the value to customers of an Index with existing aids such as the pricing factsheets (paragraph 3.12).

Original designs

3.15 The Committee of Public Accounts have commented on the need for greater transparency and clarity in pricing structures in the telecommunications and gas markets if customers were to make informed choices between different companies' services (see Appendix 1). In a recent report²⁴, the US Federal Trade Commission considered that promoting uniform disclosure by suppliers of the prices and other relevant attributes of offers to customers is important in ensuring the benefits of electricity supply competition flow to customers. They also highlighted the need to ensure that:

- a) The scope of the required disclosures reflects the aspects of suppliers' offers that consumers consider most important.
- b) The costs of standardising disclosure are considered.

3.16 Ofgem's proposals focus on prices. Their Autumn 1999 survey found that although most customers said that lower prices would be among the most important factors they would consider when choosing a supplier, a third said quality of service was also important. Some electricity suppliers told us that Ofgem were wrong to focus on price comparison alone as they felt this might encourage customers to consider only price when choosing a supplier. Mandatory disclosure requirements impose costs on suppliers, for example in reprinting marketing material, and these are likely to be passed on to customers. Ofgem told us that they intend to appraise the costs to suppliers of disclosing information in the format required for their proposed Energy Cost Index against the benefits to customers, if their market research indicates that this approach would be beneficial to consumers.

Ofgem are seeking to resolve problems with the customer transfer process

3.17 The research for the Department of Trade and Industry (paragraph 3.7) highlighted the importance of customers' perception of risk in dissuading them from considering a change of supplier. Our analysis shows that customers with smaller bills are less likely to change supplier than those with larger bills, indicating that customers take into account costs and benefits when they consider switching and reinforcing the importance of making it easy to do so.

3.18 Ofgem's survey in late 1999 found that 76 per cent of customers who had not changed their electricity supplier thought it would be easy and nine per cent thought it would be difficult. Although most customers surveyed who have switched say that changing supplier was trouble-free, some customers have experienced significant delays (see paragraphs 2.14 - 2.17).

New designs

- 3.19 Ofgem believe that some electricity transfer delays may be due to dual fuel suppliers attempting to bring customers' electricity and gas supply on line at the same time. This is because arrangements for changing gas supplier are different and this takes a minimum of 30 days. Ofgem are considering the implications in their fundamental review of the transfer process.
- 3.20 There is a particular risk of delays to customers switching for a second or subsequent time. Although customers do not need to give their electricity supplier notice that they intend to switch to another supplier the first time they switch, the suppliers can require new customers to give up to 28 days notice of their intention to switch again. Suppliers can prevent transfers if they have not been given this notice. Similar rules apply in the domestic gas market where by October 1999, suppliers' objections to customer transfers had reached 30 per cent of proposed transfers, and half of these related to insufficient termination notice. Although objection rates in the electricity market have remained at less than five per cent of proposed transfers, Ofgem considered that the objections might increase as more customers consider changing supplier for a second time. In March 2000 Ofgem therefore proposed to end suppliers' right to object to customer transfers because they had given insufficient termination notice.

Ofgem are seeking to protect customers from high pressure or misleading selling practices

3.21 The Gas Consumers Council received a number of complaints about the doorstep selling practices of gas suppliers from January 1996, three months before competition started. Complaints concerned poor or misleading information, and misleading customers into entering contracts. Ofgem modified gas suppliers' licences in January 1998 to include standards covering doorstep selling. To pre-empt problems of this nature when they introduced competition in the domestic electricity market, Ofgem introduced licence conditions for domestic electricity suppliers in September 1998 to regulate their marketing activities, including doorstep selling²⁵. In March 2000 Ofgem extended the licence conditions covering marketing, originally set to expire in 2000, for two years to 30 March 2002. In June Ofgem proposed a number of enhancements to ensure that customers feel confident in changing supplier²⁶ (Figure 13). They expect these to be in place by early 2001. The National Association of Citizens Advice Bureaux told us that their network of local offices regularly report a considerable quantity of problems with the marketing of fuel.

13 Licence conditions on the marketing of gas and electricity to domestic customers

The Figure shows the changes to licence conditions covering the marketing of gas and electricity.

Present licence conditions (Note 1)

Suppliers must ensure that:

- staff are properly selected and trained;
- their agents are readily identifiable and that they contact consumers at reasonable times;
- they audit sales on the doorstep and on the telephone;
- they take reasonable steps to cancel contracts if customers request this;
- they maintain contact with customers in case of a delay to processing the contract;
- they provide complaint handling;
- they do not enter into an agreement with agencies seeking up-front payments from customers;
- they send out terms and conditions following a telephone sale (electricity marketing only).

Notes: 1. These conditions applied to domestic gas suppliers from January 1998 and to electricity suppliers since April 1998.
2. These additional conditions proposed by Ofgem in June 2000 which should come into effect later in 2000.

Source: Ofgem

Additional licence conditions (Note 2)

Suppliers must ensure that:

- the customer understands that they have entered into a contract;
- they set up procedures for the management of sales staff;
- they carry out an audit and provide the same safeguards for sales conducted in public places (such as supermarkets and shopping centres) as for doorstep and telephone sales.

Ofgem also proposed extending to gas suppliers the requirement that suppliers send out terms and conditions following a telephone sale. This will fully align gas and electricity marketing licence conditions.

25 The licence conditions do not cover sales over the Internet. In October 2000, however, Ofgem announced a new voluntary code of practice for those companies providing price comparison services over the Internet. The code is also intended for companies providing price comparison services by post or over the telephone, and covers areas such as the need for independence, that price comparisons should cover all available tariffs, and the accuracy of price and comparisons.

26 Marketing Gas and Electricity – Decision document and proposals on the modification of licence conditions (Ofgem, June 2000).

Savings

3.22 In the first year of electricity supply competition there were some 4,900 complaints, 1.06 complaints per thousand electricity switchers, a similar position as in the first year of domestic gas competition. Complaints included:

- that the information provided by sales agents is misleading; and
- that the customer had not understood that they had entered a contract (sometimes having gained the impression that they were requesting information).

3.23 Ofgem's main method of monitoring the behaviour of suppliers and their agents is to rely upon complaints from customers. For example, following persistent complaints from customers about misleading sales methods, Ofgem investigated the activities of doorstep sales agents engaged by London Electricity in 1999. As a result, the company agreed to tighten the monitoring of sales agents and to flush out rogue operators.

