2386

POLICY RESEARCH WORKING PAPER

Regulators and the Poor Lessons from the United Kingdom

Richard Green

The United Kingdom generally fights poverty directly—through the government's benefit system—and not through utilities. But British regulators have taken certain measures that help utility consumers (mostly, but not always, poor consumers). Other countries may be able to copy some of their techniques.

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Summary findings

Green studies a number of ways in which British regulators have helped poorer consumers.

British Telecommunications offers a lower user tariff and a very cheap service with most outgoing calls barred, to attract customers who could not afford the full service.

The gas regulator has taken action to reduce price differentials between customers who pay in cash (mostly, but not always, poor customers) and those who pay with bank transfers (mostly, but not always, better off customers).

The electricity industry faces a series of rules and codes of practice governing its dealings with domestic consumers.

Some of these schemes will help all consumers; others are aimed at, but not exclusive to, the poor.

One challenge facing utilities in some countries is that of expanding their networks to reach millions of unserved (mostly poor) customers. The United Kingdom achieved nearly universal service in geographical terms while the utilities were state-owned. The utilities were serving some customers who were already profitable and were simply required to serve others, who might not be.

It might be possible to grant a concession, or privatize a new company, on a similar basis of "bundling" social obligations with opportunities for profit, but it will be important to ensure that obligations are performed properly. U.K. regulators have been fairly successful at protecting existing customers; other countries may be able to copy some of their techniques.

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Regulators and the Poor: Lessons from the United Kingdom

Richard Green *
University of Hull and CEPR

School of Economic Studies,
University of Hull,
Hull, HU6 7RX

Tel +44 1482 465720

Fax +44 1482 466216

Email r.j.green@econ.hull.ac.uk

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Regulators and the Poor: Lessons from the UK

Richard Green

University of Hull and CEPR

I. Introduction

Regulators exist to protect consumers, but some need more protection than others. The new style of regulation in the UK has recognised this from its beginnings in the 1984 Telecommunications Act, but experience has gradually revealed the more effective ways to help poorer consumers. In this paper, I want to focus on a few issues, and discuss them through case studies.

What issues are likely to be important to poorer consumers? In many parts of the world, poorer consumers cannot physically get connected to utility services, but utility networks cover the vast majority of consumers in the UK. While physical availability is not an issue, affordability is - utility services may not be priced at a level which consumers can afford. The price level will be important for all consumers, of course, but it will be most important for those whose needs are high relative to their incomes. The regulator must ensure that the regulated companies can finance their activities, but should aim for the lowest prices consistent with this.

The structure of prices can be as important as their overall level, for many poorer consumers buy below-average quantities of utility services. With most utility tariff structures, the average cost per unit declines as consumption rises, and so those poorer consumers may be paying more per unit than wealthy ones who consume greater quantities. At the same time, however, some poorer consumers buy large amounts of gas or electricity, and some wealthy consumers buy small amounts (particularly in "second homes"). This illustrates the problems which might be caused by using something which the regulator can measure (low consumption) as a proxy for another (poverty) that cannot be measured by the

regulator. British Telecommunications, however, runs a "light user scheme" as part of its universal service obligation, which is discussed in section III.

Being able to afford utility bills is one issue; actually paying them is another. Utilities will need to offer their consumers a range of payment options, and many poor consumers will value the ability to make frequent small payments in cash - they may not have access to bank accounts, and find it easier to budget for regular, small, payments than infrequent large ones. Cash payments may be harder for the utility to process, however, and most British utilities charge more for these than for payments made by automatic bank transfer (known as direct debit in the UK). They typically charge even more when the customer has a prepayment meter, which must be "charged up" before consumption, and costs more to install. The size of these differentials should be of concern to the regulator, and section IV gives a case study of British Gas' price differentials.

The way in which utilities act in dealing with their customers is another important issue. Do they provide adequate information in a form which customers (particularly those speaking a foreign language, or the blind or deaf) can understand? How do utilities go about attracting new customers in parts of their market which have been opened to competition? What procedures are followed when customers are in debt to the utility? Section V gives a case study of the codes of practice which electricity companies have to follow in these matters.

