Power brokers

Eleven years of energy regulation

by

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Foreword

This paper was commissioned by Ofreg to mark eleven years of energy regulation in Northern Ireland. It picks out what, in the view of the author, are the major milestones. The aim has been to identify and explain both achievements and failings. The hope is that unlike the Bourbons we can learn from the past as we prepare for the continuation of regulation under a new Authority. The intended readership includes Members of the Legislative Assembly, local councillors and all those involved in running or overseeing the energy industry. I am grateful to Douglas McIldoon for allowing me complete freedom to write my own assessment and I am indebted to all those in the industry who gave me their time to help me prepare it. As well as the present Regulator, my interviewees included: Geoff Horton, Richard Rodgers, Shane Lynch, Bill Cargo, Paddy Larkin, Robert Apsley, Jim McElnay, Philip Flynn, Harry McCracken, Ashley Boggs, Robin Greer, Robin McCormick, Sir Gerry Loughran, Jim McKeown, Michael Doran, Nigel Smyth, Mark Ennis, Michael Aherne, Joan Whiteside and Felicity Huston

Introduction

Ask people what they're looking for from their electricity industry. They'll tell you their aims are straightforward and basic. They want power companies to offer reasonable prices and be sure to keep the lights on. Both domestic and industrial customers will agree on this. What they will also agree on is that, despite their enormous collective buying power, they exert very little influence on the industry on which they depend for an essential service.

They rely on government and the regulatory process it set up to do the job for them. However strictly speaking, government does not guarantee either of the aims sought by customers. It promises scarcely anything on prices and only maintains that it will do its best to keep us connected. What it does offer is a system, overseen by a regulator, which it says will deliver the goods. That system is based on market driven forces. We may not have asked for it but it's what successive governments say we require. Indeed if one looks back at the last 11 years of energy regulation, one sees more evidence that we don't necessarily get what we want, we get what we're told is good for us. In that sense the whole history of regulation is the evolution not of our demands but of the government's understanding of those needs.

This is evident from the very start when the industry was privatised. Though many in Northern Ireland regard the sell-off of the power stations as a blatant exercise in maximising receipts for the Treasury, there is a more benign interpretation. The contracts with the generators can be seen as a means of securing a guaranteed long-term supply of electricity for Northern Ireland. If the price turned out to be far too high, that is in part explained by a miscalculation on productivity gains inside the power stations.

When regulation proper started, a lot of faith was placed on the power of competition. Surely this could be depended on to deliver lower charges and better service. Such confidence was justified in Great Britain but here the plan proved to be short of a market.

Prices then moved further out of line with Great Britain creating more pressure for change. Eventually regulation did appear to offer what the customers were asking for. But the promised reduction in prices turned out to be a goal in pursuit of a strategy. Denied vital political support, the new tack has enjoyed less success than was possible.

More recently the European Union told us again what we required was competition. In came the Internal Market in Electricity (IME) directive, which with the help of the Moyle Interconnector, has paved the way for lower prices for industry. It holds out the prospect of the same benefits for all consumers but achieving that will be dependent on continuing reform of the industry.

Even as the new dawn approaches, doubts have arisen over whether, in a small market, competition can deliver all our needs. Can we rely on it to produce new generation as and when it's required? Might we have to return to a form of state planning with the offer of long-term contracts? Furthermore is it possible to devise a market system that will look after the environment by rewarding energy efficiency and encouraging the use of renewable energy.

In these circumstances it is legitimate to ask whether regulation has been allowed by government to evolve fast enough to cope with all the changes the future poses. The new Energy White Paper[1] issued by the Department of Trade and Industry repeats and adds to the already ambitious targets for using renewable energy supplies and introducing greater energy efficiency. Assuming that Northern Ireland has to play its part, radical measures will be called for. Ofreg is soon to be reborn as a Regulatory Authority but is it designed to organise change for the new environment?

[1] Department of Trade and Industry (2003) White Paper, Our energy future – creating a low carbon economy, February 2003.

Brief history

The story of electricity regulation begins before the launch in April 1992 of the Office of Electricity Regulation for Northern Ireland (Offer N.I.) and the appointment a month earlier of its first Director General Geoff Horton. It starts with the drawing up of contracts for the trade sale of N.I.'s power stations. The biggest Ballylumford was bought by British Gas and is now operated by a subsidiary, Premier Power. A Belgian/U.S. consortium acquired Kilroot and Belfast West. The latter is now closed and while the former is now wholly owned by one of the partners, AES. Coolkeeragh was bought out by its management.[2]

To sweeten the deals NIE was required by HM Treasury to enter into Power Purchase Agreements (PPAs) with the new owners. The most contentious element of the PPAs was the so-called availability payments which guaranteed the generators a fee for having their generating sets in a state of readiness to produce power. While the principle was sound, the Government's "very expensive" [3] advisers underestimated the extent to which the plant could be made available. The four power stations were sold for £352.5 million, a price which implied an expected availability level of just over 80%. [4] In fact the power stations achieved levels around 95%.

Since the plants could recoup their fuel costs ultimately from consumers, it did not help that the sets were in the main older and less efficient than their counterparts in GB. Furthermore they were smaller and thus could not benefit from efficiencies of scale.

These contracts not only produced high prices, they severely limited the scope for regulators to reduce prices. Not surprisingly the privatisation has been condemned as botched by industrial and domestic consumers. Electricity prices for domestic consumers and industrial consumers in January 2001 were respectively 16% and 23% higher than the next most expensive region in the UK. [5]

Despite the fact of the obvious miscalculation by government on availability levels, few in Northern Ireland doubt that the contracts were designed to extract as much money as possible for the benefit of the Treasury. This conclusion is reinforced by the disclosure by one generating company that it was rebuffed in its attempt to persuade government to scale back the size of the availability payments.

There is another way of looking at the deals however. According to Geoff Horton,[6] who advised against lengthy contracts, there was a worry that if they were shorter, then the power stations would be in a position to drive a very hard bargain at the time of their renewal. Competition might not work to keep prices in check in a small market.

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[2] Electricity Association (1999), The UK electricity system.
[3] Anon
[4] Northern Ireland Audit Office (1994) The Privatisation of Northern Ireland Electricity. Report by the Comptroller and Auditor General for Northern Ireland, October, 1994.
[5] Electricity Association (2002) – International Electricity Prices – Issue 28, Jan 2002.
[6] Drawn from transcript of interview with Geoff Horton (2003) Director General of Offer NI (1992-1995)

Privatisation was completed in 1993 with the flotation of Northern Ireland Electricity. Again a relatively high price was paid for the assets – another factor feeding into high cost of power.

At the same time as Offer NI was set up, the Department of Economic Development transferred the General Consumer Council's (GCCNI) responsibility for electricity to a newly created Consumer Committee for Electricity (NICCE), separate from Offer NI but based in the same building in Belfast's Fountain St. NICCE quickly enquired about the future trend in electricity prices and was apprised by the Director General of the likely divergence between here and GB, an outcome flagged up in the body's very first annual report.[7] It was an early indication that privatisation here was going to prove problematical.

DED role

With the electricity industry now in private hands, it left the DED with a new role. How it handled it is the subject of critical comment from several of those interviewed for this report.

The Electricity (Northern Ireland) Order (1992) and the Gas (Northern Ireland) Order (1996) lay down the same responsibilities on both the Department of Economic Development (DED) and its successor the Department of Enterprise, Trade and Investment (DETI) and the Office of Electricity Regulation (Offer) and its successor the Office for the Regulation of Electricity and Gas (Ofreg). These are: to secure all reasonable demands for electricity are met, to secure that licensees can finance their licensed activities, to promote competition in electricity generation and supply and, in the case of gas, to promote the development and maintenance of an efficient, economic and co-ordinated industry. According to NIE the sharing of duties between the Regulator and Department created confusion as to who was going to take issues forward. In the view of several industry players, the Department took a back seat after 1992. It was believed that DED felt that the market was going to take care of most issues, and anything left over was the responsibility of Offer. Says one organisation, it was "almost like they went to sleep".[8] Where they had to make key decisions, they largely copied what GB did. One body consulted for this report said that DETI was supposed to provide policy but was struggling with it.