3.24 Complaints, however, may give only part of the picture. Research by the Office of Fair Trading²⁷ suggests that complaints received by regulators are the "tip of the iceberg" with the true level of consumer problems being much higher. Some customers may not consider it worthwhile to complain, while some may not realise sales agents had misled them until much later. Others who experience problems may not complain at all because they do not know who to complain to. The Chair-designate of energywatch told us that this could affect certain service problems in particular, including selling and problems with changing supplier. She also told us that customers may not be aware of the standards of behaviour the regulator requires of suppliers. Ofgem told us that they had begun to supplement their review of complaints with other techniques including mystery shopping.

Services

Suppliers' marketing literature emphasises the savings possible, but suppliers expect service factors to become increasingly important

Ofgem are doing more to ensure that their regulation of quality of service is effective

3.25 Suppliers' marketing literature emphasises the savings possible, the ease of switching and each company's reliability. Some suppliers believed that competition had been largely on price so far (see below). This view was shared by many of the consumer representative bodies we consulted. Indeed, the performance of some new suppliers has fallen short of the standard of ongoing service provided by the incumbents (see paragraph 2.12).

Comments by suppliers on the degree of competition on quality of service

- The basis of competition is price perception plus perceived brand strength.
- Competition is initially all on price.
- Price has been the major factor in initially driving competition, which has effectively been a disincentive to suppliers to compete on quality of service. We expect service factors to become increasingly important.

3.26 All electricity suppliers are required to produce codes of practice designed to protect customers' interests, especially vulnerable customers such as those in debt, the sick and the elderly. All suppliers must also report a range of performance data to Ofgem each quarter. The incumbents are, in addition, required to meet performance standards and report to Ofgem on progress each quarter. For example, incumbents are required to read the meter of all domestic customers at least once a year. Seven of the 14 incumbent suppliers met the target in 1998-99. In some cases, suppliers are required to compensate customers if they fail to meet the standard. For example, incumbent suppliers must offer, and keep, a morning or afternoon appointment, or an appointment at a specified time if customers request one. If the supplier fails to keep the appointment they should pay the customer £20. Incumbent suppliers made 1,264 such compensation payments in 1998-99. The Utilities Act 2000 provides for extending the service obligations of incumbents to all electricity suppliers.

3.27 Ofgem have worked closely with the Electricity Consumers Committees in reviewing the quarterly returns from the incumbent electricity suppliers. The Electricity Consumers Committees, and Ofgem, pursue under-performance with the companies concerned. Ofgem also publish annual league tables of company performance to give suppliers an incentive to meet the standards and they also consider performance against standards in setting price caps. Under the Utilities Act, the new Gas and Electricity Consumer Council take on responsibility for handling customer complaints, but Ofgem will also review complaints.

3.28 Ofgem seek to ensure that each supplier has prepared suitable codes of practice and check on compliance. Ofgem ensure that all suppliers provide performance information each quarter. Following the introduction of competition, Ofgem developed a new monitoring system to record and analyse the performance reported by suppliers. On four occasions, Ofgem have taken action arising from their monitoring of customer complaints. In the three cases where Ofgem decided to publicise their action²⁸, one company undertook to improve the management of their direct marketing, and two companies agreed to restrictions on the recruitment of new customers until they had resolved their billing problems.

Ofgem need to continue to protect customers who pay by prepayment meter until the market is competitive

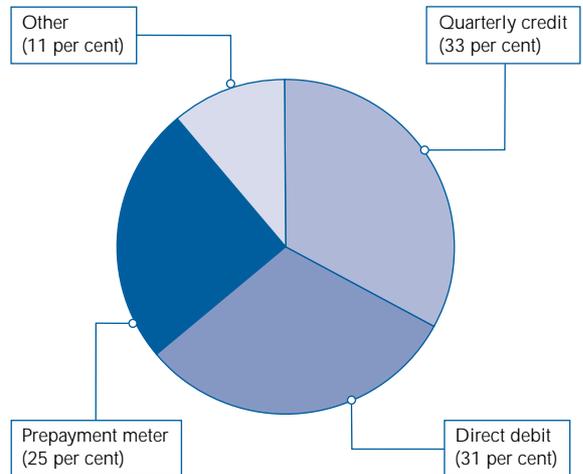
3.29 Where customers pay for electricity by prepayment meter they pre-purchase electricity at a sales outlet²⁹. The quantity of electricity they have purchased is recorded electronically on a token, 'smartcard' or key, depending on the type of meter they have, which the customer inserts into their meter to use electricity. About four million people (15 per cent of domestic electricity customers) currently pay for electricity in this way, an increase of 2.8 million since 1991. By comparison, 1.6 million customers pay for gas by prepayment meter, double the number in 1991.

3.30 Prepayment meter use is concentrated among less well off households. Our customer survey in May/June 2000 found that 80 per cent of prepayment meter customers were in occupational categories C2, D and E (skilled manual workers; semi-skilled manual workers; pensioners, unemployed people and students). A quarter of electricity customers with a household income of less than £17,500 a year use a prepayment meter (Figure 14).

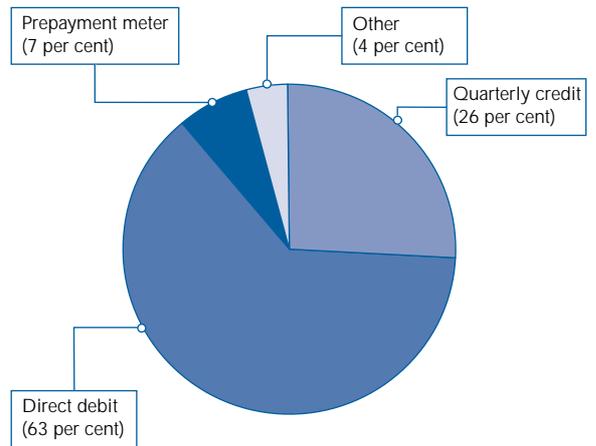
14 Many people on lower incomes use a prepayment meter to pay for electricity

The Figure shows that a quarter of households with an income of less than £17,500 a year pay for electricity by prepayment meter, while few households with an income of £17,500 or more use one.

Annual household income of less than £17,500



Annual household income of £17,500 or more



Note: Other includes weekly or fortnightly cash, fuel direct/deductions from income support.

