LETTERS & NOTES ON REGULATION

Energy Regulation: lessons from experience

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Energy regulation: lessons from experience [1]

The Chairman has asked us to consider two decades of regulation but, in dealing with energy regulation, I have to look much farther back into the past – some fifty years – to see the present situation in context. Regulation of the two energy utilities is bounded by much wider regulation of all the energy industries, the so-called "energy policies" that British governments have almost always had. Over the last few years, there has been a move from minimal energy policy constraints to a state in which those constraints are once again binding, indeed dominant.

My initial observation is that the energy market of today is beginning to resemble the energy market of the 1960s and 1970s in which governments attempted to foresee the energy future and then laid central plans to deal with it, using highly interventionist measures. Why is this particular wheel apparently coming full circle? Is it because central planning has been revealed to be successful in this field even though it has failed everywhere else? Or is it an example of reversion to the mean? In other words, is the relevant mean or norm a state of the energy market in which governments take the major decisions, such as what energy sources should be used for future power plants? If that is indeed the norm, how can we assess it in terms of consumer welfare? And how should we view what we can now see was a very brief period of liberalisation of the British energy market, from the mid-1990s to the mid-noughties? Considering these questions will give me some basis for drawing lessons from experience and for stating conclusions about what has worked and what has not.

A potted history

I divide the history of the energy market since World War Two into three sub-periods.

First were the thirty five years or so up to the early 1980s when, with coal, gas and electricity all nationalised and the oil industry subject to various controls, governments tried very hard to keep market forces in check. The relevant government department (Ministry of Power, Ministry of Technology, Department of Energy) had Soviet-style blueprints for the energy future. It made (wildly inaccurate) forecasts of demand which led it to predict "energy gaps" which only government action could fill. A more and more protectionist energy policy attempted to support the indigenous coal mining industry by shutting out imports and taxing competitive products. At the same time, government brought into being a nuclear industry. The nationalised electricity industry became an industrial support mechanism. It was not permitted to use natural gas, it had to burn much more British coal than it would freely have chosen and it had to invest in British-designed nuclear power stations which were generally not built to time or to cost and also to support the British heavy electrical equipment industry. The costs were passed on to taxpayers and captive consumers. It was a wonderful time to be an energy producer - rather like being a member of a cartel which was invulnerable because it

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[1] Presented to the Hertford Seminar on Regulation, on the theme of *Regulation and Competition in Retrospect*, 9 December 2011.

was run by the government. Cartelisation of the energy market allowed producers to enjoy quiet lives, uninterrupted by the need to compete. Producer pressure groups had a substantial hand if not in instigating at least in maintaining this regime, as did the scientific establishment which favoured a nuclear power programme which was a rich source of research grants. The regime protected home producers, raised energy prices and was generally much to the detriment of consumers. Politicisation of the market led market participants to seek rents from government rather than to trying to innovate, reduce costs and bring down prices.

The *second* period started in the early 1980s when Nigel Lawson stopped the civil servants working on their energy blueprints, arguing that the important thing was to price energy realistically, and began a process that eventually led to energy market liberalisation. Energy privatisation in the 1980s did not in itself help much because the privatisation schemes (especially gas) did little to liberalise markets. But privatisation was a helpful enabling measure which removed the prohibition on entry that had existed under nationalisation and permitted energy regulators and the competition authorities to begin to make potentially competitive markets actually competitive. Energy regulators, merged in Ofgem in 2000, led the way among British utility regulators by promoting competition, assiduously paring back "natural monopoly" networks to genuine natural monopoly activities and insisting that competition rule in the rest of the industries. Of course, there was stern resistance from the producers which tried, both at the time of privatisation and later as liberalisation was attempted, to retain their monopoly power. But they lost their quiet lives and, by the mid 1990s, the liberalisation process was well under way and for ten years or so Britain had one of the most competitive energy markets in the world. Rent-seeking was much reduced, as the government was no longer handing out so many favours. There was genuine rivalry in the energy market. Old-style energy policy could not survive, except by way of some transitional measures (such as the coal contracts).