Former DED Permanent Secretary Sir Gerry Loughran denies the Department sat on its hands after 1992. All the effort on extending the gas network was driven by the Department. He says that civil servants did a lot of work but many of the outcomes proved disappointing but in the last analysis he points out that one doesn't privatise an industry and then tell it what to do.[9]

Ofreg clearly doesn't accept that last comment. Though politicians are supposed to give a lead, Direct Rule ministers didn't come here with a policy agenda, according to the present Regulator. He says nobody seemed to be prepared to go forward with any

[7] Northern Ireland Consumer Committee for Electricity (1992) Annual Report.
[8] Anon.
[9] Drawn from transcript of interview with Sir Gerry Loughran (2003).

kind of energy plan. He even went to the length of writing to the then Secretary of State Mo Mowlam pointing out the need for political support but it was never forthcoming. As a result Ofreg, he says, has existed for most of its life in a policy vacuum. The upshot was that he, an unelected official with very little authority and a limited range of powers, could only effect change slowly. [10]

If Departmental policy making slowed down after privatisation in 1992, and DETI itself says there could have been a greater concentration on energy after the sell-off, then most are agreed that the advent of the Assembly and the arrival of a Minister with a specific energy brief brought a new urgency to gas and electricity matters. Industry representatives are quite enthusiastic about the benefits of devolution. The ETI committee comes in for praise for taking an interest in energy matters. The change is credited with invigorating civil servants within DETI, making them a lot more focussed. Interestingly DETI agrees there is a greater sense of focus on energy since devolution. It's not thought that the Assembly made much difference to the operation of Ofreg.

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[10] [10] Drawn from transcript of interview with Douglas McIldoon (2003) Director General of Electricity Supply for Northern Ireland (1995-2003) and Chairman of the Northern Ireland Authority for Energy Regulation (2003-).

Competition

Geoff Horton, was already an experienced regulator when he came to Northern Ireland in 1992 to run Offer NI and oversee the electricity industry. He did not devise the system he had to operate. Indeed, pre-privatisation, he had argued against lengthy contracts with the generators. His view had been that tying things down looks a safe strategy but is in fact risky as it leaves less room to adapt to emerging circumstances. Nevertheless once in harness he felt he had to operate what he had been given.

As he had been working on price controls in England, he realised pretty quickly that prices here would diverge from those across the water, although the gap turned out to be bigger than anyone expected because of the surprisingly big decline in GB prices. Nevertheless he hoped he could make a difference by bringing in competition.

After commissioning some research, in 1994 he proposed a wholesale electricity trading system (WETS), soon dubbed the Horton Pool, which he intended to launch late in 1996.[11] Under the scheme, all generators above a certain size would have to sell their output into a pool from which all suppliers would be required to buy. If the pool price delivered returns lower than the power stations were entitled to, a levy would be applied to suppliers to make up the difference. Conversely greater returns would result in the pool price being reduced.

Would the system bring in benefits? Few if any believed that it would. Geoff Horton consulted widely and found his plan lacked support. Never put into operation, it was abandoned by the next Director General Douglas McIldoon.

Geoff Horton recognises the limitations of his plan. He accepts it would not have driven prices down significantly, though he doesn't believe it would have proved less effective than what replaced it. He argues that it could have created momentum for change. By splitting the cost of electricity into two components: a fair market price and a levy to cover the extra costs of the generator contracts, it would have made absolutely transparent the excess costs faced by consumers. In that way political pressure might have been brought to bear to find a solution to what the former Regulator himself described as "outrageously high prices".

In the middle of 1995 Geoff Horton left Offer NI and several months later a new man came in with a new approach.

[11] Offer NI (1995) Annual Report.

Generator contracts

Douglas McIldoon was sent into Offer by the Department of Economic Development with a very clear brief. He was directed to try and bring down electricity prices. And the strategy, in the slightly colourful language of a former DED official, was "to lean"[12] on NIE and the generators.

A former Head of Energy within DED, the new Regulator turned his attention to the twin tasks facing him: tackling the generator contracts and conducting the five yearly price control review for NIE.

However, for the Regulator, the main priority was to reduce generator costs by the greatest extent possible. He commissioned research from consultants London Economics which was published in 1997.[13] It showed that cost of generation in Northern Ireland in 1997/8 was expected to be 4.15p per kWh, over 40% higher than the 2.9p per kWh forecast for GB

His solution was in essence to buy out the uncompetitive costs of the contracts with Ballylumford and Kilroot, to incentivise the power stations to operate more efficiently and to encourage the replacement of old, inefficient plant. The Regulator said he would have preferred to have a voluntary settlement but in the absence of agreement he was forced to refer the matter to the MMC. The idea was to accuse the generators of operating a complex monopoly.

What alarmed the generator companies was the threat to cap the charges arising from the availability payments. This would reduce the profits guaranteed to them under the original contracts signed in 1992 with NIE. One company describes it today as expropriation and said it came as a massive surprise. Lawyers in London were consulted and their findings sent to the Treasury.

Though it caused nervousness, the generators say the Regulator's plan to go the MMC would have failed. They were confident their contracts were watertight. Nevertheless the threat was described by one of the companies as a useful tool which got minds focussed.[14]

Kilroot

In due course as the generators produced their plans for reform, the threat was lifted. Kilroot proposed to convert its equipment to allow it to burn, in addition to oil and coal, orimulsion, an oily fuel from Venezuela which at the time was 25% cheaper than coal and a quarter of the price of oil. Such a move would have allowed the station to boost its output from 390 Megawatts (MW) using coal to 520MW, producing cheaper energy and benefitting from an economy of scale. In return Kilroot would have its contract continue beyond 2010, when it could have been cancelled, to 2024. NIE, with whom the new deal would have been signed, baulked at extending the lifetime of the

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[12] Anon.
[13] Ofreg (1997) Annual Report.
[14] Drawn from transcript of interview with Shane Lynch of AES Kilroot.

contract. They were also environmental concerns at the prospect of using orimulsion as a fuel, though Kilroot had promised to install Flue Gas Desulphurisation equipment to clean up emissions. The Kilroot plan was never adopted. In theory it is still on the table though, with an increase in the price of orimulsion, the economics of the proposal have completely changed. Recently Kilroot has proposed that its contract continue beyond 2010 but that availability payments should be substantially reduced after that time.

Ballylumford

Ballylumford's plan was accepted. It has involved: a £170m buy out of the uncompetitive costs of the existing 1992 contract, the replacement of 600MW of output by a new more efficient combined cycle gas turbine (CCGT) producing power at a competitive price, and the retention of a 117MW unit generating power at cost price.

The owner of Ballylumford, Premier Power was nonetheless disappointed on several counts. It has described the four year period to get to financial close on the CCGT as ridiculously long. In the company's view it should have taken half the time. It believes the benefits from the haggling during the last 18 months of negotiations were outweighed by the delay in getting the CCGT up and running. Premier Power says Ofreg should have ensured earlier closure through its powers to force economic purchase.[15]

Low cost levy

The Premier Power team is even more annoyed at the decision by DETI to postpone a measure in the new Energy Order intended to reduce the costs of servicing the £170m buy out loan. The provision would have enabled the charge, which customers currently pay, to be transformed into a sort of tax. The virtue of the plan was that the certainty of the levy would have persuaded the lenders to accept a lower interest payment. It appears that the Department of Finance and Personnel (DFP) was concerned that if lenders were ready to take lower return, it implied their level of risk had been reduced. The only way that could happen, DFP concluded, is that risk would be transferred to customers.

A key assumption behind the DFP concerns is that the market is 100% efficient, that always and everywhere prices accurately reflect the risk attached to an investment. In light of the dot com bubble, the technology companies bubble, the massive decline in world stock markets, all of which implies a huge mis-pricing of a whole range of financial products, this is simply implausible. A little common sense is called for. Under either the present lending arrangements or the low cost levy, the lenders were guaranteed the agreed return on their investment. It's unimaginable that the Stormont administration would permit a default. So, if one set of lenders is prepared to charge us less, then maybe, yes, we would be getting a very modest free lunch.

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[15] Drawn from transcript of interview with Premier Power management team (2003). Those taking part in the interview were: Bill Cargo, Paddy Larkin, Jim McElnay, Robert Apsley and Philip Flynn.

For its part DETI points out the low cost levy sets a precedent for the UK. Interestingly this is presented as a difficulty rather than an opportunity for Northern Ireland to be first to realise savings. The Department says that with the complexities of the issues it just ran out of time. DETI stresses that the issue is still definitely on the table.[16]

Premier Power is not impressed by the arguments for delay. Management accuses civil servants of frustrating the will both of the Regulator and the Assembly. They're described as being very cautious to the point where they're stifling innovation and creativity. The Confederation of British Industry (CBI) uses more moderate language but it is also disappointed by the postponement. If needed, expert help could have brought in at an earlier stage, it says. The proposal should have been adopted or abandoned six months ago. The CBI sees it as evidence that civil servants have not got a "can do" mentality.[17]

Premier Power does stand to gain from the introduction of the low cost levy. Its removal would release the company from certain contractual obligations to NIE. Nevertheless its claim that the blocking action by civil servants is "not good for democracy" has some merit. Having control over our own affairs gives us the right to make decisions, which civil servants are free to regard as mistakes.

Strikingly no one blames the Direct Rule Minister who actually made the decision to postpone, which says volumes about who is really believed to run the country.