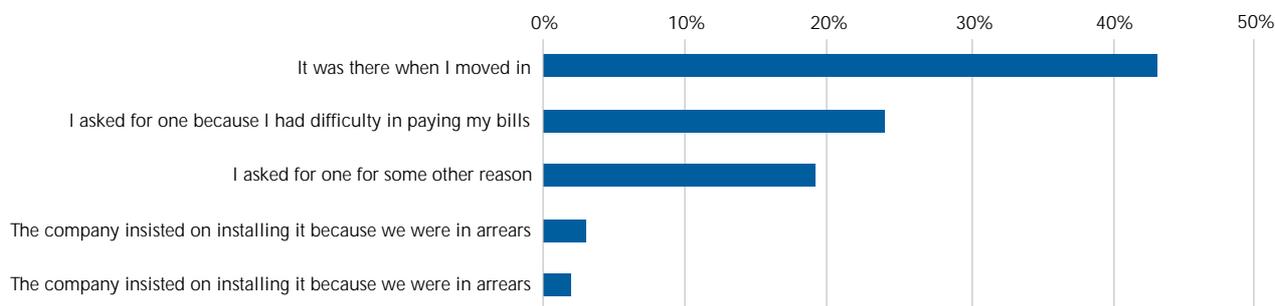
Source: NAO/Ofgem survey in May/June 2000

28 Independent Energy, London Electricity and Northern Electric and Gas.

29 Prepayment meters provide a limited amount of emergency credit, for example to enable customers to have access to a supply overnight.

15 Many electricity customers with a prepayment meter inherit it from the previous occupant of their dwelling

The Figure shows that a significant minority of prepayment meter customers (over 40 per cent) inherited their prepayment meter when they moved into their current dwelling.



Source: Ofgem survey, June 2000

16 It should cost efficient suppliers an average of £18.50 a year more to supply customers who have a prepayment meter

The Figure shows Ernst & Young's estimate of the additional annual costs to the incumbent electricity suppliers of serving prepayment meter customers, by comparison with the costs of serving quarterly credit customers. Ofgem concluded that savings from better debt management, working capital management and other operational benefits would broadly equal the extra infrastructure costs.

	Annual costs £
Extra costs	
Capital and operating costs of the meter	15.00
Infrastructure costs (Note 1)	15.00
Total extra costs	30.00
Less	
Savings from better debt management, working capital management and other operational benefits (Note 2),	(11.50)
Net additional cost by comparison with quarterly credit	18.50

- Notes:
1. The cost of issuing cards and tokens, collecting cash from customers through a network of outlets, and disseminating payments and information to suppliers. Ernst and Young's calculation relates to the incumbent electricity suppliers.
 2. Other operational benefits include the elimination of the need for a manual meter reading for some types of meter (smartcard and key meters).

Source: Prepayment Meters – A Consultation Document (Ofgem, October 1999)

3.31 Suppliers often install prepayment meters to recover outstanding debt, but the meters then remain in place after the debt has been repaid unless the customer asks to pay in another way. Ofgem estimate that some 250,000 electricity customers (about six per cent of the total) using prepayment meters are repaying debt³⁰. Some 43 per cent of customers who pay by prepayment meter started doing so after they moved into a house or flat equipped with one (Figure 15).

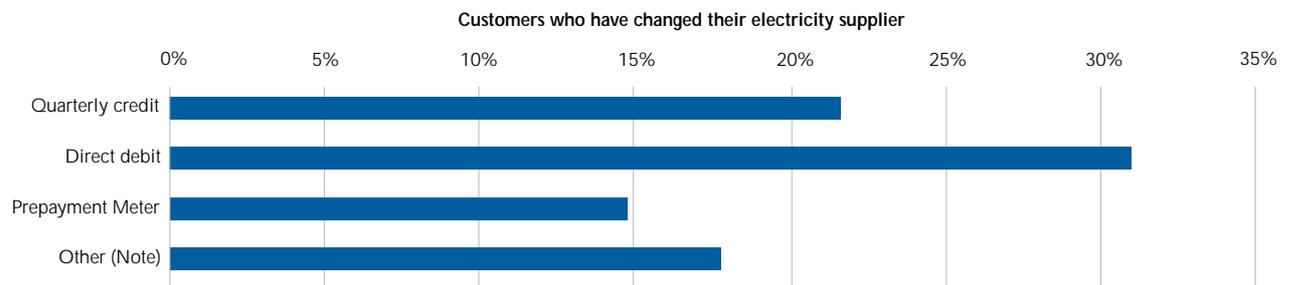
3.32 Research commissioned by Ofgem suggests that customers who use a prepayment meter are more expensive to supply because of the cost of the meter and the infrastructure to support this payment method (Figure 16), although the research also suggested that the cost of prepayment meters was falling. Unless customers who pay by prepayment meter obtain a lower price by changing supplier, in all but one region they pay between £9 and £15 a year more than those who pay the quarterly credit tariff³¹. Even if they change to a supplier offering a lower prepayment meter tariff, they would usually pay more than customers who pay the quarterly credit or direct debit tariff who switch suppliers. For example, for customers with typical electricity consumption who live in Northern England, the lowest prepayment meter tariff offered in July 2000 was £243 a year, a saving of £15 a year on the incumbent's tariff. By comparison, the lowest quarterly credit tariff was £206 a year, and the lowest direct debit tariff was £197.

30 Prepayment Meters - A Consultation Document (Ofgem, October 1999).

31 The exception is Northern Scotland where Scottish and Southern Energy's prepayment meter tariff is the same as the quarterly credit tariff.

17 A smaller proportion of prepayment meter customers have changed supplier than those who pay for their electricity in other ways

The Figure shows that there is variation in the rate at which customers have changed their supplier depending on how customers pay for their electricity. Over 30 per cent of direct debit customers had changed supplier, more than twice the proportion of prepayment meter customers who had done so (15 per cent).



Note: Other includes payment in cash at a Post Office.

Source: NAO/Ofgem survey May/June 2000

3.33 Two companies offer prepayment meter tariffs lower than those of incumbent electricity suppliers in their home areas³². But most suppliers do not offer competitive tariffs and hence their marketing efforts are of little value to customers with prepayment meters. Our survey in May/June 2000 found that, since the start of competition, a smaller proportion of customers who pay by prepayment meter had changed supplier than those who pay the quarterly credit or direct debit tariffs (Figure 17). Nevertheless, nearly 500,000 prepayment meter customers have changed their supplier since the start of competition.