II The Legal Framework

Each of the industry-specific regulators in the UK was established by a separate Act of Parliament, passed between 1984 (telecommunications) and 1993 (rail). These Acts established the office of regulator, required the companies in the industry to hold a licence (issued either by the regulator or a Secretary of State) and converted state-owned Public Corporations into companies which could then be privatised. The aim was to create an independent regulator who could use his or her powers in a flexible manner, but would be guided by the legal duties laid down by the Act.

¹ The main exception is gas, which is not available in many rural areas, because of the cost of expanding the network to cover these. Water, electricity and telephone services, however, are available to the overwhelming majority of consumers in the UK.

The regulator's independence should be a result of their appointment for fixed terms, with mid-term removal only for incapacity or misbehaviour (although their appointment and re-appointment is a matter for the Secretary of State). The regulators are able to appoint their own staffs, subject to a budget set by the Treasury, but their resources usually come from licence fees paid by the industry they regulate.

The regulators' duties are manifold. In the case of the Telecommunications Act 1984, for example, the regulator's primary duties were "to secure that there are provided throughout the United Kingdom ... such telecommunications services as satisfy all reasonable demands for them including, in particular, emergency services, public call box services, directory information services, maritime services and services in rural areas; and ... to secure that any person ... is able to finance the provision of those services." Subject to those primary duties, the regulator was required "to promote the interests of consumers, purchasers and other users in the U.K. (including, in particular, those who are disabled or of pensionable age) in respect of the prices charged for, and the quality and variety of, telecommunications ..." and "to maintain and promote effective competition" between telecommunications companies. Other secondary duties included the promotion of efficiency and economy, and research and development, on the part of telecommunications companies, to encourage major telecommunications users to locate within the UK, and to enable UK telecommunications companies to compete effectively outside the UK. There were waivers where "national security" or (for the secondary duties) environmental protection conflicted with these duties.

Other regulators have similar duties, although each Act has its own variants. The Electricity Act 1989, for example, raises the promotion of competition to a primary duty (ahead of the protection of consumers, which is still a secondary duty) and also requires the regulator to ensure that tariffs to consumers in designated areas of Scotland would not vary by the customer's location, effectively to ensure that urban and rural areas had the same prices. The Labour government elected in 1997 has reviewed the regulatory system, and is introducing a Utilities Bill which will make consumer protection a primary duty for all of the regulators, and replace some individual regulators with three-person commissions, which it hopes will lead to greater continuity and consistency in decision-making. In particular, the regulation of the gas industry and the electricity industry is being combined. Since January 1999, the industries have had the same regulator, although he will continue to hold two

legally separate posts until the new Bill is passed.² The policies discussed in this paper precede the merger, however, when the separate regulators sometimes followed different policies.

Any company wishing to operate in a regulated industry (even in the competitive part of one) must have a licence, unless it is small enough to qualify for a *de minimis* exemption. Some telecommunications companies, for example, are covered by class licences with a small number of standard conditions, but the major network monopolies still have individual licences. These lay down their rights and responsibilities, and can only be changed by agreement, or after a ruling by the Competition Commission (previously the Monopolies and Mergers Commission). This "Court of Appeal" is intended to protect the company's interests against arbitrary changes, while it is still easier to reflect changing conditions by changing a licence than by passing a new Act of Parliament.

Licences are used to set out general principles and procedures, but are still insufficiently detailed to govern all the day-to-day work of regulation. Much of the regulator's time³ will be spent responding to consumers' complaints about the companies' actions, or appeals against their decisions (such as the amount that must be paid for connection to the network). The regulator will generally produce a written decision, and frequently publicise this, building up a set of case-law that should reduce the number of appeals in future - companies will know what they are likely to be allowed to do in future. The company may also be required to produce codes of practice - for example, on their procedures for marketing, or dealing with customers in debt - which the regulator will have to approve. Failure to follow the code is likely to get the company into trouble, should a customer subsequently complain to the regulator.