Coolkeeragh

Coolkeeragh also proposed to build a CCGT albeit on a smaller scale than Ballylumford. It will have 400MW of output and will be fed by the planned gas pipeline to the North West. The present management and employee shareholders have agreed to sell out their interest to their current partner ESB International (ESBI), the investment arm of the semi-state power company in the Republic. The new Coolkeeragh is a merchant plant operating without the guarantee of long-term contracts. It is expected to sell at least part of its output to consumers in Donegal. It will benefit from the decision to postalise gas prices, ie offer gas to consumers at the same price no matter where it comes off the grid. The issue of postalisation will be examined later in the report.

Moyle Interconnector

It is rather obviously not a generator but the Moyle Interconnector linking Northern Ireland to the Scottish grid behaves in the market as if it were since it supplies power. Its construction was agreed in 1991 between DED and the then state-owned NIE. Later that year NIE signed a 'Heads of Agreement' with Scottish Power on the price Northern Ireland would pay for power through the Moyle.[18] This was later renegotiated to take advantage of falling prices in Great Britain. Originally the

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[16] Drawn from transcript of interview with Jim McKeown of the Department of Enterprise, Trade and Investment (2003).
[17] Drawn from transcript of interview with Nigel Smyth of Confederation of British Industry (2003).
[18] Offer NI (1995) Annual Report.

interconnector was intended to carry 250MW. NIE later discovered that the capacity could be doubled for relatively little extra cost – two for the price of one, the company called it.

This development disturbed Premier Power which hoped to use two of its sets to supply the eligible market – consisting of large users of electricity who, because of EU Directive on the Internal Market in Electricity (IME), could from February 1999 bypass the PPB and buy their power directly from generators or from second tier suppliers. Now the enhanced Moyle Interconnector could undercut Premier Power and satisfy the eligible market on its own. Premier Power complains it was not warned about the possibility of doubling the size of the Moyle. Had it known, the company would have kept at least one of these two sets in question under contract, charging in line with operating and maintenance costs. It instances this surprise as an example of Ofreg failing to provide clarity in the market and thereby jeopardising future investment decisions. For his part Douglas McIldoon said, when he cleared NIE's 250MW proposal for economic purchasing, he was unaware the Moyle was going to be doubled. Furthermore not only could he not have stopped it, it would have been wrong to do so. It would have meant forcing consumers to pay higher prices for the privilege of keeping old, inefficient plant in use. The Regulator further argues that it was the soaring price of gas that made Premier Power's two sets uneconomic.[19]

Eligible Market

The eligible market initially covered 26% of electricity demand but has now been extended to 35%. It has been welcomed by industry but not with overwhelming enthusiasm. The reason is that although prices have come down, business here is paying significantly more for power than the rest of Great Britain and Europe. The CBI reports that one of Northern Ireland's top companies with 80 plants round the world finds that it pays more here than anywhere else apart from Japan.

While there are no official figures on the reduction in prices created by the IME, it is estimated that large users are now paying approximately 15% less than they would have been charged under the Bulk Supply Tariff (BST). Currently the BST rate for someone taking 1MW constantly throughout the year is 4.1p per kWh. That implies a charge of in the eligible market around 3.5p per unit.

The big question facing the regulator now is how to handle the expansion of the eligible market. In Great Britain the market is already completely open. The Republic will follow suit in 2005. ESB International say there is a logic in co-ordinating the opening of the market throughout the whole of Ireland especially as it is being increasingly recognised there are clear synergies in treating the Northern and Southern electricity systems as one entity.[20]

Opening the market will present a variety of problems but one of the trickiest, assuming it arises at all, will be how to deal with the stranded costs, those

[19] Drawn from transcript of interview with Douglas McIldoon (2003) Director General of Electricity Supply for Northern Ireland (1995-2003) and Chairman of the Northern Ireland Authority for Energy Regulation (2003-).

[20] Drawn from transcript of interview with Michael Aherne of ESB International (2003).

uncompetitive costs associated with the high priced generator contracts dating from privatisation. Currently most consumers pay these charges as part of their normal electricity bills but come the time when a consumer in Ballymena, domestic or business, wants, and is able, to buy from an electricity supplier based in Kerry, there will have to be some form of levy to cover the stranded costs which is then added on to his or her bill.

Ofreg has produced a report on market opening,[21] parts of which have been rejected by the industry. It is beyond the scope of this report to make suggestions on the subject except to say that the pace of change on this issue probably needs to be speeded up. Indeed decisions on a range of subjects need to come faster.

In the longer term an All Ireland market implies even closer co-operation between the Regulatory Authority and the Commission for Electricity Regulation (CER) in the Republic. It may even require one Regulator for the whole island although that idea, to be successful, would have to overcome some significant political hurdles. For example, it would probably depend on the Stormont administration and the Dublin Government harmonising their energy policies.

Decision making

A number of industry players have commented about what they see as slow decision making within Ofreg. As mentioned earlier Premier Power believes that the Regulator should have forced closure sooner on its CCGT deal. NIE [22] says that though the price control review for T&D was agreed last June, the licence by February of this year still had not been changed. A lengthy price review costs NIE because, among other things, they have to keep consultants on board. The view is that Ofreg is under-resourced. NIE, which points out that electricity regulation costs three times more per customer here than in Great Britain, actually says there is a an economic case for greater funding for regulation though there is no consensus about paying more by way of fees to Ofreg to allow it to bring in extra staff.

The Regulator admits the last price review of T&D was drawn out but he says the end result was a much better understanding between the two sides, and mechanisms which should deliver results for customers and shareholders alike. He asks whether people want a quick decision or a good decision. On the failure to wrap up the T&D price review more quickly after it had been signed, he blames NIE's decision to sell the Moyle Interconnector which took up a lot of Ofreg's time

Speed of reform

On the general question of the pace of reform within the industry, he says delays came about because people resisted change. He specifically accuses NIE of holding up renegotiation of the Coolkeeragh and Power Station West contracts despite evidence

[21] Ofreg (2002) Generation and Supply Competition in Northern Ireland, a consultation paper issued by the Director General of Electricity Supply for Northern Ireland.

[22] Drawn from transcript of interview with Harry McCracken, Ashley Boggs and Robin Greer of Northern Ireland Electricity (2003).

those changes would reduce prices. The Regulator doesn't accept he has delayed things.

It will be a matter of debate as to whether NIE's tactics on the renegotiation of all the generator contracts were in the best interests of consumers. Clearly NIE believes that they were. However, what is less contestable is the Regulator's assertion that had there been a greater political will, change could have taken place more quickly within the industry.

In a recent paper the Regulator has contended that for the rest of their lives, ie through 2010 and beyond, the Ballylumford and Kilroot plants are in market.[23] Though that assertion is unprovable, if it is true, it implies that a lot more could have been done to reduce prices in the past. It would have required a very radical restructuring of both contracts, most probably stretching the return of the generators' investment over much longer timescales than the ones they were working to. If necessary it might have required the buyout of a part of the contracts.

One way to help the Regulator achieve lower charges would have been to have set an explicit target for prices. It might have required DED/DETI to have made it clear that neither industrial nor domestic consumers should be paying more than an agreed percentage above the costs facing their equivalents in comparator regions within GB.

Such targets would have greatly strengthened the Regulator's hands in his dealings with all parties. As it was, there was only one clear price target set for the Regulator and that was one he set himself. In 1998 among other things he pledged to reduce the cost of electricity, for the domestic consumer using 3300 units per year, to £253 by 2002.[24] While he succeeded in his other aims, he missed that target for three reasons: a hike in fuel prices, a change in approach to the T&D price control review and the failure to renegotiate contracts such as Kilroot.

For the future, if and when we need new generation, Premier Power makes a powerful case for having new, long-term contracts. Who should build the new plant should be decided through pre-build competition. The company that promises the most cost-effective generation should be given the contract. The certainty of the contract should allow for financing on the most favourable terms. Safeguards could be introduced to prevent excess profits being extracted by the power plant company. The approach would require a change in view that the market, as it exists, is the only way to deliver new generation.

Whether we will need new generation in fact is being investigated by the Systems Operator for Northern Ireland (SONI). Up to 1999 the responsibility for maintaining the generation standard fell on NIE but is now back with DETI and Ofreg. SONI is preparing a so-called seven year statement basing its recommendations on a recognised standard called Loss of Load Expectation (LoLE). A generation system can still comply with LoLE if it turns out that customers are off supply at peak demand for a total of 8/9 hours in the year. A rule of thumb is that a system will comply with LoLE if it has roughly 20 per cent extra capacity above peak demand.

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[23] Ofreg (2003) Competition and Customer Empowerment: The Next Steps in the Northern Ireland Electricity Market. A Consultation Paper by the Director General of Electricity Supply March, 2003.
[24] Ofreg (1998) Annual Report

Last January 8 NIE had its highest ever peak at 1601 megawatts. That implies a required capacity of approximately 1920 megawatts which the generators and interconnectors can achieve. Nevertheless the fact is that on Jan 8, because of a problem at Ballylumford, SONI was only carrying 100mw above demand. SONI admits that on a couple of occasions, it has had to consider the possibility of cutting off customers though it has never had to do so.[25] There is a good case for the Regulator or the DETI Minister raising these issues with the public so consumers can advise what risk they are prepared to take with blackouts vis a vis the cost of contracting extra capacity.