3.34 Customers with prepayment meters can obtain bigger savings when they switch supplier by changing payment method at the same time. By June 2000, 139,000 customers had changed from prepayment meter to another payment method at the same time as changing supplier and have therefore benefited from competition. About 100,000 customers had, however, changed to the prepayment meter tariff when they switched supplier. Many prepayment meter customers would prefer not to change to another payment method. Ofgem surveys show that prepayment meters are generally popular with the customers that use them, for instance because using them avoids the build up of debt (as can happen, for example, with direct debit). And some customers are unable to pay by cheque or direct debit because they do not have a bank account.

3.35 We surveyed the views of suppliers on the strength of price competition in different segments of the electricity market. Although most suppliers rated the strength of price competition as high in other segments of the market, most of the 20 suppliers who expressed an opinion believed that the prepayment meter market was not yet price competitive. Some suppliers told us that the margins on prepayment meter customers were lower than on customers who pay in other ways, making such customers less attractive to recruit. Figure 16 above

indicates what Ofgem believes to be the additional costs incumbents incur in serving prepayment meter customers, provided they are operating efficiently. Suppliers believed, however, that Ofgem had underestimated these additional costs.

3.36 Under market rules, gas and electricity suppliers can prevent customers who owe them money from moving to a competitor. These rules were intended to prevent customers changing supplier to avoid paying their debts. Although most customers who pay by prepayment meter are not in debt to their supplier, Ofgem believe that those who use prepayment meters to manage their debts are particularly affected. Prepayment meter customers are an identifiable group who may be prevented from switching, and prevention from switching imposes costs on the intended new supplier. Ofgem believe this may be discouraging suppliers from seeking to recruit such customers.

Ofgem are seeking to protect the interests of prepayment meter customers

3.37 Ofgem have a range of measures in place or planned to protect the interests of customers who pay for their electricity using a prepayment meter:

- a) Ofgem's price controls over the incumbents' tariffs from April 2000 reduced prepayment meter tariffs in line with quarterly credit tariffs and required them to charge prepayment meter customers no more than £15 a year more than quarterly credit customers or the existing difference if lower. They did this because, at the end of 1999, three of the incumbents were charging prepayment meter customers with typical consumption some £20 - £30 a year more than their quarterly credit customers. At October 2000, the average prepayment meter charge was some £12 a year more than quarterly credit, ranging from six companies charging £15 more to one with no additional charge.

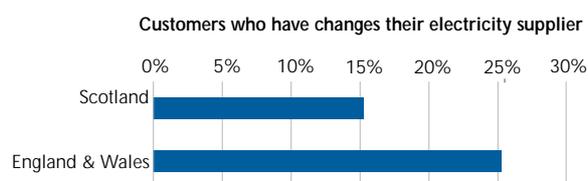
- b) Ofgem are proposing a new standard condition in both electricity and gas supply licences requiring companies to prepare a code of practice to ensure that prepayment meter customers receive better information and advice about the services available. The codes must include information about where keys and smartcards can be charged, what the customer should do if their meter malfunctions and standards of performance that apply if this happens. Licence conditions require suppliers to compensate customers if they do not comply with these standards of performance. The new codes of practice were operating by October 2000. Incumbent suppliers lack an incentive to encourage prepayment meter customers to change payment method, as they would bear the cost of the change.
- c) At the end of 1999, Ofgem proposed changes to market rules to remove a supplier's ability to stop customers in debt moving to another supplier. Suppliers could transfer the debt to the new supplier by voluntary agreement, write off small debts or pursue larger debts through the courts, or sell the debt to a third party. Some suppliers and consumer groups believe that Ofgem's proposal carries risks and that change should be delayed until the market had been open longer, to give suppliers time to adjust. For example, the Public Utilities Access Forum, a consumer group, have suggested that if the change were introduced suppliers may be more likely to insist that customers provide a security deposit, or even require more customers to use a prepayment meter. Ofgem have not yet reached a final decision on whether to proceed.
- d) Ofgem are looking at how far better debt management and prevention by suppliers could help customers avoid getting into debt, and are considering new ways for customers without bank accounts to pay their bills, including the development of credit unions.

3.38 Competition has encouraged suppliers to produce new tariffs and some of these may be attractive to customers who currently pay by prepayment meter. For example, one company³³ is piloting a new tariff based on a fixed annual charge, payable in instalments, regardless of how much electricity customers use, thereby enabling customers to budget for their electricity without incurring the extra cost of using a prepayment meter.

Ofgem plan changes to strengthen competition in Scotland where a smaller proportion of customers have switched than in the rest of Great Britain

3.39 A smaller proportion of domestic electricity customers have changed their supplier in Scotland than in England and Wales (Figure 18), and the two Scottish incumbent suppliers have retained over 80 per cent of the domestic electricity market in their home areas. Fewer domestic customers have changed supplier in Scotland, even allowing for the greater number of rural and prepayment meter customers there (these groups have switched in smaller numbers throughout the country). By contrast, in the domestic gas market, the level of switching is broadly in line with England and Wales after adjusting for the greater number of prepayment meter and rural customers.

18 Fewer people in Scotland have changed their electricity supplier than those in England and Wales



Source: NAO/Ofgem survey

3.40 Most suppliers we consulted³⁴ believed that price competition was weaker in Scotland than in England and Wales. They attributed this in part to the different wholesale trading arrangements in Scotland³⁵ and the integration of transmission and distribution with the two incumbents' supply businesses, see below. The position in the larger business electricity market appears to provide evidence for this view. For example, the 100 kW to 1 MW sector of the electricity market has been open to competition since 1994. By 1998-99, new suppliers had gained 56 per cent of the market in England and Wales but only 20 per cent in Scotland. One Scottish supplier³⁶ told us that new entrants can purchase electricity from a number of independent generators, and noted that where new entrants do purchase from a Scottish incumbent the price is tied to that in England and Wales. The supplier also took the view that less switching in Scotland reflected in part Scottish customers' high degree of loyalty to the Scottish incumbents, and the lower penetration of gas in the North of Scotland – which limits the scope for dual fuel offers.

