

Extending the Supply Price Control/Preparing for effective domestic supply competition

A consultation paper by Ofreg

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Introduction

In the summer of 2002 Ofreg and NIE agreed a price control for NIE's Transmission and Distribution (T&D) Business which will cover the period April 2002 to March 2007. Towards the end of 2002 the European Union decided that full market opening in electricity should apply from 1 July 2007.

The price control which covers NIE's Supply Business runs from April 2000 to March 2005. In the light of all the other developments affecting the market structure I have encouraged NIE to come forward with a proposal to extend the Supply price control until March 2007. This NIE has now done.

Ofreg has in fact three options and it must decide which is in the best interest of customers.

The first is to have no Supply price control once the current control comes to an end in 2005. There are no Supply price controls in Great Britain on the grounds that such controls are unnecessary in a fully competitive market. For reasons set out later in this paper I do not think there is a compelling case for lifting Supply price controls in Northern Ireland as early as 2005.

The second option is to go for a traditional price control based on a bottom up examination of the Supply Business's costs and the assumed scope for efficiency gains in the Supply business. This could be seen as the traditional price control approach.

The third option is to build on the approach which Ofreg and NIE adopted in the revised price control for the period 2000/2005

The purpose of this consultation paper is to set out NIE's proposal, consider the issues it raises at this stage of the industry's development, and finally to seek views on whether it is in the best interest of customers to extend the Supply Price control on the same principles as the current control. If so it will be necessary to also consider if the measures proposed by NIE are those which should be adopted, or if some variation on NIE's proposal would achieve a better outcome for customers.

The Background

At privatisation NIE's Supply Business - known as the Public Electricity Supplier and referred to henceforth in this paper as "PES" - had a de facto monopoly of supply to all customers in Northern Ireland. Supply is the activity that takes place at and beyond the customer's meter. It includes meter reading, billing and purchasing electricity from a generator. This activity accounts for about 5-7% of a customer's

total electricity bill. It is a contestable activity. The privatisation arrangements recognised this and provided that any customer could switch from PES to another supplier. In practice this provision was of negligible value to customers because suppliers had to buy their electricity from NIE's Power Procurement Business (PPB) on the same terms as PES. Second Tier Suppliers (STSs) were thus as completely locked into the long term generator contracts as PES - or to put it another way - the long term generator contracts effectively locked STSs out of the Supply market and therefore prevented genuine supply competition from developing.

The change which the European Union brought with its Internal Market in Electricity (IME) Directive was thus not the introduction of supply competition but the introduction of generation competition. Thirty five per cent of all the electricity consumed in Northern Ireland can now be sourced in a competitive market and it is this alone which makes supply competition a possibility. Proposals for further market opening - while they may be expressed in terms of supply competition - are in reality about giving customers through their suppliers access to a competitive market in generation. With tight supply margins it is from generation competition that the most of the competitive pressure on prices will come.

The extension of generation competition from 35% to 100% of the market needs to be achieved as quickly as possible and this will be discussed in a separate consultation paper entitled "Competition and Customer Empowerment".

NIE's Proposal

The present PES price control was changed in structure in 2000 by agreement between Ofreg and NIE from the price control established by the Monopolies and Mergers Commission (MMC) in 1997. That price control was constructed around a conventional price cut (a "Po" cut in the jargon of utility regulation) followed by an X factor of 2 (that is a 2% real reduction in allowed revenue) each year for the next four years. The MMC allowed PES a margin of 0.5% on gross turnover. The subsequent changes have not altered these MMC price control fundamentals - rather they have built on them.

In 2000 NIE and Ofreg agreed that instead of re-running a conventional approach to the 2002 PES price control we would develop an alternative under which NIE would deliver to customers a range of benefits which would be greater in value than the benefits of a Po price cut but which would cost NIE less to deliver. This approach therefore provided both shareholders and customers with a better outcome than the conventional approach and gave management a longer term horizon to plan, make and retain efficiency gains.