Regulators have gradually learned the value of openness, and now issue a series of consultation papers before changing a company's licence. The first paper in the series may only set out the issues to be considered, but later papers are likely to indicate the regulator's preferred solutions, and invite reactions to them, before they are finalised. These papers provide valuable evidence about the way in which the regulators' thinking has developed, and

² The former Office of Gas Supply (Ofgas) and Office of Electricity Regulation (Offer) have already been combined into Ofgem – the Office of Gas and Electricity Markets.

³ Or to be more accurate, that of the regulator's staff, since individual consumers' cases rarely reach the top of the organisation.

of the way in which they might treat issues which do not yet merit action, but might do so in future.

III. Universal Service in Telecommunications

The telecommunications regulator, OFTEL, has defined universal service as "affordable access to basic telecommunication services for all those reasonably requesting it regardless of where they live" (Oftel, 1995, para 4.3). This has demand side and supply side aspects. Some customers may not be able to afford the standard services provided by BT and Kingston Communications,4 and universal service suggests that they should be offered a cheaper alternative so that they can at least be connected to the network. The supply side aspect is implicit in the reference to the customer's location. Some sparsely populated areas might be uneconomic for the company to serve at any price - since demand decreases as prices increase, and average costs rise as demand falls, there may be no "break-even" price. In other areas, the demand curve might intersect the average cost curve at high prices, but BT's licence requires it to charge the same prices throughout the UK. This means that the company would make losses in serving these areas. Universal service implies that these losses should not be a reason for refusing to provide these customers with a connection. (The requirement for geographical averaging is relaxed when a new line is required, as BT is allowed to levy an additional connection charge where more than 100 person hours of work is needed).

As well as uneconomic areas, there are also uneconomic customers, typically those who make (and receive) few calls or have heavy customer service costs (perhaps because they are bad at paying their bills on time). The revenues from these customers (which should include the payments made by other people for calls made to these customers) are less than their costs, and a company might be reluctant to serve them - always assuming that it could identify them in time to deny them service.

Note that universal service does not imply selling the full range of telecommunications at a discounted price. A more recent objective for the regulator (which makes reference to the government's concern over social exclusion) is "to ensure that those

⁴ BT is the public telecommunications operator for almost all of the UK, but Kingston Communications provides telephone services in the area of Kingston upon Hull. For brevity, I will discuss BT alone.

telecommunications services which are used by the majority and which are essential to full social and economic inclusion are made available to everybody upon reasonable request in an appropriate fashion and at an affordable price" (Oftel, 1999, para 2.10). Oftel has defined the basic package as "a connection to the fixed network able to support voice telephony and low speed data and fax transmission" (para 2.30). "All consumers should also be able to access [emergency] services free, receive itemised bills, be able to choose selective call barring, and have access to operator assistance and directory information; ... All consumers should be given the option of an outgoing calls barred (OCB) service, together with a repayment plan, as an alternative to disconnection for non-payment" (*ibid*). To help with the demand side aspect, customers must also be given "the option of a more restricted service package at low cost".

The universal service obligation also includes "reasonable geographic access to public call boxes across the UK at affordable prices", since these provide access to the telephone for some people who do not have a phone at home. Again, many phone boxes are profitable, but some are not. BT cannot unilaterally remove uneconomic boxes, and has agreed to install a number of new boxes, expected to be uneconomic, in places where there is a social need for them. Finally, Oftel also considers special services for disabled people as part of the universal service obligation, in particular the touchtype service which allows deaf people to send messages via a keyboard and a "translation" service (when the other party does not have a keyboard). Since my main focus is poverty, I will not discuss this aspect of universal service in this paper.

In the UK, 93% of households have a home phone, and another 1% have access to a mobile phone (but no fixed line). This leaves 1.35 million households without a phone, and "two-thirds [of those] indicate, in market research surveys, that they would like a home phone but are deterred from having one, mainly because of the cost" (Oftel, 1997a, para 3.3). BT started to address this problem in 1983, when it offered the first in a series of residential low user schemes. These were designed to reduce the line rental for customers who made few calls, although lines in second homes (for example) were ineligible.