[25] Drawn from transcript of interview with Robin McCormick , Systems Operator Northern Ireland (2003)

Price Controls

While Douglas McIldoon may not have gone through with his threat to refer the generators to the Monopolies and Mergers Commission, he most assuredly did act on his warning to Northern Ireland Electricity.

At privatisation Government, rather than any regulatory body, set the first price control for NIE. It fixed returns for all three regulated businesses, Power Procurement, Supply and, by far the most important, Transmission and Distribution, the subsidiary within NIE which takes electricity from the power stations and delivers it through the wires to homes and businesses. DED gave the company permission to raise T&D revenue by 3.5% a year above inflation from April 1992 to March 1997.[26] On the assumption of growth in demand of around 2.5%, this allowed the company to increase its charges by about 1% a year. If this seems relatively generous, then it merely reflects the pattern of privatisation elsewhere in the UK where Government, during initial price control periods, did not squeeze the companies it had just sold off.

Towards the end of the first price control period, domestic and industrial consumers alike, were looking for, and expecting, cuts in the cost of electricity. The prospective review offered the first opportunity to lower the cost of power albeit by a limited amount since the biggest factor in creating high prices was the cost of generation. Relatively speaking domestic consumers stood to gain most from a Transmission and Distribution price cut since T&D made up around 40% of household electricity bills. In contrast it only comprised 18% of the bills of large industrial users. The balance in each case is made up of generation costs of which 30% or more reflects availability payments and the rest fuel costs

Douglas McIldoon proposed a cut of 30% in T&D prices at the start of the new regulatory period followed by 2% reductions in each of the subsequent years[27]. NIE rejected the proposal as well as the extent of cuts advocated for Supply. They did accept Ofreg's review of the Power Procurement Business. When the contested price reviews were examined by the Monopolies and Mergers Commission in 1997 [28], their report approved many but not all of the Regulator's decisions. In an unusual but not, within the UK, unprecedented move, the Regulator decided not to implement some of the MMC's findings. NIE sought a judicial review. The Regulator won in the High Court but lost in the Appeal Court. It is fair to say that the Regulator did not take his reverse lying down. He has described the whole episode as evidence that the regulatory system as a whole is biased against customers. The MMC was a transitory panel meeting in secret, with no knowledge of the issue, answerable neither to Ministers or customers. He described 1998 as an unmitigated disaster for T&D customers.[29]

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[26] Monopolies and Mergers Commission (1997) Northern Ireland Electricity Plc: A report on a reference under Article 15 of the Electricity (Northern Ireland) Order 1992.
[27] Ofreg (1996) Price Control Reviews for Northern Ireland Electricity plc: Director General's proposals.
[28] Monopolies and Mergers Commission (1997) Northern Ireland Electricity Plc: A report on a reference under Article 15 of the Electricity (Northern Ireland) Order 1992.
[29] Ofreg (1998) Annual Report.

Regulatory risk

Douglas McIldoon's actions in challenging the findings of the MMC raised eyebrows in the regulatory world. Normally in matters disputed between a company and a regulator, the referral body has the last word. At the time the law demanded that regulators have regard for the MMC's conclusions. It has since been tightened up so that findings have to be put into effect. Mr. McIldoon was entitled to challenge the system in the way that he did but several companies claimed that his actions had created the sort of uncertainty that made investors nervous and thereby raised the cost of borrowing for utility companies. The complaint is summed up by the phrase 'regulatory risk'. The argument is that in world of utilities, companies, and to some extent their lenders, are making long-term, very large investments which are difficult to amend once undertaken. These factors in themselves make any such investment risky. What they then require from regulators is predictable decision-making so that the bundle of risks they are already taking is not added to. This is not a request for leniency or special favours but a demand that they know where they stand not just with the present regulator they're dealing with but his or her successor. In other words the process has to be transparent. A regulator who makes unpredictable decisions adds to risk. Investors who take on increased risk demand bigger returns. So, regulatory risk is not a simply a nuisance but an extra charge on the P&L account.

Over the years the allegation has been made against Douglas McIldoon that by decisions such as the one to challenge the MMC he has added to the risks faced by Northern Ireland Electricity and, in effect, has perhaps added to its borrowing costs.

Helpfully the regulators across the UK have just published an independent report which, among other things, looks at the question of regulatory risk. It was prepared by Stephen Wright of Birkbeck College and Robin Mason and David Miles , both of the Centre for Economic Policy Research.[30] The authors say that concern over regulatory risk is "largely misplaced". The argument revolves around the theory underpinning most investment strategies today – the Capital Asset Pricing Model (CAPM). CAPM assumes that investors have a widely diversified portfolio of assets. Since this is true for the major players in the market such as pension and insurance funds, it is a reasonable assumption. At the heart of CAPM is the counter intuitive proposition that such investors are not rewarded or punished for taking on risks that are peculiar to a particular company. The view is that these sort of risks are diversified away by holding a large portfolio. They cancel each other out. This clearly implies that maverick decisions by a regulator will not affect investor judgement and will not persuade them to demand a bigger return for their investment.

There is a very big proviso in all this. What investors are rewarded for is taking on any form of risk which co-varies, that is moves in step, with factors driving the market up or down. So if a regulator were to neutralise the benefits of a positive cost shock benefitting the market as a whole, such an action would lower the return on that share, forcing its price down and thereby raising the cost of capital. An example would be if a regulator were to slap on a lower price cap following an unexpected drop in the cost

[30] Wright, S., Mason, R. and Miles, D., (2002). A study into certain aspects of the cost of capital for regulated utilities in the UK. Commissioned by the UK economic regulators and the Office of Fair Trading. Published in February 2002.

of labour or raw materials which could benefit other firms in the market. Such action would increase the cost of capital. It is implausible to suggest that challenging the MMC in the courts falls into this category.

Relationships

This is fairly dry stuff. By contrast the differences between the Regulator and NIE over the first price control generated some emotion. It is said, though not by the company, that some senior representatives of NIE took the decision to go to the MMC personally. The firm itself describes the period as "slightly vitriolic" and a "turbulent time" in regulatory history. It acknowledges that the Regulator honestly believed the company was trying to hold on to too much money but it says he did a pretty poor job in demonstrating that fact. [31]

Nowadays NIE is inclined to be more philosophical over the Regulator's approach. It accepts that he is entitled to push his case. If, in its view he goes too far, the company has a statutory right to challenge him. His decisions can be judicially reviewed. However, without accusing him of being unethical, NIE suggests that the Regulator knows the outcome he wants to achieve and " it doesn't matter too much how he gets there."

His approach is contrasted with that of the former regulator Geoff Horton who, NIE claims, had a higher regard for regulatory precedent. Whether or not that is true, most if not everyone who expressed an opinion, identified major differences between the way regulation was pursued by the two regulators.

Regulatory styles

Douglas McIldoon was said to have "challenged" the system of regulation but Geoff Horton "operated" it. Mr. Horton made it clear that he would not be swayed from his approach by what he regarded as political objectives. In doing so he signalled Offer would be pursuing an independent line. While his attitude slightly bemused DED, the Department fully accepted the Regulator's right to take the view that he did.[32] But if it understood the propriety of the Horton line, there is little doubt the Department, like most consumers, was more enthusiastic about the more vigorous approach adopted by Mr. McIldoon.

There are a number of issues involved here but the big question is whether the new tack made any real difference. The CBI while giving a lot of points for effort, accuses Mr. McIldoon of raising expectations around 1997/98 that the price of electricity could be brought down in a fairly short time and then failing to deliver.[33] Sir Gerry Loughran, who sympathised with and supported Douglas McIldoon, says in retrospect that maybe together they created the impression that more was achievable through

[31] Drawn from transcript of interview with Harry McCracken, Ashley Boggs and Robin Greer of Northern Ireland Electricity (2003).

[32] Drawn from transcript of interview with Sir Gerry Loughran (2003).

[33] Drawn from transcript of interview with Nigel Smyth of Confederation of British Industry (2003).

regulation than really was deliverable. It was never going to be possible, he now says, to radically reshape the generator contracts unless money was found for a buyout.

All of this comes as little surprise to Geoff Horton. He claims his successor hasn't changed anything or been able to change anything about the costs associated with the generator contracts. Mr. McIldoon might have used "stronger language than is normal" in his dealings with the industry generally, but in the end both of them were very constrained by the same regulatory system which neither of them stepped outside. The differences between the two were more of style than substance, though Mr. Horton ruefully admits he looked more like the technical apparatchik and Mr. McIldoon as the man of feeling.