33 TXU Europe

34 Thirteen out of the 18 suppliers who expressed an opinion.

35 Ofgem plan to align wholesale electricity trading arrangements with those in England and Wales in 2002.

36 Scottish and Southern Energy.

Suppliers attribute less price competition in Scotland to higher barriers to entry and expansion

- The different trading arrangements in Scotland are a barrier to market entry – ensuring fewer suppliers actively target Scotland.
- Trading arrangements, the availability of competitive wholesale prices and different systems and processes in Scotland have been barriers.
- The vertically integrated incumbents are the dominant providers of wholesale electricity to new entrants, with whom they are competing.
- Scotland is a relatively small market and therefore any process differences act as a barrier.
- Scottish customers are less inclined to move from their existing (Scottish) suppliers and other suppliers have yet to focus their efforts on the Scottish market. Arrangements for securing access to generation in Scotland are also less satisfactory than in England and Wales.

Suppliers view low margins and the high cost of acquiring new customers as the most important barriers to entry and expansion in the domestic electricity market

- Ongoing price reductions due to price controls have reduced the profit incentive and consequently the attractiveness of the market to new entrants.
- Low margins may restrict routes to market.
- The margins in electricity are historically lower than in gas, therefore, the savings for customers are less.
- Gas price controls have been further above market prices because of British Gas Trading's purchase contracts.
- There are no significant barriers to growing market share other than the fundamental economics of profitability and attracting and retaining customers, given the tight margins available.
- Customer acquisition costs (using direct marketing) range from around £30 to £50. Price controls have reduced profit to around two per cent. Profit on an average domestic consumer spending of £250 is £5. So it can take between six to ten years to recover customer acquisition costs. Bad debt risk is increasing so the preferred means of gaining market share is to buy a competitor.

Ofgem are seeking to ensure that suppliers can compete on equal terms

3.41 The possibility that companies will enter a market reduces the risk that the existing companies will develop informal understandings and expectations of "reasonable prices". New entrants are also an important source of innovation. There are 14 competitors in the domestic electricity market: the incumbent electricity suppliers (now owned by nine companies) and five new entrants³⁷. All the electricity suppliers also sell gas to domestic customers, but seven gas suppliers, mostly smaller suppliers, do not sell electricity. In 2000, British Energy withdrew from the domestic electricity market after 14 months by selling SWALEC to Scottish and Southern Energy and Innogy, owners of Midlands Electricity, purchased the major supply business assets of Independent Energy, a new entrant to the electricity market. Mergers and acquisitions are leading to increasing concentration in the market.

3.42 The three new entrants we consulted believed there were significant barriers to entering the domestic electricity market. Six out of eight gas suppliers we consulted who expressed a view agreed. The factor suppliers mentioned most often was the low profit margin in the electricity market, see below. Some suppliers attributed this in particular to the stringency of Ofgem's caps over electricity prices by comparison with those on British Gas Trading's gas prices. Some viewed the low margins in the electricity market as particularly significant in deterring new entrants because of the high cost of acquiring new customers through doorstep selling.

3.43 The relatively low profit margins arise from Ofgem's aim of striking a balance between protecting customers through price caps and encouraging competition, and therefore are relevant only so long as price caps are retained. Other problems mentioned by the suppliers are structural, in particular:

- a) The lack of separation between distribution and supply.
- b) Differences in the processes for obtaining a electricity supply licence by comparison with obtaining a gas supply licence.

3.44 When competition was introduced, the companies owning the incumbent supply businesses also owned the distribution business for the area. Since then, the ownership has become separate in four of the 12 regions in England and Wales. Licence conditions require the incumbent distribution business to provide open access to their networks to all suppliers, prohibits them from discriminating between suppliers on prices for their services and bans cross subsidies between distribution and supply. Different arrangements exist in the gas market. Under the Gas Act 1995, transportation was separated from shipping and supply. In 1997, British Gas took a commercial decision to separate their transportation from their supply and shipping business into two separate companies. These changes followed the August 1993 recommendations of the Monopolies and Mergers Commission aimed at ensuring that the

37 Two of the new entrants operate in association with existing suppliers.

transportation of gas was available to all gas shippers without undue discrimination. The Utilities Act 2000 provides for similar changes in the electricity industry to those implemented in gas in 1997. The Act provides that companies cannot both supply electricity and provide electricity distribution services.

3.45 Companies take about six months to obtain a domestic electricity or gas supply licence from Ofgem³⁸. Some suppliers told us, however, that it was easier to obtain a gas supply licence. More work is required to prepare computer systems to operate in the domestic electricity market than in the gas market, and electricity suppliers need to enter into a much larger number of service contracts with other companies (for distribution services, for instance). The latter is because distribution and other services are provided by 14 separate regional companies. Ofgem's licensing requirements also differ between electricity and gas supply. The Utilities Act 2000, however, provides for aligning the licensing requirements in the two industries. Ofgem hope that the new licences will come into effect in April 2001.

3.46 New wholesale electricity trading arrangements are to be implemented in 2001 in England and Wales and 2002 in Scotland (see paragraph 2.31). Ofgem have calculated the costs likely to be incurred by participants in the wholesale market, including independent electricity suppliers. Ofgem estimate that participants set up costs could be up to £12 million (Figure 19). One supplier told us that profits on a typical domestic electricity customer would be of the order of £5 each year. If suppliers sought to recover their set up costs over five years, this equates to the profit on 500,000 customers. Companies can, however, share these costs with existing suppliers. For example, Virgin entered the electricity market in 2000 in partnership with London Electricity.

19 Ofgem estimated the costs to suppliers who participate in the new wholesale market in England and Wales at up to £12 million for a new entrant

The Figure shows the estimated costs to participants of the new electricity wholesale market

Changes to participants' internal finance systems	Up to £10 million (Note 1)
Hardware and software	Up to £2 million (Note 2)
Legal costs for reviewing the new contracts before signing	£100,000
Credit cover	£150,000
TOTAL	Up to £12.25 million

- Notes
1. Ofgem believed that about a fifth of market participants would need to replace their internal financial systems completely. Ofgem expect the remainder to incur much more modest costs, of the order of £100,000.
 2. For trading systems, settlement systems and for connection to the National Grid Company's network control system.