Clearly, much has changed in the *third* period – the last 5 or 6 years. Producer dominance seems to have returned. External circumstances have changed in the sense that crude oil prices have increased compared with the earlier years of this century but it is striking that gas and electricity producers now seem quite confident, when they raise prices (as they have frequently done) that their "competitors" will before long follow suit. I am not, of course, suggesting that there is explicit collusion. Rather, the government has created an environment in the energy sector which is inimical to competition: it has taken certain major decisions to itself, recreating an energy market of rent-seekers trying to extract favours from government to replace a market of innovators trying to bring down costs and then passing the benefits on to consumers. The full circle is taking us back to the cartelised structure with which producers were so happy in earlier times. In the process regulation of the energy utilities has changed fundamentally.

What has happened?

When New Labour came to office in 1997 it carried out a review of regulation which concluded that the existing emphasis on competition-promotion should be maintained but also said that utility regulators should be given statutory guidance on social and environmental objectives. I remarked at the time that this suggestion of a widening of the responsibilities of utility regulators could turn out to be the precursor of intrusive regulation. For a while the government did not interfere in Ofgem's efforts to press ahead with liberalisation of the gas and electricity markets. But, in the second half of the first decade of this century, all that changed under the then Labour government and the coalition has continued along the same path. Independent regulation of electricity and gas has been crowded out, overwhelmed by the return of an "energy policy" that sets out two strategic objectives relating to security of supply and climate change. Government actions in the energy market are now so intrusive that the regulator cannot act independently: in effect, it is primarily carrying out the wishes of government. Nor can it promote competition effectively because government has so undermined the competitive processes that its predecessors in energy regulation had begun. I should also mention two government actions aimed specifically at utility regulators – one is to change Ofgem's objectives so the primary duty to promote competition is downplayed, and the other is to insist on regulatory boards staffed with government-appointees rather than responsible individual regulators.

Energy policy has returned as it left – a mish-mash of overlapping and untidy measures has appeared over the last few years, though now principally intended to encourage substitution of renewable for fossil energy sources and to promote energy saving. Carbon budgets are supposed to bind successive government to reduce greenhouse gas emissions in stages, reaching 80 per cent by 2050. The government is not content with applying the neo-classical remedy of setting a minimum carbon price and then allowing the market to adjust. It is attempting to set such a price but it is also applying a range of other measures in which, in general, renewable and energy efficiency obligations are imposed on energy suppliers which bear them happily enough since the costs are passed on to consumers. Furthermore, the regulations probably act as a barrier to entry which means that even though suppliers may not actively seek regulation, as George Stigler thought they often do, they are content to see the costs of potential rivals raised. Energy costs and prices are being increased by government policy and energy prices are moving more out of alignment with costs because a new network of cross subsidies has been instituted under which some energy consumers subsidise other energy consumers. We should, of course, recall that one of the benefits of privatisation was supposed to be the ending of the cross subsidies that existed under nationalisation. Rent-seeking is back, encouraged by the repoliticisation of the market: potential suppliers of non-fossil energy are queuing up to prise out of government the subsidies available to those who invest in lobbying.

Electricity regulation has been particularly affected because the days of government-controlled power station programmes have returned. As under nationalisation, the electricity industry is the principal chosen instrument of the new form of government control without government ownership. The proposed electricity market "reforms" are predicated on the assumption that it is the government's responsibility to determine future power station programmes and to institute mechanisms to provide security of supply and that it has the knowledge to carry out these responsibilities. The government, which once upon a time, forced coal and nuclear power onto the CEGB, is now forcing renewables and possibly nuclear on to the privatised generators, leaving the regulator on the sidelines. Like the CEGB before them, the generators have little incentive to resist since they do not bear the costs. Only very recently, as signs of consumer discontent have appeared, has the government shown some signs of anxiety about where its policy might be leading. In his Autumn Statement, the Chancellor resurrected another cross subsidy policy from the past – help for energy-intensive energy users (a powerful lobby group) and there may be a more general retreat before long.