To develop the argument, it might be said that one of the more interesting developments of recent times, that is the creation of the eligible market which allows large electricity users to bypass the PPB and contract directly with the generators or suppliers, came about as a result of an EU directive and not through the activities of the Regulator. Certainly Mr. Horton doesn't accept that we are better off from going down the McIldoon route rather than the one he was taking us along.

Clearly there is some substance in the former regulator's claims but objectively it looks as if he may be overstating his case. Consumers may not be hugely better off financially from the renegotiation of the Ballylumford contract. NIE has described the benefits as marginal. But it is leading to lower emissions of greenhouse gases and it has presented us with new, more efficient plant which incidentally only Coolkeeragh is also offering to provide. The Kilroot renegotiation would have delivered benefits along the same lines. That it has so far come to nothing is probably not the fault of the Regulator.

Nevertheless the Regulator does to some extent blame himself, not for the breakdown in any particular negotiation, but for failing to create the political momentum to drive through in a shorter time the change the industry needed. One is somewhat surprised that he should ever have seen that campaigning role as appropriate for a public servant to pursue. But Mr.McIldoon draws a distinction. His function was not to make policy but to persuade ministers to do so. Not to succeed in doing that he says was his biggest failure.

MMC again?

Four years after the battles between the Regulator and the NIE and the recourse to the MMC, it looked last year as if we might be in for a repeat performance. Mr. McIldoon drew attention to the divergence in prices between Northern Ireland and the rest of the UK for T&D. While he acknowledged the cost of sending power through the wires had fallen by 27% since privatisation [34], he thought NIE could do much better. He proposed swingeing cuts in operating expenditure (opex) and capital expenditure

[34] Ofreg(2001) Transmission and Distribution Price Control Review for Northern Ireland Electricity plc, a consultation paper by the Director General of Electricity Supply for Northern Ireland, November 2001.

(capex).[35] The company said his proposals would entail job cuts. And then just as it appeared to be reaching stalemate, the Regulator produced a radical new price control which he said aligned the interests of both customers and shareholders[36]. Among other proposals he wanted to reward capex on such things as embedded generation, which made redundant network investment, with a 1% higher rate of return and to depreciate it over a relatively short ten year period. In this the Regulator has anticipated UK Government proposals. In the Department of Trade and Industry's new Energy White Paper [37], incentivising Distribution Network Operators like NIE to link up with distributed generation is firmly recommended. Significantly the price control allowed NIE to recoup from customers over the five year regulatory period £84 million more than the Regulator has previously proposed. The company was getting less than it had asked for but much more than was originally on the table. It accepted the deal.

A clue to Mr. McIldoon's softening of approach lies in one paragraph of his Final Proposals for the T&D price control review.[38] He said the record of the Competition Commission and its immediate predecessor (the MMC) in producing outcomes which were less favourable to shareholders and more favourable to customers than the regulatory body had proposed was not encouraging. In other words if the matter were to end up with the Competition Commission he might lose. At the same time it's important to recognise this was not capitulation. It will reduce T&D prices albeit in a more leisurely fashion than had been expected. Furthermore the experiment in aligning interests could produce useful gains.

[35] Ofreg (2002) Transmission and Distribution Price Control Review, Initial Proposals for Northern Ireland Electricity plc, a consultation paper by the Director General of Electricity Supply for Northern Ireland, March 2002.
[36] Ofreg (2002) Transmission and Distribution Price Control Review, Final Proposals for Northern Ireland Electricity plc, a consultation paper by the Director General of Electricity Supply for Northern Ireland, June 2002.
[37] Department of Trade and Industry (2003) White Paper, Our energy future – creating a low carbon economy, February 2003.
[38] Ofreg (2002) Transmission and Distribution Price Control Review, Final Proposals for Northern Ireland Electricity plc, a consultation paper by the Director General of Electricity Supply for Northern Ireland, June 2002.

Gas

When British Gas won the bid for Ballylumford power station, the Government required it to fuel the plant with natural gas. In due course the Scottish Northern Ireland Pipeline (SNIP) was built. As envisaged it allowed the creation of a gas supply industry in Northern Ireland. This began in the Greater Belfast area. The city had enjoyed the use of town gas for over 160 years but the soaring cost of the fuel forced the closure of the system. The last customer was disconnected in 1988. For reasons which have never been entirely and satisfactorily made clear, Stormont had declined the opportunity to link up to the Republic's natural gas system which sourced its supplies from the Kinsale field off the Co. Cork coast.

Despite the absence of a single customer, a British Gas subsidiary, Phoenix Natural Gas took on the responsibility of creating an infrastructure to supply Larne and the Greater Belfast area. If it couldn't pick up existing town gas customers, the company was at least able to sleeve its new plastic pipes through the old cast iron gas conduits. Even that was of limited advantage since the layout of Belfast streets had changed so much in the last thirty years. Phoenix was given combined licences to convey and supply gas. Since it was already taking on enough risk, the conveyance licence conferred exclusive rights to transport gas in the licensed areas for 20 years.

As of course it was and is a monopoly, Phoenix is regulated. Reflecting its new role, the regulatory authority Offer had its name changed in 1996 to the Office for the Regulation of Electricity and Gas (Ofreg). The responsibilities of Ofreg with regard to gas are broadly similar to its duties concerning electricity. There is at least one major difference. The Regulator is charged with promoting the development of the gas industry here whereas he is most definitely not asked to promote the electricity industry. [39] [40] [41]

Gas has won this favoured status because among other things it is a cleaner, more efficient source of energy. The more it is used the more it displaces other fuels like coal and oil which produce greater emissions.

Unlike in Great Britain where the gas industry is mature, Phoenix has had to start from scratch. So far it has spent over £170 million without the guarantee that it can recover all of that investment for its backers. Currently it supplies around 53,000 customers, around 26% of the premises its pipes pass by. By contrast in GB the national gas conveyor Transco is connected to 93% of premises close by its pipes. The upshot is that in Northern Ireland the equivalent infrastructure is supported by a much smaller customer base. In addition those assets have cost more to buy. When Transco's former parent British Gas was privatised in 1986, the fixtures and fittings were sold at a 60% discount to their book value. As a private company Phoenix has paid 100% of the cost of its assets. On top of all that because of the greater risk facing Phoenix, it has been offered an 8.5% real pre tax return on its investment. It's little wonder that gas costs more here than in GB. There the average customer using 18,000

[39] Electricity (Northern Ireland) Order 1992.
[40] Gas (Northern Ireland) Order 1996.
[41] Energy (Northern Ireland) Order 2003.

kWh per annum, paying quarterly in arrears, faces a yearly bill of £326 from British Gas. Here the equivalent consumer pays Phoenix £374, about 15% more.[42]

These higher costs faced by Phoenix and the fact that it faces real competition in the shape of oil which 70% of homes here still use for central heating, means it is less likely to want to overspend on operating costs or capital expenditure. Unlike some other monopolies it will be thus less attracted to gold plate its system. That goes some way to explaining why there have never been the battles between Phoenix and the Regulator that one has seen in the electricity industry. Another reason is that public spats between Ofreg and the nascent natural gas industry would probably put people off from converting to gas, something both sides wish to encourage.

Phoenix says there will always been tension in the relationship between the company and the Regulator but for the public good these differences are dealt with behind closed doors.[43]

By contrast the Phoenix has been drawn into more public rows with the watchdog body responsible for gas, the General Consumer Council. These were regrettable the company says.

Consumer complaints

The General Consumer Council (GCC) does not apologise for its interventions. [44] It says,occasionally, the watchdog has to bark in the interests of consumers. The GCC claims Phoenix hasn't honed its procedures well enough for dealing with customers and their complaints. Relatively speaking there were many more complaints about gas than electricity last year. The GCC blames Phoenix for example for not listening to advice that it should install a pay as you go system to match the lifestyle of customers used to paying cash for their fuel. The result was some people with huge debts who were being disconnected. The GCC believes the company may have created problems for itself because of its understandable focus on building the gas supply system.

This October Phoenix will announce its review of gas prices. One measure currently being discussed between itself and Ofreg which would help hold prices down is a plan to allow the company to recover its investment over 40 years rather than 20 as is the case now. The restructuring of the price control formula would bring it closer to the one applied to NIE's T&D. Details have yet to be published by Ofreg at the time of writing.

Supply competition

As mentioned earlier Phoenix has an exclusive licence to convey gas in the Greater Belfast area but it is in the process of having to compete to supply customers. From the start of 2005 the whole market will be open. But for now only large gas users, about 100 in all, can choose. Despite at least two companies taking out supply

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[42] Correspondence (2003) with Richard Rodgers of Phoenix Natural Gas.
[43] Drawn from transcript of interview with Richard Rodgers of Phoenix Natural Gas (2003).
[44] Drawn from transcript of interview with Joan Whiteside, former chair of the General Consumer Council for Northern Ireland (2003).

licences, no one has made the switch. It raises questions as to whether Ofreg has been able to ensure that the conditions for real competition exist. While this issue is significant now it becomes vitally important in two years time when the whole market opens. Phoenix, which says that at heart it is really a conveyance business, is trying to deal with any issues that might act as an artificial barrier to entry to the market. The company acknowledges it may mean eventually the sale of the supply business.