By 1997, however, Oftel were concerned that the most important barrier for the remaining "unphoned" households was not only the level of BT's charges, but also the fear of

getting into debt from making too many calls.⁵ From 1998, BT has run an alternative scheme, the Residential Limited Service Scheme. This was a cheap package which did not allow people to make "charged" calls, and meant that they could not get into debt. They could only phone the emergency services, freephone numbers, and people who had previously arranged to pay for the call.⁶ Oftel is monitoring the scheme to check that it is attracting new customers to get a phone.

In 1997, Oftel also reported that it was pressing BT to provide a scheme allowing people to pay for calls in advance, giving them complete control over their bills, (1997b, 3.25). The industry is evolving rapidly, however, and a number of other companies are now selling pre-paid charge cards which provide a similar service. This shows how the industry is evolving - what was once seen as part of the universal service obligation is now provided voluntarily as part of the competitive market.

The rest of the universal service obligation may involve a cost to the provider, however. When BT was a monopoly, it could simply absorb this cost - it was included in the costs which the regulator took into account when setting the company's price control, in any case. The telecommunications industry is becoming much more competitive, however, and this approach could cause problems in a competitive market. If one company has obligations which another does not share, the second company will have an unfair advantage which could distort competition between them.

There are two approaches to this problem (apart from the inadequate one of simply ignoring it). The first is to select one company to provide the service, and to set up a fund which will meet the net costs of doing so. All the companies in the industry would contribute to this fund in proportion to their revenues. While the incumbent would normally be chosen to provide the service, it might be possible to "auction" uneconomic areas or customers, and this approach is being considered by the Federal Communications Commission in the United States (Kelly and Steinberg, forthcoming).

A more competitive alternative is known as "pay or play", and could be applied to the cost of offering low-cost basic services - every company would choose whether or not to offer

⁵ Many of the poorer people in the UK are fearful of getting into debt, a "cultural" factor which may date back to the time when debtors could be sent to prison, and paupers to the workhouse (Dickens, 1837, 1839).

⁶ This is a service which BT markets as "Call Me Free" - after dialling a special code (including a security number) calls to the buyer's phone are charged to their own bill. The buyers can pass on the code to people who they wish to be able to call them free of charge, such as their children or elderly relatives.

such services. If it did not offer the services, it would simply make payments into the fund instead. If it chose to offer a low-cost tariff, the fund would make a payment (which would probably be based on BT's costs) for each customer it served. This would allow for some innovation in the services on offer, and companies with lower costs than BT would be able to earn a profit from these apparently "uneconomic" customers. Note that this would not apply to services such as free emergency calls, which have to be provided by all operators in any case.

Oftel has considered both approaches to funding universal service in the UK, but has not yet implemented either. This is because it believes that the *net* cost of universal service is very small, and too small to justify the cost of setting up and running a fund. BT certainly incurs some costs in providing universal services, but it also gains some benefits, and Oftel believes that these exceed the costs.

In 1997, Oftel estimated that providing universal service cost BT between £65 million and £85 million in 1995/96, in terms of the difference between the revenue earned by, and the avoidable costs of, uneconomic services. Oftel also believed that BT's operating costs were 5% higher than the best-performing US local exchange carriers, and reducing BT's avoidable costs by 5% would cut £20 million a year from the cost of universal service. The table gives a break-down of these figures:

		Actual cost (£m)	Adjusted cost (£m)
Uneconomic Areas	<0.5% of lines	10-15	5-10
Uneconomic Customers	6% - 7% of lines	45-55	30-40
Uneconomic Call Boxes	20% of call boxes	10-15	10-15
Total		65-85	45-65

source: Oftel (1997a), Tables 6.1 and 6.2

Oftel also estimated some benefits from being the universal service provider. By supplying a currently unprofitable customer, BT would increase the chance that it would be chosen by that customer in the future, when they became profitable (the life cycle effect). Only some customers would become profitable in the future, of course, and their future choice of

supplier might not depend on their current supplier, which meant that this benefit was relatively low (at most £10 million a year, and possibly only £1 million).

As the national company, when people move area, almost all will be aware of BT, but may not be aware of other companies operating in their new area. BT will therefore win some customers who would have switched to another company if they had known about it (the ubiquity effect). BT estimated that this effect was worth £3 million a year, but Oftel's 1997 estimate was of between £40 million and £80 million a year.