Is it worth it?

It could be argued that imposing costs on the consumer, and at the same time wrecking the previous framework of independent pro-competition utility regulation, are prices worth paying – that the government's "strategic objectives" are so important that we should grin and bear the costs. What can we make of the two objectives?

1. Security of supply

   The idea that government can enhance the security that would otherwise be provided by markets is superficially attractive but, as I have argued for many years, there is no major market failure in security provision. Security is an important attribute of any energy product and one for which consumers are willing to pay and it will therefore generally be incorporated in prices. Market-based security will not be "optimal" but, outside the world of "Nirvana economics", nothing is. Comparing market-based security with government attempts at security provision, the latter tend to blunt the incentive for investment in security provision both because it is believed that "government will provide" and because political uncertainty is introduced thus reducing the willingness to invest. As can be seen in the case of the UK in the 1960s and 1970s, security is likely to be reduced not increased by government action. I would therefore conclude that security provision does not justify pursuit of a costly interventionist policy.

2. Climate change

   There are also serious problems underlying pursuit of the climate change objective. There is room for reasonable people to differ about the influence of human beings on the climate, the likely extent of any future climate change, the associated economic and social consequences and the need for government action. The conventional view is that governments must act because the looming problems are so serious. But, because of information failures and government failures in policy implementation, it is very difficult to translate that view into action that will in practice improve social welfare.

   Information failure is a particular problem in that not only is there huge scientific uncertainty about how much (if any) global warming there will be as a consequence of human activities, there is also extreme uncertainty about the economic and social consequences of a given amount of warming. The economic and climate models that are used as a basis for the standard conclusion – that drastic human-induced climate change with dire economic and social consequences is virtually certain in the rest of this century - go out into the far distant future, typically a century or more, and well beyond the range of any experience. Such models seem a wholly inadequate basis for the government to conclude, as it evidently does, that it knows the future direction of climate change, its approximate magnitude and its likely effects sufficiently well to formulate a highly interventionist policy to deal with the problems it foresees.

Like its immediate predecessor, the present UK government shows no awareness of the extent of the uncertainties surrounding future climate change and its possible effects. It seems determined to plan centrally, with all the rigidities that implies, committing one of the commonest errors of central planners – to view the future as though it contained only a narrow range of possible outcomes – leaving little flexibility to deal with the inevitable surprises. Policy towards climate change should reflect the huge uncertainties of the future, retaining a degree of flexibility, rather than taking a fixed position.

The three questions

The speakers this evening have been asked to provide crisp answers to three questions. I give them below.

***What has worked*?** The policy that was pursued for the shortest period. Energy market liberalisation was a successful policy in Britain that quickly fell victim to powerful forces – in particular, civil servants and politicians that wish to tinker with markets and pressure groups that seek favours.

What has not worked? The policy that was pursued for longest. An interventionist energy policy that suppresses independent pro-competition regulation is favoured by powerful pressure groups and is usually appealing to governments. Mainstream economists, who assume governments are attempting to maximise consumer welfare, must find it paradoxical that governments should, except for a brief interlude, have pursued policies that do not work for consumers. Of course, it is not paradoxical at all. Almost all governments think they can tweak market outcomes to win votes and they are swayed by powerful producer groups, environmental groups and the scientific establishment which fill the information vacuum that always exists about complex issues. That, it seems to me, is the underlying reason for mean reversion. The default energy policy is highly interventionist because that is what is in the perceived interests of the organisation that puts energy policy in place and the interest groups that influence its decisions.

What lessons can be learned from experience? We should be very wary of the kind of policy so often used unsuccessfully in the past to which governments have recently reverted - accepting the latest piece of conventional wisdom and establishing a central planning framework to plan for it, committing to a state-promoted investment programme for decades ahead that may turn out to be totally misguided. We need to adapt as we go along and as problems change. I think experience suggests that we should eschew centralised "solutions" and revert to a policy used for all too brief a period - decentralised muddling through or, as it is more technically known, ensuring that there is a competitive energy market.