Postalisation

One of the more controversial issues associated with gas is the postalisation of prices, authorised in the new Energy Order. [45] The law will enable the same price to be charged for gas throughout an extended network. It is not just a question of treating all users and would be users of gas equitably. If new customers on the route had to pay for the pipeline to the North West, it would deter them from converting and linking up to the system, thereby limiting the environmental and other benefits of switching to gas. It would also make the cost of electricity generated by the new CCGT at Coolkeeragh more expensive. It has been claimed that the pipeline to the North West will pay for itself through increased use of gas. Accordingly gas prices should not go up. Premier Power is unhappy about postalisation believing it deprives the company of the chance to lower its gas bills and lower the cost of producing electricity. It quotes the decision to postalise as another example of the goal posts being moved in the energy market by the authorities, upsetting its ability to plan long term. The counter argument is that postalisation probably enjoys the overall support of politicians. It is most certainly not an example of unaccountable public servants interfering in the market.

NICCE [46] wonders if the pipeline would have gone ahead if the Regulator had not had responsibility for both gas and electricity. In my opinion the plan enjoys so much political support, that it would happen whatever the regulatory structures. It is an example of democracy in action. One nagging concern is that consultants engaged by DED, Phoenix and others, concluded in 1998 that the scheme was not commercially viable. [47] Caminus reported that over a 20 year period it would have a negative Net Present Value of 40 million pounds. The reaction from Ofreg and others appears to have been that such a loss was offset by the other benefits conferred by the project. That may well be the case but it makes one wonder why the exercise was done in the first place since its findings appeared to be irrelevant to the decision to go ahead.

There are mixed views on the value of having gas and electricity regulated under the one roof. Premier Power says it allows the Regulator to understand better how different parts of the energy market relate to each other, but, instancing postalisation, it enables him to play one company off against another. NIE also refers to postalisastion on this issue of joint regulation. But no one has any strong views one way or the other

[45] Energy (Northern Ireland) Order 2003.
[46] Drawn from transcript of interview with Felicity Huston and Anne McMinnis of the Northern Ireland Consumer Committee for Electricity (2003).
[47] Ofreg (1998) Annual Report.

Renewables/Environment/Energy efficiency

The present Regulator has been consistently positive about two subjects which have clear benefits for the environment. They are: obtaining energy from renewable sources and encouraging greater energy efficiency. In the latter case the preferred method for raising money to support the policy has been a levy on customers. On these issues Douglas McIldoon, while working in DED and Geoff Horton, as Director General of Offer, opposed each other.

Geoff Horton, while obviously not against either objective, felt that electricity prices were high enough without customers having to fund the Non Fossil Fuel Obligations (NFFOs) which allowed for higher payments to those generating from renewable sources of energy. NICCE shared those concerns. In 1994 [48] it opposed the first NFFO order which it said obliged NIE to buy power at twice the cost of current fossil fuel generation. For the same reason Geoff Horton didn't think it sensible to ask electricity users to pay an Energy Efficiency Levy (EEL). When asked by the Department to impose an EEL before the end of the first price control period, he refused. As it was, the charge was not put on until 1997.

Introduced in 1997 at the rate of £1 per customer per year, the EEL was soon raised to £1.50 and then in 2000/1 to £2. With the approval in September 2001 of the Northern Ireland Assembly it has now being increased to £5 per customer, raised through the T&D price control. As the levy is raised as a charge per kWh, the cost to consumers will vary with consumption. At the higher rate the levy should only cost the average domestic customer £1.62. Only NIE operated the EEL programme. It has been financially incentivised by Ofreg to exceed its annual target.

Up to 2001/2 the independent Energy Saving Trust has estimated the NIE projects will have saved over their lifetimes 1,000GWh. By beating its targets NIE has earned payments of over £800,000.

In practical terms the schemes have delivered nearly 400,000 energy efficient lamps as well as insulating 13,000 homes. Benefits have been estimated at £50m, over two thirds of which have gone to the 170,000 homes in Northern Ireland suffering from fuel poverty. [49]

In 1998 NIE introduced its Eco Energy Tariff which allowed consumers to buy a tenth, a half or all of their electricity from renewable sources at a slight premium to standard prices. In terms of uptake it has been described as the most successful green electricity tariff in the UK.

Stricter emissions controls and changes in fuels burnt have helped to reduce the amount of Sulphur Dioxide (SO_2) and Oxides of Nitrogen (Nox) produced by power stations here. The change in Carbon Dioxide emissions has not been so dramatic.

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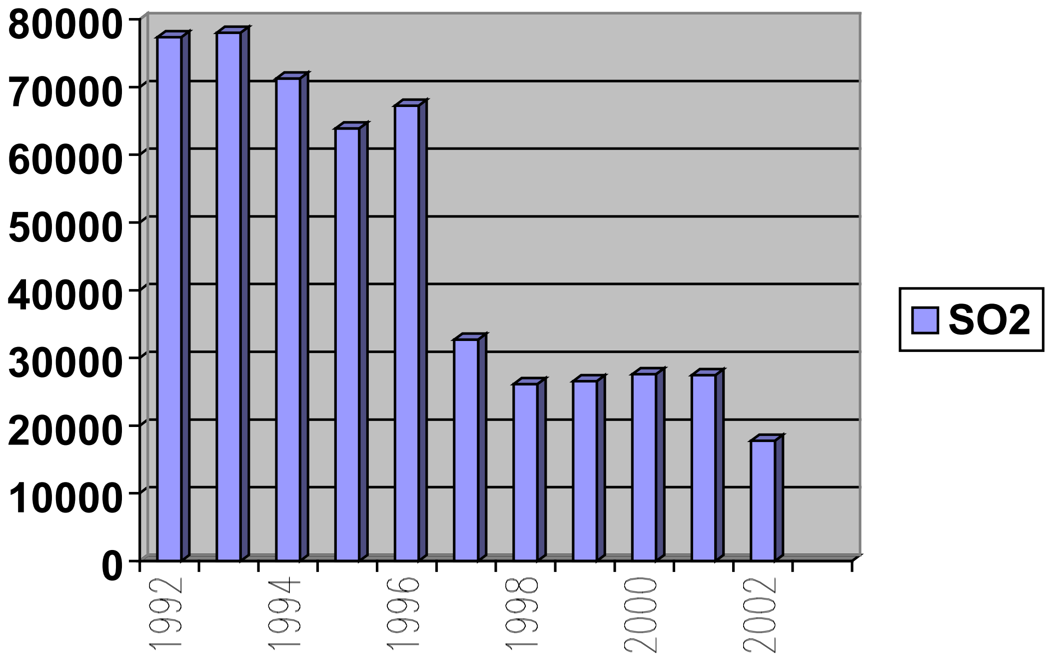
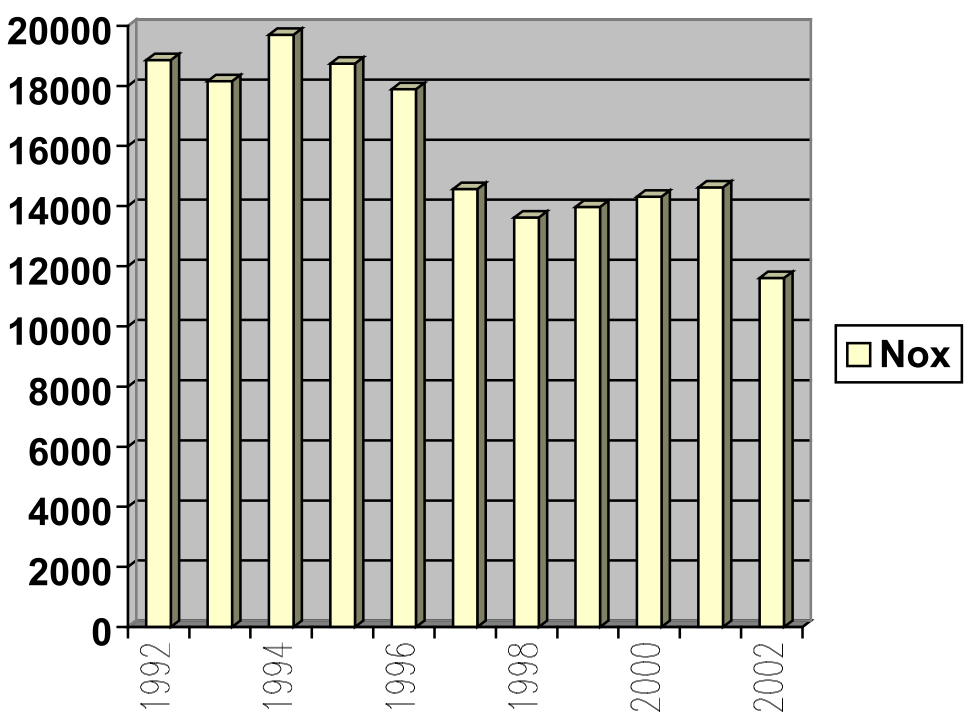
[48] Northern Ireland Consumer Committee for Electricity (1994) Annual Report.
[49] Ofreg (2003) Recommendations on a framework for Northern Ireland's £5 Energy Efficiency Programme, a consultation paper prepared by the Energy Savings Trust.