The main elements in the proposal were:

- a new prepayment system for 100,000 prepayment customers. The system - called Keypad - saves these prepayment customers £18 per annum. As a

result prepayment customers now pay the same for their electricity as quarterly customers and the position has been ended by which prepayment customers (presumably those who were least well off) had to pay most for their electricity;

- energy efficiency measures by which NIE would deliver to customers £10m lifetime savings from avoided energy consumption.
- 25 gigawatt hours of renewable electricity sales through the construction of 7.5 megawatts of additional renewable generating capacity;
- a reduction in allowed revenue of 3% real per annum from 2002.

Two years before the end of the PES price control NIE is performing well against all these targets. Ofreg agreed last year the renewable obligation could be largely transferred to PES's sister company Energia. This stimulus to renewable electricity has worked exceptionally well and Energia's commitment to the development of renewables will be four times the size of the PES obligation by the middle of this year. The commitment to Keypad has been honoured in full. On the commitment to deliver energy efficiency savings good progress has been made with over £4m already delivered. The reduction in allowed revenue is delivered automatically by the price control formula and its working out in declining allowed revenue.

NIE's proposal for an extension to 2007 - that is for a further two years - has associated with it the following deliverables:

- a further 75,000 Keypad meters including 15,000 for Economy 7 users;
- a further £4m of lifetime energy savings through energy efficiency measures;
 - the continued development of the eco-energy tariff with an emphasis on delivering eco-energy to low income customers; and
 - a 3% real reduction in revenue in each of the further two years. (This would contribute to a total reduction in allowed revenue in real terms in the period 2002/2007 of 14%).

It is not possible to place a precise value on these proposals. The movement of customers to Keypad meters will reduce the danger of customers falling into debt which produces both revenue losses for the company and stress for customers. However new Keypad customers would not for the most part be avoiding the prepayment surcharge since most of them are not currently on prepayment meters. NIE has not a long enough time series to calculate if there are any customer savings from Keypad with any degree of accuracy. Though there is anecdotal evidence that Keypad does enable customers to reduce their electricity consumption - though possibly this benefit will degrade over time as the novelty of Keypad wears off. But if we assume a 2% efficiency gain the 75,000 customers who move to Keypad would save about £0.5 m per annum though some of this would then have to be collected

from other customers - at least in the short run - to meet the fixed costs of the T&D system and the generator contracts.

The 3% real price reduction per annum would reduce the total bill by about £750,000 per annum. Without going through the exercise it is not possible to say categorically whether a conventional price control would give a 3% real annual reduction. The £4m lifetime energy savings is real and verifiable. NIE make the further point that the more fully geared up they are to develop energy efficiency the more likely they are to outperform on the targets set for them under the Energy Efficiency Levy. On the basis of their 20% to date out-performance they would expect to generate other energy efficiency gains which would be worth a further £4m of lifetime savings over the two year period of the extension.

The proposal is therefore worth somewhere in the region of $\pounds 6$ - 10m during the two years of the possible extension. To beat this a price reduction of $\pounds 3$ -5m in 2005 would be required. This would require a reduction of between 12 and 20% in PES's revenue.

The wider considerations

The case for or against the NIE proposal has to be considered in the context of a market which is moving to being fully competitive. Will the proposal assist us to move towards the sort of well designed market which works for customers or will it make it more difficult to create that sort of market?

At present it is not possible to be definitive about the extent to which customers will benefit from a more competitive market. However it is reasonable to suppose that the market will have fewer suppliers than the market in Great Britain. In Great Britain supply competition is not yet eroding supply margins which Ofgem has described as "high in historical terms". Consequently the supply margin on domestic customers in Great Britain is at present substantially greater than in Northern Ireland. Ofgem's 2001 Annual Report suggests the cost of supply plus margin is about £80. Some of this represent costs common to all supply businesses, some represents costs which are incurred in acquiring customers in a competitive market and some goes to shareholders as profit.

There is no a priori reason to expect that Northern Ireland will be able to develop a more keenly competitive market than Great Britain. This being so it will be necessary to maintain an effective Supply Price control for the foreseeable future in order to protect domestic customers. This will serve as a cap in the market. It would not therefore be logical to set it on quite such a cost minimisation basis as is the case in a classic monopoly situation. The price control in a fully competitive supply market will serve as a cap below which the PES may have to sell if it is to maintain a significant market share. It will therefore be the customer's last line of defence rather than an attempt to pre-judge the outcomes which the market would produce.