BT's corporate reputation is probably improved by its position as universal service provider (the brand enhancement effect). This could be viewed as raising its market share, but the high market share is already taken into account when the company's price control is calculated, and there would be a risk of double-counting if it was also considered as a benefit of universal service (Oftel, 1997a, 6.31). Oftel's preferred approach was to view this effect as a kind of advertising. BT's retail division spent over £250 million on marketing in 1994/95, and if the brand enhancement effect was worth 20% of this (an arbitrary figure, admittedly), it would give BT £50 million a year (6.32). Public call boxes could also be seen as advertisements, perhaps worth £11 million a year (6.35).

Oftel's calculations therefore suggested that BT's benefits from being the universal service provider exceeded its costs, and that no special funding would be required. The regulator's detailed numbers might be open to question, but the general conclusion seems appropriate, when only 7% of customers are uneconomic, and BT can spread the benefits across roughly 90% of the UK market. If the universal service provider had a lower market share, or if more lines were uneconomic, then there might be more need to spread the costs of universal service across the industry. Oftel is now (in the second half of 1999) reviewing the position.

IV. Price differentials in the gas industry

The previous section referred to the fear of getting into debt as one of the reasons why some people did not have a home phone, and suggested that "pay as you go" schemes could be a

⁷ Oftel has since suggested that most of this benefit comes from having a large national network, rather than supplying the small number of uneconomic areas, and so should not be offset against the cost of providing universal service in those areas (Oftel, 1999, para 4.8).

response to this. In the energy industries, prepayment meters are an increasingly common response to the problem (or potential problem) of debt. While a traditional meter accepted coins in advance, and then released the amount of gas or electricity which had been paid for, modern meters use magnetic cards, which must be charged up at a payment point (such as a shop or post office with appropriate equipment). This may be less convenient for the customer than a coin-operated meter, but means that the company does not have to collect money from the meter itself, and avoids the risk of theft from the meter.

Although card-operated meters may be cheaper to run than coin-operated meters, they are nevertheless more complicated than normal meters (which only record consumption), and the utilities have argued that it is expensive to run a large network of payment points, each of which collects many small cash payments. Most companies' pre-payment tariffs are therefore significantly above their other tariffs. The standard tariff is based on paying a bill every three months for the consumption up to that point (or an estimate of it). The cheapest way to pay is through a direct debit scheme, which makes automatic bank transfers from the customer's account every month, equal to one-twelfth of the customer's estimated annual bill.

Many of the people who use pre-payment meters are aware that they are more expensive than other ways of paying (Doble, 1998). Despite this, the majority of users are happy to keep their meter, seeing it as a convenient way to budget for their gas and avoid getting into debt. (Some meters are installed to recover debts, and these customers would not be able to change their payment method until the debt is repaid, but 85% of the other customers in Doble's sample said they were happy to remain on prepayment meters, even though they had been told how much they could save through direct debit).

Even if pre-payment meter customers seem willing to pay more for the features they see as attractive, this does not mean that they *should* pay more. On average, pre-payment customers have lower incomes than other gas consumers, although there many poor customers do not have pre-payment meters, and some pre-payment customers have high incomes. On average, however, poor customers will be subsidising the rich if pre-payment customers are paying more than their fair share of the gas industry's costs, and this seems undesirable.

In 1994, BG charged prepayment customers about 4% more than other customers, and gave no discount for paying by direct debit (Waddams Price and Bennett, 1999). From that

year onward, however, BG started to "rebalance" its tariffs, in response to the prospect of competition in the domestic market (announced in December 1993). The company introduced a discount for paying by direct debit, and soon faced claims that this discriminated against customers who helped the company by paying their bills promptly by cash or cheque, and were (on average) less well-off than direct debit customers. The company responded by giving a (smaller) discount to those who paid credit bills within ten days.

By November 1997, British Gas charged pre-payment customers 11% more than standard credit customers, and direct debit customers 6½% less. Waddams Price and Bennett argue that this was a response to the threat of competition, implying that BG thought that the 1997 tariffs were more cost-reflective than the earlier ones. New entrants have typically set tariffs with a much greater differential between direct debit and prepayment prices, and some did little to attract pre-payment customers in the first months of competition, implying that they viewed direct debit customers as more profitable at the prevailing prices.