Sulphur Dioxide emissions from NI Power Stations in tonnes



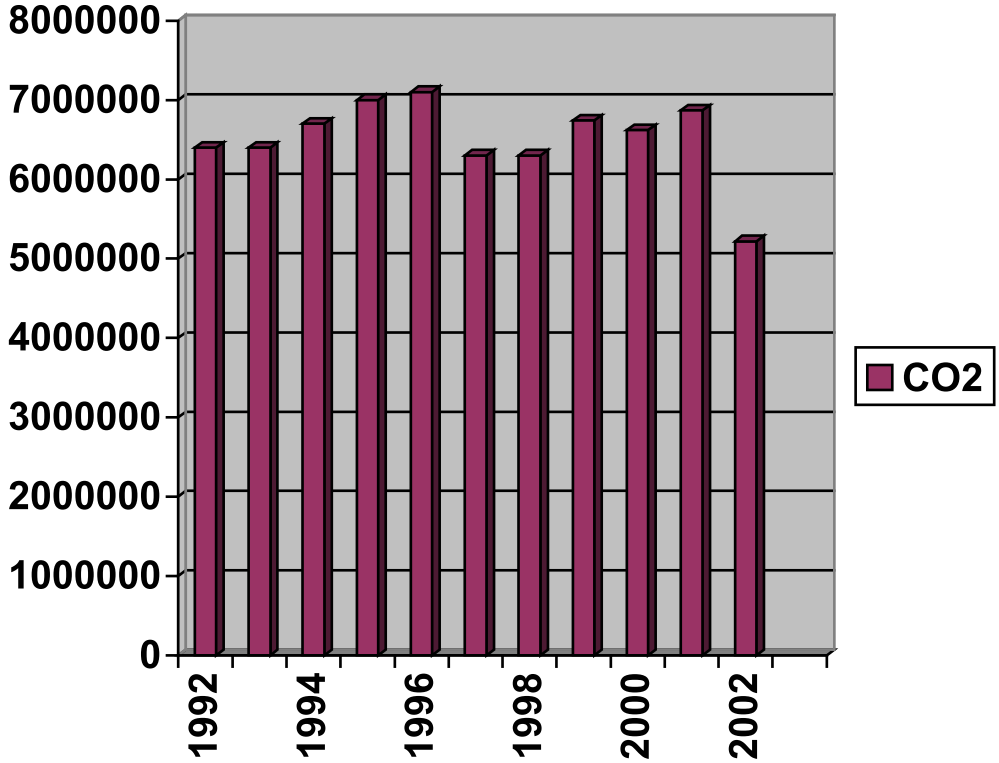
Source: Department of the Environment for Northern Ireland

Emissions of Oxides of Nitrogen from NI Power Stations in tonnes



Source: Department of the Environment for Northern Ireland

Carbon Dioxide emissions from NI Power Stations in tonnes



Source: Department of the Environment for Northern Ireland

The main reason for the drop in Sulphur Dioxide emissions arises from the switch from oil to gas by Ballylumford in 1997. As a fuel, gas has a far lower sulphur content than either oil or coal. The further reduction in 2002 came about through the closure of Power Station West. Another factor has been the trend to use coal with a lower sulphur content.

Emissions of oxides of nitrogen also fell in 1997 because both Ballylumford and Kilroot fitted low NOx burners around that time. The closure of Power Station West also had an effect.

The illustration shows the changes in the industry have had less impact on the production of Carbon Dioxide. The switch to gas at Ballylumford helped but in later years that was offset by greater reliance on Kilroot and Power Station West which were burning low priced coal. The situation appears to improve in 2002 but that simply reflects the Moyle Interconnector, whose energy comes from GB, replacing Power Station West.

Wind farms

As well as offering NFFOs, the Regulator has attempted to stimulate the market by encouraging other suppliers as well as NIE to deal in renewables. Last year he issued proposals [50] which were warmly welcomed by Airtricity, the generator and supplier of green electricity. [51] The ideas were an attempt to get round a major problem deterring wind power suppliers from entering the market. At that time they were required to balance their books, so to speak, every half hour, by ensuring they were putting into the system what their customers were taking out. But because their source of energy was so variable it was forcing them to buy top up supplies and sell over production or spill to keep themselves on target. This exposed them to unmanageable risks. In the Republic the problem is mitigated by keeping top up and spill charges close in value.

It might be said that here the Regulator has devised a neater solution and certainly one that has found favour with the Airtricity. Generators are merely required to produce 20% more energy than they have contracted to sell. These extra supplies compensate for the variability in their output. It avoids the need for customers to install half hour metering systems costing four or five hundred pounds, and also avoids the charge for a modem allowing meters to feed back information to a control point.

The company is obliged to Ofreg for another initiative. Early in its life it faced a difficulty in winning the backing of banks so it could build wind farms. But the banks wanted to see a customer base before they would lend money. It was obviously impossible though to win customers without a source of electricity. The classic Catch 22 problem. The problem was resolved through the help of Mr.McIldoon. He first encouraged NIE to sell NFFO capacity to Airtricity. He then facilitated the transmission of hydro power from Scotland through the Moyle Interconnector. Both moves provided the company with a product to sell in the Republic. In doing so Douglas McIldoon helped Airtricity to establish the much needed customer base. In turn it will be able to take wind farm energy from the South and sell it in Northern Ireland.

But the Regulator is limited in what he can do when a structural problem involves Departments other than DETI. Just outside Londonderry a small firm called Rural Generation is trying to develop a business selling Combined Heat and Power (CHP) plants to farms and businesses which have biomass supplies. Though the Government ostensibly wants to promote the use of biomass, the Department of Agriculture and Rural Development (DARD) only provides farmers with a grant of £600 per hectare to convert their land to grow willow as an energy crop. In GB the figure is £1600 and in the Republic 3000 euro. DARD defends its position saying its support comes without the same strings attached as the GB grant [52]. Rural Generation, however, says it indicates an absence of what is called joined up government [53]. Interestingly the company's conclusion on this is given a measure of support by DETI itself which admits that Government could in general co-ordinate better its approach to energy.

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[50] Ofreg (2002) Trading in Renewable Electricity, A Consultation Paper issued by the Director General of Electricity Supply for Northern Ireland, February, 2002.
[51] Drawn from transcript of interview with Mark Ennis of Airtricity, (2003).
[52] Correspondence with DARD (2003).
[53] Drawn from transcript of interview with Michael Doran of Rural Generation (2003).

Energy White Paper

Now the whole renewables market has been given a shot in the arm by the new Energy White Paper issued by the Department for Trade and Industry.[54] The most striking aims are that of cutting production of Carbon Dioxide (CO_2) by 60% by 2050.and ensuring every home is adequately and affordably heated. Energy efficiency is posited as the cheapest, safest way of reaching the targets but renewable energy is also expected to play an important part. The document suggests that hitting the target will require at least 30% to 40% of our electricity generation being delivered by renewables. The Government has already a Kyoto protocol commitment to reduce CO_2 to 80% of 1990 levels by 2010. Renewables are expected to produce 10% of UK electricity by that time as long as the price is acceptable. The aspiration is to source 20% of electricity from renewables by 2020. Here DETI has yet to set definitive targets. [55] The Assembly's ETI committee has recommended 15% of power being sourced from renewables by 2010.

Last December the EU Council of Ministers agreed to start a carbon emissions trading scheme in 2005. Under the proposals, combustion installations and certain manufacturing plants will have their emissions capped. If they then exceed their cap, they will have to buy "allowances" from those who have reduced their output. This scheme is likely to replace the UK Government's own greenhouse gas emissions trading scheme and the related energy efficiency scheme involving climate change allowances.

The White Paper estimates that by 2020 the policies outlined above will in Great Britain add 5-15% to electricity prices (per unit) for domestic consumers and 10-25% to industrial prices. Homes will pay 5% more for gas and businesses 15-30% extra. Greater efficiencies should however cause the overall bills of many users to fall, says the White Paper.

We are still awaiting DETI's new strategy on energy policy. Presumably it will shed some light as to how we will play our part in switching to renewables such as providing more detail about NI's version of GB's Renewable Obligation Certificates (ROCs). [56] One idea the Department might consider is change in the legislation to place a duty on the new Regulatory Authority to promote renewables in a similar way

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[54] Department of Trade and Industry (2003) White Paper, Our energy future – creating a low carbon economy, February 2003.