As it is not at present possible to design the price control which should be in place in a more fully competitive market it would be prudent to allow the present approach to price controls to continue until the shape of the competitive market becomes clearer. There are however a number of parameters regarding the future market which need to be set out now.

Low income customers and a fully competitive market

A fully competitive market which worsened the position of low income households relative to more affluent households would be socially regressive. While the competitive market in Great Britain has led to many lower income households switching suppliers there is some evidence that suggests that low income households have fared less well than more affluent households and it must be presumed that low income households are most vulnerable to the mis-selling of alternative suppliers which has become of major concern recently to both Ofgem and Energywatch. It is therefore desirable that in Northern Ireland we should have a full roll out of Keypad meters to all customers who are likely to benefit from them. NIE's proposal for having 175,000 Keypads installed before full domestic competition takes effect could therefore be seen as a sensible precaution to protect all households in Northern Ireland who could fall into the "fuel poor" category ie needing to spend more than 10% of their income on heat and electricity. There may however be some room for debate as to whether the figure of 175,000 is the right number. It does however roughly approximate to the number of households who are believed at present to be at risk of fuel poverty though it may be that additional measures would need to be taken to ensure that Keypad does go primarily to households who genuinely need this effective aid to good budgeting.

Once Keypad has been extended to cover all vulnerable households who want it, low income households would be in as good a position as all other domestic customer to enjoy whatever benefits the competitive market has to offer. With a Keypad meter a low income customer would be as attractive to a supplier as a more affluent customer - or perhaps even more so. This does however pre-suppose the carving out of NIE of a "billing and metering" common provider whose services would be available to all suppliers.

Profiling versus half hourly metering

It is generally assumed that full supply competition for domestic customers should be based on profiling. This proposition needs to be tested. Full and effective supply competition in Northern Ireland will be almost a decade after Great Britain and many changes will have occurred in that period. There is no reason why Northern Ireland should necessarily and unquestioningly follow the route taken by Great Britain in the 1990s. It would indeed be surprising if there were no lessons to be learned from the GB exerience enabling us and others who come to this later to make improvements. If customers are to fully benefit from competition they need to know how much their electricity is costing them in any period so they can trade the convenience of using it when they want against the cost advantage of using it when demand is low and consequently the cost of producing the electricity is low. It is therefore to everyone's benefit that this information should be available to customers. It enables individual customers to save money and it improves the utilisation of both the network and the more efficient power stations. As such it is also good for the environment and has a beneficial effect on system costs. Profiling does not provide customers with this vital information and good information is after all an essential requirement if a market is to work efficiently.

Although the extension of generation competition to all industrial and commercial customers in 2004 will be based on half hourly metering and the presumption that customers or suppliers will install half hourly meters if it is the economically rational option - that is that the savings will justify the investment in metering - the historical objection to half hourly metering for domestic customers has been cost and the presumption that the costs would not outweigh the benefits. But costs for half hourly metering along with the associated communications are continuing to fall. Moreover it may be that for domestic customers, longer intervals than half an hour would be sufficient to achieve electricity pricing that is broadly cost reflective but less costly to calculate.

At present, while we know that a metering solution is better than profiling in principle, we do not know whether the benefit would outweigh the higher cost even though the likelihood of less intense competition in our market makes effective customer empowerment even more of a priority than it has been afforded in Great Britain.

It is therefore highly desirable that NIE carries out on a significant scale an experiment with a multi-period metering system for domestic customers so that we can find out if metering and the additional information which it would place at customers' disposal would result in a better utilisation of generation and the network.

Keypad has a potentially important role to play in this investigation - and possibly the critically important role. Keypad meters can be programmed to charge different amounts for electricity at different times of the day and therefore to offer customers information which would enable them to move some of their electricity consumption to periods when demand is low and consequently the price of electricity is low. As with customers on half hourly meters, in moving their own load to low cost periods Keypad customers would not only save themselves money but they also reduce total system costs and improve the load factor of the more efficient power stations and thereby reduce emissions. Moreover Keypad has at present the distinct advantage over half hourly meters that they are much lower cost.