Glossary

Direct debit	A payment method by which the customer's bill is paid automatically from their bank account each month or each quarter.
Distribution	The transfer of electricity from the transmission network to customers. It is carried at lower voltages than transmission.
Electricity supply price cap	The maximum tariffs, set by Ofgem, that are payable by domestic customers.
Generation	The production of electricity, mainly at power stations.
Incumbent electricity suppliers	The companies which, before the introduction of competition, had a monopoly to supply electricity to all domestic premises in their assigned geographical areas.
Prepayment meter	A meter into which a customer inserts an electronic card, mechanical tokens or coins in order to obtain electricity.
Standard credit	The tariff charged by suppliers to customers who pay their bills by cash, cheque, and credit or debit card.
Switching	The process of changing from one supplier of electricity to another.
Supply	The selling of electricity to customers. The process includes wholesale purchasing, marketing, reading meters, billing, processing payments and dealing with enquiries from customers.
Tariffs	The published prices charged by electricity suppliers.
Transmission	The transfer of electricity at high voltages from the point of generation to the companies responsible for distribution to end users. High voltages are used to minimise losses.

Appendix 1

Main Recommendations of the Committee of Public Accounts in their 1999 Report: "Giving Customers A Choice: The Introduction of Competition in the Domestic Gas Market"

1. On the basis of a report by the Comptroller and Auditor General, the Committee examined Ofgem on the introduction of competition for domestic gas customers. Four main points emerged from our examination:
 - We are concerned that low income customers who use prepayment meters to pay for their gas are not benefiting as much as other customers from the introduction of competition. We note Ofgem's concern that low income customers who use other payment methods should not be asked to subsidise prepayment meter users. But Ofgem need to look more closely at ways of promoting price competition in this part of the market, and ensuring that low income customers use prepayment meters only when they want to or benefit from doing so. Ofgem need, for example, to pursue rigorously their work with companies to make it easier for customers who use prepayment meters to repay debt to change supplier, whilst protecting the position of suppliers to whom debts are owed.
 - As a result of errors on the part of gas suppliers, or in some cases dishonest marketing, some 100,000 customers have had their gas provided by a new supplier without having asked for this to be done. We are concerned at the anxiety that such involuntary transfers can cause to customers, especially the elderly and other potentially vulnerable groups. Customers may be concerned for example, that they might be charged twice for the gas they use. Some customers have encountered considerable difficulty in changing back to their original supplier. We expect Ofgem to put pressure on suppliers to stop transferring customers who have not asked to move, and to require any companies that do so to correct such transfers when they occur and to compensate customers for any inconvenience caused.
- In our 1998 report on the work of the Office of Telecommunications to counter anti-competitive behaviour in the telecommunications industry, we found that there was a need for greater transparency and clarity in pricing structures if customers were to make informed choices between different operators' services.³⁹ It is evident that customers are encountering similar problems in the gas market, where, for example, over 60 per cent of customers do not realise that the prices on offer from the new suppliers are lower than those of British Gas Trading. Matters are further complicated by the fact that at least two companies - a supplier of gas and a transporter of gas - are involved in delivering gas to each customer's home. We recommend that Ofgem should consider what more they can do to improve the information available to gas customers on the choices available to them in the gas market and on the issues they need to address when considering whether or not to change supplier.
 - It is vital that safety standards in the gas industry do not slip. The gas transportation company Transco are responsible for coming and attending to gas escapes reported by the public and have a target of getting to 97 per cent of uncontrolled gas escapes within an hour. We are concerned that, whereas 99 per cent of such escapes were reached within an hour in both 1993 and 1994, in 1995 this fell to 92 per cent, and in 1998 had recovered to no more than 97 per cent. This means that in 1998 it took Transco more than an hour to get to the premises in some 40,000 cases. We recommend that Ofgem examine with the Health and Safety Executive the risk to households in this deterioration in performance for both safety and public confidence in domestic gas supply, and whether Transco should be required to set a target of their performance at the level of 99 per cent achieved in 1993 and 1994.

Appendix 2

Study Methods

1. The main sources of evidence for the conclusions drawn in this report were:
 - We collected and evaluated information from Ofgem relating to the implementation of competition in the domestic electricity market, and their monitoring of electricity companies' compliance with their licence conditions. This included information obtained from Ofgem's most recent customer survey, undertaken by MORI in Autumn 1999.
 - Jointly with Ofgem we commissioned Ipsos-Capibus Limited to carry out a survey of a representative sample of 4,600 electricity customers in Great Britain. This provided up to date information on customers, covering characteristics such as location, payment method, occupational class, household income, and whether they had changed their electricity or gas supplier. We analysed the results to assess the influence of various factors on the propensity of customers to switch supplier. Further details are provided in Appendix 3.
 - In September 1999, we sent a questionnaire to companies that had been directly involved with the implementation of competition in the electricity supply industry, the regional Electricity Consumer Committees and national consumer organisations. The 40 (89 per cent) completed questionnaires helped us to formulate the study's issues for examination.
 - In May 2000, we sent a further questionnaire to some 90 companies in the electricity and gas industries to obtain more detailed information about their views and experiences of electricity and gas competition, including overseas practice. All but one of the incumbent electricity suppliers replied. We also received responses from the two main new entrants to the electricity industry. Some companies operating solely in the gas industry also responded, but most, while welcoming the opportunity to comment, declined to do so because of their limited first hand experience of electricity supply.
 - We analysed the database of complaints received by Ofgem to identify the types of issues and concerns that customers were raising with them. We also reviewed the action, where appropriate, which Ofgem were taking in response to those concerns. This enabled us to draw conclusions on the trend in the level of complaints and Ofgem's handling of them.
 - We collected information on electricity and gas tariffs directly from companies. This, together with similar information held by Ofgem, was used to prepare estimates of the savings being achieved and still achievable at June 2000.
 - We examined the results of research undertaken by the Department of Trade and Industry into the reasons why customers did not switch suppliers.
 - We examined the information that Ofgem provide to customers on electricity and gas prices and quality of service, in particular the information included on their website, with a view to drawing conclusions on the information available to customers.
 - We telephoned, anonymously, the sales points of all electricity suppliers to obtain quotations to test whether any pressure was exerted to sign up and to obtain information packs. We checked the accuracy of the information provided against printed tariff information to assess whether it was possible to obtain reliable information on tariffs over the telephone.
 - We collected and evaluated information on the electricity markets of Germany, Sweden, Pennsylvania and California. We also compared the characteristics of the electricity market in Great Britain with other home markets, such as telecommunications and gas. This information enabled us to benchmark the development of electricity supply competition with similar markets elsewhere.
2. As well as speaking to key staff at Ofgem, we consulted widely with those concerned with the introduction of competition to obtain their views. Those we consulted included:

Representatives of electricity industry and consumers

 - Electricity Pool of England and Wales
 - MRA Service Company⁴⁰
 - National Association of Citizens Advice Bureaux
 - National Consumer Council
 - National Electricity Consumers Council
 - PA Consulting Group⁴¹
 - Public Utilities Access Forum

40 MRA Service Company oversee the computer systems that enable customers to change their electricity supplier.

41 Ofgem's programme manager for introducing competition.

Companies involved in the electricity supply market

- British Gas Trading
- Eastern Group
- Enron
- London Electricity
- Manweb
- Scottish and Southern Energy
- A potential supplier who had considered but decided against entering the market

Electricity safety issues

- The Engineering Inspectorate of the Department of Trade and Industry
- Health and Safety Executive

Environmental matters

- Association for the Conservation of Energy
- Centre for Sustainable Energy
- Friends of the Earth

3. We set up an expert advisory panel to provide us with informed comment on the scope of our study, study methods, findings and conclusions.