[55] Note: since this paper was first published in March, 2003, DETI has set out targets in a consultation paper, Towards a New Energy Strategy for Northern Ireland (April, 2003). By 2012 DETI aims to have 12% of electricity consumed to come from renewable sources. By the same date Northern Ireland suppliers will be *obliged* to supply 6.3% of their electricity from renewable sources.

[56] Since publication of this paper in March 2003, DETI has published details of its policy on Renewable Obligation Certificates in its consultation paper, Towards a New Energy Strategy for Northern Ireland, (April, 2003). DETI will implement a Renewables Obligation scheme in Northern Ireland similar to schemes introduced in England, Scotland and Wales. Suppliers will be required to produce evidence of compliance through the purchase of Renewable Obligation Certificates, or by buying out their obligation at the rate of £30 per MWh.

to the existing responsibility to promote gas. It would strengthen the Authority's hands in its role to encourage a reduction in carbon emissions in order to meet the UK's commitments under Kyoto and its much bigger target outlined in the Energy White Paper. But a greater sense of urgency across all issues might also be in order.

Conclusions

Northern Ireland has experienced two forms of energy regulation each identified with the Director General in charge at the time. The first was conventional in style though that observation implies no criticism. Geoff Horton operated the system according to precepts accepted and approved throughout the UK. He resisted any suggestion that he should change tack to deliver a more acceptable political outcome. Indeed by creating an organisation immune to influence from interest groups Geoff Horton bequeathed to his successor an important legacy. Offer would be seen and understood as an independent body.

When Douglas McIldoon took over he set about, as he was free to do, to challenge the system within the limits of the law. His actions may not have been expected but it is difficult to argue that they constituted a form of regulatory risk which added to the cost of capital of NIE. In so far as they were unpredictable, they were risks that large investors could diversify away.

Mr. McIldoon expanded the notion of what a regulator should do. In the absence of political direction, despite his protestations, he created a form of policy. In essence, though the target was never made explicit, it was not just to bring the price of electricity down but to bring it much closer to GB levels. His initiatives have helped but the reform of the industry is still a job in progress. That it hasn't moved faster is down to the lack of political support he needed to force change through. As he puts it himself; there is only so much an un-elected official can do.

Looking back it is clear competition was supposed to be the engine for change. In the view of DETI itself, it has however done nothing at all for any consumers except the 750 large users who have access to the eligible market. When it became clear that it wasn't having the desired effect, and that conclusion was reached fairly quickly, a radical rethink should have taken place. Putting in a new Regulator with new ideas but then denying him political backing was a flawed approach. An explicit price target should have been set by Government. Broadly speaking it should have been to offer consumers charges which did not exceed an agreed percentage above the costs faced by comparator regions in GB. Such an aim would have concentrated minds wonderfully.

Against that approach it has been argued that the costs bound up in the generator contracts created a burden for consumers that was unavaoidable if the contracts with the generators were to be honoured. On that basis, whatever the range, depth and speed of change, electricity users here would always have had to pay a premium for their supplies until 2010 at the earliest. Perhaps, but it is hard to resist the view that had there been a clear price target and the political will to pursue it, a lot more could have been achieved.

While there is a consensus that Ofreg has done what it could in difficult circumstances, there is also agreement that it is time to move to a form of regulation which is not dependent on one individual. The Regulatory Authority, created under the Energy Order, removes the personality aspect of the arrangement. That is generally thought to be a good thing.

The Energy Order also transfers responsibility for consumer matters in electricity back to the General Consumer Council. Though this was opposed by NICCE, the organisation has admitted that some stakeholders found difficulty in distinguishing it from Ofreg because the two were based in the same office. NICCE says even the Department appeared to have that problem, ignoring it for example when drawing up the economic blueprint Strategy 2010. It has nevertheless overcome these handicaps to uphold, during its lifetime, the interests of electricity consumers.

On energy efficiency and renewable energy, imagination has been demonstrated in the handling of structural problems. The progress made in these fields is down in no small part to Ofreg. However, it is perhaps these issues, regarded in the past by many as a side show, that will pose the biggest challenge for regulation in the future. If we expand renewables to the levels envisaged in the DTI Energy White Paper, it will imply a transformation of generation. Perhaps a renewables contribution of 30% to 40% can be delivered by one or two large wind farms. But is also likely that in the future we will have electricity produced and fed into the grid by a variety of sources including biomass, wave and tidal energy, hydro, CHP including micro CHP, many of the operators of which could be quite small in scale. Up to now regulation has had to deal with just a few large producers and suppliers. The future may be quite different. Is it designed to cope? One doubts it. It is also questionable whether, even with the reforms of the new Energy Order whether the Regulatory Authority has sufficient control over energy efficiency. The DTI White Paper describes it as the cheapest, safest way of hitting the targets. The Authority is charged with promoting energy efficiency but it is not clear that it has the levers to push through the necessary changes.

Lastly the logic of an All Ireland market suggests even closer co-operation between the Regulatory Authority and the Commission for Electricity Regulation in the Republic. It may even require one Regulator for the whole Island.

Postscript

A number of lessons can be drawn from the Offer/Ofreg's 10 year experience which can be applied to other sectors, such as water, which are now being considered as candidates for regulatory treatment. Two of the most obvious ones are: (a) we should be very wary of any regulatory system which critically relies on competition to drive down prices and (b) we should have a better understanding of the risks, or lack of them, that the industry faces.

Let us have a brief review of the characteristics of both the T&D and generation businesses to see how they might be shared by the water industry. T&D is a classic natural monopoly. It provides an essential service to which there is no real alternative. The company is not overly dependent on any one customer. If the upside is limited by low growth, that is more than compensated for by the lack of competitive threats T&D faces. These factors are reflected in the company's profit record which exhibits low volatility. Even now there remains a strong argument for refinancing the company with 90% to 100% debt to take advantage of its low risk nature[57].

Up to now the generating companies have not had to compete with each other. Even when they do, they will only have vie for custom in a limited way because Northern Ireland hasn't a surplus of generating capacity and is not likely to have. In other words their output will probably always be in demand. Contrast that with the generation market in England where companies face massive and unexpected competitive threats. A further point about generation is that the product is not something that can be refined or developed or repackaged. Management's only job is to cut cost. Since power stations have huge amounts of money invested in them, financing is one of their biggest charges. Any arrangement which reduces that, such as pre-build competitive tendering, is worth pursuing further.

The similarities between the water industry and the power industry are fairly clear. No one is going to provide a second set of pipes to supply water and remove sewage. It is a natural monopoly. As long as water complies with all the various standards, it passes muster with customers. Few competitive threats exist. The industry is likewise hugely capital intensive. Keeping financing charges down will be one of the biggest challenges facing new management. Prospective lenders will want reassurance about the income stream from customers. They will also want to assess the risks involved with the much needed investment programme. Whether they provide finance in the form of equity or debt, they will price those risks in the same way and charge accordingly. It is something of a fallacy to argue that because in tough times utilities are forced to cancel dividends rather than surcharge customers, stakeholders are better protected by equity rather than debt. If the earnings of utilities were to become markedly more volatile, their cost of capital would rise, requiring regulators to allow them to charge more. In any case financiers can structure all-debt deals so that part of the loan acts as a quasi-equity cushion earning a much higher return than the rest of the financing. The judgement call is to decide which market, debt or equity, is better attuned to the needs of a low risk business such as the water industry. The regulatory

[57] Delargy, J. (2002) Could financial engineering reduce the cost of electricity in Northern Ireland? (2002), a dissertation submitted in part fulfilment of an MSc in Finance and Investment.

authority should be involved in that debate. If it has a duty to ensure economic purchasing, why not economic financing as well?

Much of the argument between regulators and industry arises because the companies have the facts and the regulator has only his estimates arrived at with the help of expensive consultants. It's called asymmetry of information. Anything which aligns the interests of the industry and the public it serves reduces the problem and would be welcome. The Glas Cymru/Consumer Service Corporation model is one solution. Some have their reservations as to whether it can work here but it's a concept that is worth exploring further. If that route is chosen it implies the need for only a light regulatory touch. The legislation would have to be cast in an appropriate way.

Efficiencies are improved in any industry where there is a market for corporate control ie sacking the bosses when they do not perform. In Northern Ireland that culture is a markedly absent. Most directors here have very enviable job security. In theory it should be the shareholders who create the momentum for change at the top but if they don't act or we end up with a water industry which doesn't rely on equity investment, then stakeholders should be able to raise these questions with the assistance of the regulatory authority.

It is probably the case that most people here do not have confidence that a state run water industry can ever be made efficient. I do not share that view but I recognise that at the threat of the first water bills, the clamour for private sector management will build up. That implies regulation. Through no fault of successive regulators it hasn't worked well here. As a community we need to get it right next time.