To ensure that BG did not take this rebalancing too far as the market was opened to competition (which happened in stages between April 1996 and 1998), the company's price cap for 1997-2000 included a separate cap for each of its main tariffs - direct debit, credit (with and without prompt payment) and pre-payment. BG was allowed to ask for the caps to be rebalanced (within the overall total of allowed revenue), however, and did so in July 1997. Direct debit prices would have fallen by £6 a year (at the average consumption level), and prompt payment prices by £2. Standard credit prices (without the discount for prompt payment) would have risen by £2. BG proposed that the cap on pre-payment prices should rise by £50 a year, or roughly one-sixth.

In September 1997, BG announced that it would cut its direct debit tariff by 9%, and the prompt payment tariff by 8%. The standard credit tariff would fall by only 1%, and prepayment tariffs were not mentioned. The Gas Consumers Council (an independent body, established by law, which represents consumers) asked Ofgas to consider whether these reductions constituted predatory pricing, and whether the failure to reduce prepayment prices

⁸ This is for the average consumption level (across all tariff types) of 21 MWh/year. In practice, the direct debit saving fell very slightly as consumption increases (at twice the average consumption, it was only 6.1%),. Prepayment meters have a lower minimum charge, coupled with a higher unit rate for the first 4.6 MWh per year. Although the tariff is 11% higher for all consumption levels above 5 MWh per year, it is actually cheaper than the standard tariff for consumption levels below 3 MWh per year (one-seventh of the average for all consumers).

constituted undue discrimination against those consumers (which was against the terms of BG's licence).

Ofgas considered BG's attributable costs and margins, and found that none of the tariffs were predatory (although pointing out that there were other dimensions of anticompetitive behaviour which would have to be monitored). The direct debit tariff had an annual surplus of £7 over attributable costs (the majority of costs) and the other tariffs had greater surpluses (Ofgas, 1999). This was not unrelated to Ofgas' decision on whether the tariffs were discriminatory - BG was required to reduce all of its other tariffs relative to the direct debit tariff. The prepayment tariff needed the largest reductions, and BG's licence was changed so that pre-payment customers faced the same price cap as standard credit customers (excluding the prompt payment discount). Ofgas argued that although the meters were more expensive, BG gained from being paid in advance, both in terms of cash flow and in reduced credit risk. Aligning the two price controls also ensured that BG did not have an artificial incentive to install prepayment meters when customers were in debt. In a separate decision, Ofgas reduced the charges which suppliers had to pay for installing a prepayment meter and for using the national network of payment points and card chargers (the Quantum settlement system). Keeping these charges down will help keep prices down for prepayment customers.

While Ofgas presently believes that the true costs of pre-payment customers in gas are no higher than those of credit customers, most electricity companies still charge more. Furthermore, customers who gain the discount for prompt payment of a credit bill are still paying for their gas up to three months late, and this might seem unfair when compared to the prepayment customers who pay in advance. In its consultation paper on utility regulation, the government suggested that direct action should be taken to reduce prepayment prices further. One way to do this without distorting competition would be through the network tariffs paid by every customer's supply company, by setting a lower tariff for prepayment customers than for other customers. Suppliers could offset the discount against the higher costs which they incur in dealing with prepayment customers, and reduce the differential in retail prices (DTI, 1998a, 5.38).

The electricity regulator's response to this consultation paper opposed the idea of a cross-subsidy (Offer, 1998a). Estimates of the extra costs involved differed widely, so that it would not be easy to set the subsidy at the right level. The regulator suggested that suppliers

might not pass on the subsidy unless regulation forced them to do so (and this kind of regulation could well distort competition). Both the electricity regulator and the gas regulator pointed out that pre-payment prices were falling, and promised to monitor this to encourage companies to pass on cost reductions. In its follow-up paper, the government announced that it would not introduce such a scheme at present, but would consider doing so if "market developments do not allow disadvantaged consumers to receive a fair share of the benefits of liberalisation" (DTI, 1998b, conclusion 5.1).