The National Audit Office expert advisory panel

- Professor John Chesshire of the Science and Technology Policy Research Unit at the University of Sussex
- Michelle Childs of the Consumers Association
- Philip Daubeney of the Electricity Association
- Gareth Davies of OXERA
- Peter Vass of the Centre for Regulated Industries at the University of Bath (later David Parker of Aston Business School)
- Catherine Waddams of the Warwick Business School

We thank the members of our expert panel, together with those we consulted and staff within Ofgem and Department of Trade and Industry, for their assistance in completing this examination.

Appendix 3

Analysis of Customer Survey Data

- 1 The National Audit Office, with Ofgem, commissioned Ipsos-Capibus to telephone a sample of 4,600 electricity customers in England, Scotland and Wales in May/June 2000. The data obtained included whether respondents had switched electricity and/or gas suppliers, or signed a contract to do so, together with demographic details (socio-economic status, geographic area, income, whether living in a rural location) and details about electricity and gas bills and payment methods. Our initial analysis of the data revealed differences in the switching behaviour for different sub-groups in the sample:
 - 20 per cent of those with a household income of less than £9,500 a year had switched electricity supplier, compared with 30 per cent of those with household income above £25,000 a year;
 - 12 per cent of those in rural areas had switched electricity supplier, compared with 24 per cent overall;
 - 15 per cent of customers who pay their electricity bill by prepayment meter had switched supplier, compared with 31 per cent of those who pay by direct debit;
 - 15 per cent of customers in Scotland had switched electricity supplier compared with 25 per cent in England and Wales.
- 2 These sub-groupings are not, however, independent of each other. For instance, there are more customers in rural areas in Scotland than in England and Wales. To assess the effect of, for example, being in a rural area on a customer's likelihood of switching electricity supplier, it is necessary to control for these other factors, such as geographic location and income. We can then look at the relative importance of the different factors in predicting whether or not customers switch supplier.
- 3 We did this statistically using a technique known as logistic regression. This is a method of examining the relationship between a set of explanatory variables (such as socio-economic status, income, location, electricity payment method) and a response variable which can only take one of two values (in this case, "switched electricity supplier" or "did not switch electricity supplier"). This technique enabled us to model the probability that a respondent would have switched electricity supplier, given that respondent's characteristics, as described by the explanatory

variables. We have included technical details of the regression model at the end of this Appendix.

Factors influencing switching behaviour for electricity customers

- 4 We found that the following factors were most important in determining whether respondents switched electricity supplier or not:
 - Payment method (whether direct debit, prepayment meter or quarterly bill);
 - Electricity supply group area (whether Scotland, Northern England, Wales/Central England or Southern England)⁴²;
 - Location (whether urban, suburban or rural);
 - Size of electricity bill (as classed into one of three bands in the survey).

Once these factors had been included in the model its fit was not improved by adding household income level or socio-economic status. This suggests that the above factors between them already account for most of the differences in switching between those with different household incomes.

- 5 **Figure 20** overleaf below quantifies the effects of those factors that were statistically significant at the 95 per cent level of confidence. The numbers presented are odds ratios, which indicate the change in the odds of a respondent switching electricity supplier for each category listed, by comparison with the reference category. For example, the odds of a customer who pays by direct debit having switched supplier are about 1.5 times the odds of a quarterly bill payer switching. We see that factors that tend to increase the chances that a customer has switched supplier are paying by direct debit and living in Northern or Central England/Wales. Factors which tend to decrease the chances are: paying by pre-payment meter; living in a rural area; living in Scotland; and paying less than £3 per week for electricity.
- 6 Although the effects in Figure 20 are all statistically significant, individually they only represent effects that are substantively small to moderate. The joint effects of various combinations of these factors can be substantial however. For example, the type of customer which this model would predict to be least likely to have switched

⁴² For the analysis, we divided Great Britain into four areas: Scotland (Scottish Power and Scottish Hydro-Electric regions); Northern England (Norweb, Northern Electric and Gas and Yorkshire regions); Wales and Central England (SWALEC, Manweb, Npower, Powergen, and Eastern Energy regions); and Southern England (London Electricity, Seeboard, Southern Electric and SWEB regions).

20 Significant predictors of electricity switching

The Figure shows odds ratios, or the change in the odds of a respondent switching electricity supplier for each category listed, in comparison with the reference category. For example, customers paying for electricity by direct debit are 1.5 times as likely to have changed supplier by comparison with quarterly credit customers, the reference category in this case. It also shows that the factors tending to decrease the chances of switching are: paying by prepayment meter; living in a rural area; living in Scotland; and paying less than £3 per week for electricity.

Factor	Odds ratio
<i>Payment method (as contrasted with quarterly bill)</i>	
Direct Debit	1.54
Prepayment meter	0.55
<i>Electricity supply group (as contrasted with Southern England)</i>	
Scotland	0.66
Northern England	1.44
Wales/Central England	1.54
<i>Location (as contrasted with urban)</i>	
Rural	0.45
<i>Size of bill (as contrasted with 'Band 3: more than £7/week')</i>	
Less than £3/week	0.75

Source: NAO Analysis

21 Significant predictors of gas switching

The Figure shows odds ratios, or the change in the odds of a respondent switching gas supplier for each category listed, in comparison with the reference category. It also shows that the factors tending to decrease the chances of switching are: paying by prepayment meter and living in a rural area.