NIE have proposed that as part of the further role out of Key pad they should conduct an experiment with some Keypad customers to see if time of day pricing does offer worthwhile benefits to customers. This experiment should begin shortly and the experiment will be on the scale necessary to produce statistically significant results for both economy 7 and ordinary domestic customers.

The time required to carry out a properly structured experiment of this nature would be a further factor militating in favour of extending the PES price control.

Empowering Customers and Supply Competition

Supply competition is promoted widely because it is believed that it is "good for customers". This is because a number of suppliers will compete for their custom and this will bring down prices and extend the range of products on offer. In other words competition is good for customers because it puts them in the driving seat - that is it "empowers" them.

This would undoubtedly be the case if competition does indeed confer these benefits on customers. In practice we have no reason to believe that supply competition will deliver much in the way of price reductions. Suppliers will be buying from the same power station as before and the generation market should, itself, be competitive. Supply margins in Northern Ireland are low and are unlikely to have much scope to come down because of competition. Consequently the market is unlikely to attract many new entrants and is in any case too small to support many.

PES has a good record of empowering customers in a regulated market. In addition to the mandatory standards and protection which customers enjoy, PES has empowered customers to reduce their electricity consumption by taking energy efficiency measures. It has also additionally empowered them to be good environmental stewards by taking renewable energy. The introduction of Keypad is another form of empowerment because it has given low income households greater control of their consumption and their budgeting. Clearly PES could, either voluntarily or by regulation, offer additional products and services that would extend yet further customer empowerment. If the Keypad experiment with time of day charging proves successful in that it enables customers to reduce their bills this would become yet another example of customer empowerment. If the Keypad time of day charging experiment proves successful, time of day charging could be another form of consumer empowerment.

It is far from clear that a competitive market would afford customers these forms of empowerment. However once they are firmly established it would be harder for the competitive market to remove them. There is therefore a case for establishing as full a range as practicable of consumer empowerment measures as are considered desirable before full and effective supply competition becomes a reality.

The need to empower customers is therefore an additional reason for extending the present Supply price control.

Conclusion

The completion of the opening of the generation market - which should happen by 2005 at the latest - and the development of effective generation competition will focus the spotlight on supply. At present supply is a fully competitive market but at the level of the domestic customer this remains theoretical rather than real.

There are, however, serious question marks surrounding the ability of supply competition to deliver price reductions to customers. PES's current margin is 5.8%. In the competitive market of Great Britain the cost of supply plus margin for domestic customers is significantly higher. There are additional costs such as the cost of putting in the systems to enable supply competition to take place even on the basis of profiling. Then there is the possibility that low income households would find their relative position worsening.

All these considerations point to the need to move in an orderly way in our approach to supply competition. There is no reason why our supply market should not more effectively look after the interests of customers than the Supply market in Great Britain. It will be a different type of market. It will probably have fewer competitors but it should be a market where well informed customers have a greater ability to influence outcomes to their advantage and are more genuinely empowered than their counterparts in Great Britain. In particular we need to:

- ensure as far as possible that we empower customers rather than enrich suppliers;
- drive total costs downwards;
- protect the position of the fuel poor and make them equally attractive to suppliers as affluent households;
- protect the environment by utilising generation better;
- provide an appropriate supply price control to provide a protective long stop for customers;

empower customers to reduce their costs by time of day time of day options cost reflective pricing options.

PES has been outperforming its price controls and delivering a range of enhanced value products to its customers for a number of years. Allowing it to continue would serve two useful purposes:

- (a) it would provide the time to create the optimum conditions and the best chance for supply competition; and
- (b) it would give customers a further two years to benefit from a falling real cost of supply and the range of social and environmental benefits that PES has provided.

Responses

Responses are invited on any of the issues raised in this paper and in particular on:

The principle of extending the price control for two years and the range of measures in the NIE proposal;

Any alternative measures which might be worth considering;

Are any of the other proposals discussed at the beginning of the paper more attractive than NIE's;

Ofreg's proposed approach deal with market opening and customer empowerment.

Any responses to this consultation paper should be received by 28th March 2003. They should be sent to :

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