The government had said that legislation would be needed to make companies disriminate in their prices in this way - many of the regulators have been extremely reluctant to collect revenue for purposes which they regard as akin to taxation. The electricity regulator has included an energy efficiency levy of £1 per customer per year in price controls, as did the first gas regulator, but his successor refused to continue this. Her point was that general issues of taxation (and, presumably, subsidies) are a matter for Parliament, not for an unelected regulator.

The most important point about a subsidy for prepayment meter users, however, is that many pre-payment customers are not poor, and many poor customers do not have pre-payment meters. This means that if the pre-payment tariff is below the true costs imposed, there will be a cross-subsidy which will, in some cases, be from poorer to richer customers. In a country like the UK, which already runs a complex system of targeted benefits, changes to the benefit system are likely to be a better way of helping poorer consumers than a badly targeted cross-subsidy within energy prices.

V Codes of Practice in the Electricity Industry

Most of the time, utilities do not need to have much contact with their customers, and the dealings they do have go smoothly. When things go wrong, however, a lot of distress can be caused, and much of this may be unnecessary. Licence conditions and codes of practice have been agreed in the UK, which set out the standards and procedures which the utilities should follow. The codes are designed to protect all consumers, but poorer consumers, who are

⁹ If competition is not strong enough to make companies keep prices down to the level of their costs net of a subsidy, however, would it be strong enough to keep prices down to the level of the costs without the subsidy? The presence of a subsidy does not seem to affect the case for continued regulation where competition is weak.

more likely to have debt problems, and may be less skilled at dealing with an (occasionally bureaucratic) organisation, may gain more than most from the existence of the codes - as long as they are followed.

The present set of licence conditions were agreed in preparation for full competition in the electricity market - the first domestic customers were allowed to choose their electricity supplier in September 1998. Any company wishing to supply "designated customers" (domestic customers, and others with an annual consumption of less than 12 MWh) has a similar set of obligations. The licence quoted is that of Independent Energy (Offer, 1998b), but other "second tier supply licences" should be practically identical.

The first condition (at least in terms of a company's dealings with a customer) concerns marketing. Companies are required to "set up appropriate procedures for the selection of [marketing] staff", "take all reasonable steps to ensure that [their staff are] trained so as ... any relevant advice given... is not misleading" and ensure that the company's representatives identify the company properly (Offer, 1998b, Condition 51). Furthermore, unsolicited contacts made on behalf of the company must be at a reasonable time, and the condition also applies to the company's agents and sub-contractors. Once customers have signed a contract, the company must contact them¹⁰ to ensure that they are aware that they have signed a contract (some customers were told they were signing a "request for further information"), that they are content to have done so, and that they are content with the marketing activities of the company. If the customer is not content, the contract must be terminated, and a customer who is adversely affected by a breach of the condition must be compensated.

Another licence condition requires the company to offer a contract to all designated customers, and supply all customers who accept the contract terms, unless "it is not reasonable in all the circumstances" (Condition 29). This exception presumably allows the company to disconnect customers who fail to pay their bills. However, the company is required to agree a code of practice on payment of bills with the regulator, including procedures which the company would have to follow before it disconnected any customers (condition 30). The code should include procedures by which the company can distinguish customers who are in difficulty paying their bills from others in default, and help those who are in difficulty. This should include making arrangements for the arrears to be paid in

installments which the customer can afford (and monitoring compliance with these),¹¹ or offering a prepayment meter (also calibrated to recover the debt at an affordable rate). The companies should also offer advice on using electricity efficiently, in the hope that this might reduce any excessive consumption which is worsening the consumers' situation. Finally, the code must "have particular regard.. to the interests of .. customers who are of pensionable age or disabled or chronically sick and to the purpose of avoiding, so far as is practicable, the disconnection of .. such customers during the winter months" (Condition 30.3).