Factor	Odds ratio
<i>Payment method (as contrasted with quarterly bill)</i>	
Direct Debit	1.54
Prepayment meter	0.55
<i>Payment method (as contrasted with quarterly bill)</i>	
Direct Debit	1.39
Prepayment meter	0.61
<i>Electricity supply group (as contrasted with Southern England)</i>	
Northern England	1.41
<i>Location (as contrasted with suburban)</i>	
Rural	0.70

Source: NAO Analysis

electricity supplier would be someone living in rural Scotland, who pays by prepayment meter and whose electricity bill is less than £3 per week. There were, in fact, no respondents with these characteristics in the sample, but the predicted probability of such a customer having switched electricity supplier is about three per cent. By contrast, the type of respondent predicted to be most likely to have switched supplier would be someone living in urban central England, who pays by direct debit and whose electricity bill is more than £7 per week. There were 39 respondents to the survey with these characteristics, of whom 19 (49 per cent) had switched supplier.

Comparison with gas switchers

- We also carried out a logistic regression analysis for respondents who had switched gas supplier. The three factors which emerged as important, in predicting whether or not respondents had switched, were, in this case, payment method, electricity supply group area and location. Note that data on the size of respondents' gas bills were not available. However, adding income band to the model did not significantly improve its fit. **Figure 21** below gives odds ratios which indicate the relative sizes of the significant effects for gas switchers.
- We see that there are some differences from those for electricity switchers. There is no longer a significant effect of living in Scotland. The only significant contrast to Southern England is Northern England, for which the odds of a customer having switched gas supplier are about 1.4 times as great. The effects of payment method are similar, with those paying by direct debit being more likely to have switched, and those paying by prepayment meter less likely. Respondents in rural areas are less likely to have switched gas supplier but the effect is not as strong as we found for the electricity market.

Technical note

- Figure 22** below gives the results of the logistic regression of "whether respondent switched electricity supplier" on the variables: payment method, geographic area, location (urban, suburban, rural) and size of electricity bill. Examination of the likelihood ratio statistic (a measure of the comparative "fit" of models involving different predictor variables) showed that adding socio-economic status (graded AB, C1, C2, D or E) and income (reported in bands of "less than £9,500", "£9,500 to £17,499", "£17,500 to £24,999" and "£25,000 plus") to the model did not significantly improve its fit.
- For the model reported in **Figure 22** below, the Hosmer and Lemeshow test for goodness of fit gave $X^2=3.6$, d.f.=8, $p=.88$. In this test, responses are divided into deciles based on predicted probabilities, and predicted and actual frequencies are compared using the chi-

22 Model coefficients: electricity switching

	<i>B</i>	Standard Error	<i>p</i> for Wald statistic	Exp(<i>B</i>)	95% Confidence limit
PAYMENT METHOD (contrast with quarterly bill)			<.0005		
Direct Debit	.434	.081	<.0005	1.54	[.32,1.81]
Prepayment Meter	-.605	.117	<.0005	.55	[.43,.69]
Other (e.g. in cash)	-.270	.148	.068	.76	[.57,1.02]
AREA (contrast with Southern England)			<.0005		
Scotland	-.419	.161	.009	.66	[.48,.90]
Northern England	.365	.103	<.0005	1.44	[1.17,1.76]
Wales/Central England	.428	.088	<.0005	1.54	[1.29,1.82]
LOCATION (contrast with urban)			<.0005		
Suburban	-.010	.087	.905	.99	[.84,1.17]
Rural	-.790	.187	<.0005	.45	[.31,.66]
SIZE OF ELECTRICITY BILL (contrast with highest band 3)			.12		
Band 1 (less than £3 per week)	-.294	.145	.042	.75	[.56,.99]
Band 2 (£3 - £7 per week)	-.025	.085	.765	.98	[.83,1.15]
Don't know	-.207	.157	.187	.81	[.60,1.11]
CONSTANT	-1.354	.130	<.0005	.26	

23 Model coefficients: gas switching

	<i>B</i>	Standard Error	<i>p</i> for Wald statistic	Exp(<i>B</i>)	95% Confidence limit
PAYMENT METHOD (contrast with quarterly)			<.0005		
Direct. Debit	.330	.078	<.0005	1.39	[1.20,1.62]
Prepayment Meter	-.492	.120	<.0005	.61	[.48,.77]
Other	.101	.086	.417	1.11	[.87,1.41]
AREA (contrast with Southern England)			<.0005		
Scotland	-.150	.146	.304	.86	[.65,1.14]
Northern England	.347	.096	<.0005	1.42	[1.17,1.71]
Wales/Central England	.128	.084	.127	1.14	[.96,1.34]
LOCATION (contrast with suburban)			.026		
Urban	-.144	.085	.088	.865	[.73,1.02]
Rural	-.356	.156	.022	.701	[.52,.95]
CONSTANT	-.929	.086	<.0005	.40	

squared test. A small p-value (e.g. 0.05 or less) indicates a significant difference between predicted and actual values, i.e. a poor model fit. A larger p-value, as here, indicates that the model is a good fit.

- 11 The columns in Figure 22 give the values of the model parameters. The effect of each factor is estimated by its B -value; and the precision of this estimate is indicated by the corresponding standard error. The column headed " p for Wald statistic" indicates the result of testing whether each effect is significantly different from zero: values of 0.05 or less indicate significance at the five per cent level. The value of " $\exp(B)$ " reported in the penultimate column gives the odds ratio for each effect (a more easily interpretable figure than the raw B -value). Thus the value of 1.54 for $\exp(B)$ in the first row of the table indicates that, according to this model, the odds of a customer who pays by direct debit switching electricity supplier are 1.54 times the odds of a customer who pays by quarterly bill doing so. (Odds ratios greater than one indicate factors which tend to increase the likelihood of switching, in comparison with the reference category, and odds ratios less than one indicate factors that tend to decrease the likelihood.) The final column of the table gives a 95 per cent confidence interval for the estimated odds ratio for each factor. Thus, in the first row, the estimated odds ratio is 1.54: but there is, of course, some uncertainty associated with this estimate. A 95 per cent confidence interval (i.e. the likely range of values for the estimate, given this uncertainty) is between 1.32 and 1.81.
- 12 **Figure 23** gives the corresponding results for the model for gas switching (excluding size of bill, which was unavailable for gas). The Hosmer and Lemeshow test for goodness of fit in this case gave $\chi^2=7.0$, d.f.=8, $p=.53$.