Another condition (31) sets out the services which must be provided for elderly, disabled or sick customers. If required, the company must arrange to send the customer's bill (or a copy) to a third party - this would be useful for a customer who might have difficulty in remembering to pay a bill! The company can only supply designated customers according to the terms of standard contracts (condition 42) and must take all reasonable steps to bring those terms to the customer's attention (condition 44). The company is required to offer a range of payment methods, including prepayment meters, cash and cheque, and a range of payment intervals including the industry's standard methods of predetermined monthly payments, and quarterly bills paid in arrears (condition 43). The company may not require a security deposit if the customer is supplied through a prepayment meter, or "where it is otherwise unreasonable in all the circumstances to do so" (condition 45). If a deposit is held, it should normally be 1½ times the customer's expected quarterly bill, and interest must be paid on it, at a rate determined by the regulator. Contracts must be terminable on 28 days' notice (or 2 days' notice, when the customer is moving (in which case the new occupier will be supplied by the company)), and a termination fee is only payable if the contract had a fixed term period (condition 46).

When things do go wrong, despite the licence conditions and codes, the regulator is able to receive complaints from consumers, and can require companies to pay compensation. Many complaints are resolved by the regulator's staff, working in regional offices (in general, one for each Regional Electricity Company), but some are taken to the Electricity Consumers' Consultative Committee for the region. Committee members are volunteers, appointed by the regulator and supported by his staff, with a part-time chairperson. The

¹⁰ The person making the contact must not themselves be employed in gaining new customers for the company.

¹¹ Organisations such as the Citizens' Advice Bureaux (a voluntary, but state-supported, network of drop-in advice centres) are experienced in negotiating repayment plans with the utilities on behalf of indebted customers.

regulator will include the committees in any consultation exercise, in which they try to represent the viewpoint of ordinary consumers.

The regulator's annual reports give (anonymised) examples of the complaints which have to be resolved. Disputed bills are a major source of complaints. Customers' meters should be read every three months, but if the meter is inside a house which is unoccupied during the day, there may be long periods with no meter reading, during which bills are estimated. If the estimates are incorrect (particularly if the company has made a mistake in reading the meter), the customer may have paid too little for electricity, and the company may issue an abnormally large bill to recover the difference. The regulator has sometimes intervened to reduce the amount of catch-up, particularly if the under-payments were the company's fault. Another example concerned a customer, with a coin-operated prepayment meter, who suffered a burglary. Money was stolen from the meter, which the company treated as a debt to be repaid by the customer, until the regulator intervened (Offer, 1993, p. 66). Offer can also intervene if a company asks a customer to give a security deposit when this would be unreasonable, or asks for too high a deposit. According to the regulator's survey of customers who had made complaints in 1998, 80% were satisfied with the outcome of their complaint, and 89% found the service provided by Offer useful - 94% said they would recommend the service to others (Offer, 1999, p.79).

VI Conclusions

The regulators' most visible actions typically concern the average level of prices, and keeping average prices down is an important help to poorer customers. These case studies have been chosen to show some of the other things that British regulators have done that help poorer customers. Note that I have written "that help" rather than "to help", for the schemes I have described are available to all, and some poor consumers will not take advantage of them. It would be extremely difficult to target help more directly without means-testing consumers, and comparing their incomes to their needs. Means tests are used in a few schemes - some poorer consumers have been given grants towards home insulation or more energy-efficient appliances, funded by the levy for energy efficiency discussed in section V, but these are the exception. In general, the UK has a reasonably effective system of targeted welfare benefits.

If this system did not exist, there might be a case for using the utilities as the best available instrument for helping the poor, but only if there is little chance of setting up a more effective direct policy.

The other main challenge facing utilities in some countries is that of expanding their networks to reach millions of unserved, mostly poor, consumers. The UK achieved a nearly universal service in geographical terms while the utilities were still in state ownership. If cross-subsidies were needed to expand the networks, they were never explicit. The utility was serving some customers who were already profitable, and was simply required to serve others, who might not be. It might be possible to grant a concession, or privatise a new company, on a similar basis of "bundling" social obligations with opportunities for profit, but it will be important to ensure that the obligations are performed properly. Unfortunately, the UK's experience offers few other lessons for the task of network expansion. UK regulators have been fairly successful at protecting existing customers, however, and I hope other countries may be able to copy some of the techniques.

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