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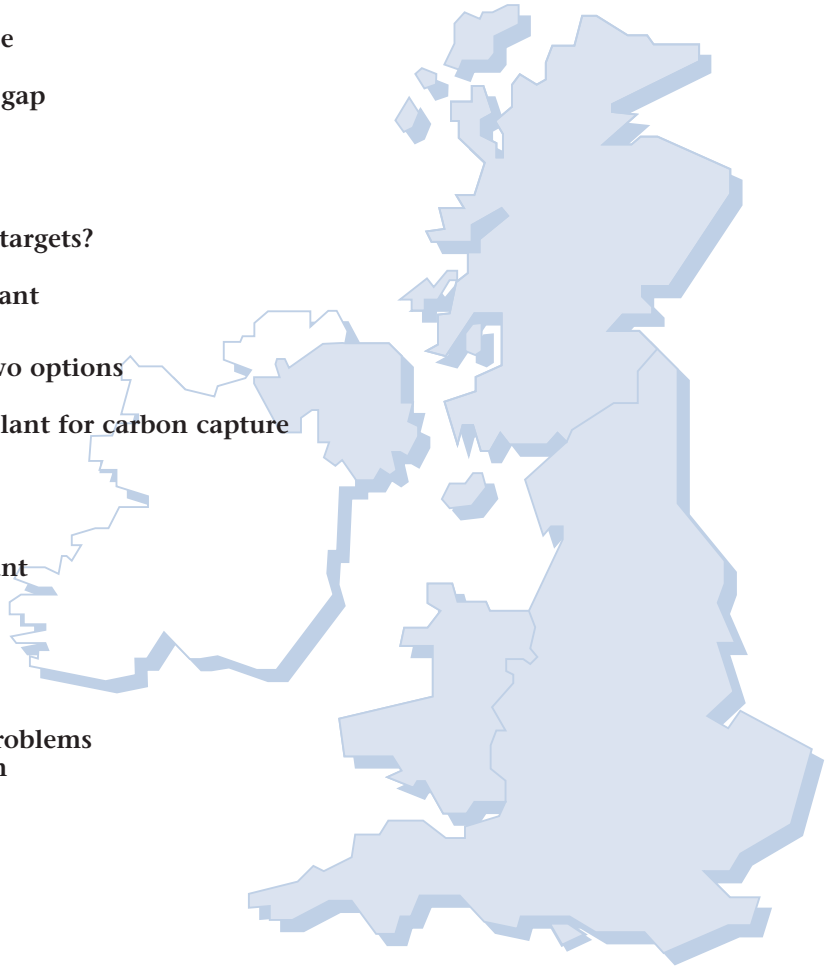

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THE POWER UK INTERVIEW

Professor Stephen Littlechild

To many, Professor Stephen Littlechild is regarded as one of the founding fathers of electricity liberalization. He played an important part in the shift in thinking that led to privatization of the industry in the UK and was then installed as its first electricity regulator. He stepped down from this role soon after New Labour took power and has since pushed the benefits of liberalization around the world. But this job seems to have become increasingly tough in recent years following a number of events that have taken the shine off liberalization – the debacle in California, the demise of Enron and near collapse of British Energy. Such events have hardened the attitudes of those that oppose liberalization. And as power prices are shooting up both here and elsewhere, the prospect of establishing a fully liberalized pan-European power market seems to be shrinking by the day. **Dr Dominic Maclaine** asked him whether he thought the tide had turned against liberalization?

Last month, Professor Stephen Littlechild delivered a talk to a packed lecture theatre at the Royal Society of Arts. The lecture was part of a series set up by the Institute of Economic Affairs and London Business School. Named after Michael Beesley, a professor at the London Business School, who died in 1999, the lectures cover different aspects of regulation – from energy to broadcasting.

The lecture provided Littlechild with +an opportunity to revisit some of the themes that he explored in his previous Beesley lecture given four years ago viz. competition, regulation and government.

In his previous lecture he suggested the concept of a "standard model" of regulation. This acknowledged that networks would continue to be monopolies that would need regulation. In contrast, goods and services supplied over those networks could be subject to competition and would not need the same degree of intensive sector regulation. Some restructuring was typically required to separate these monopoly and competitive elements of an industry, and to secure sufficiently competitive markets from the beginning.

He suggested back then that this standard model had increasingly been adopted worldwide. But although there were some moves to extend, implement and refine the standard model there was also some reaction against the concepts of privatization, competition and regulation, especially following the events in California in 2001.

Since then there have been more proposals to supplement and influence regulation, or even to replace market and regulatory outcomes by the decisions of government. Moves to extend the model to additional countries have since largely come to a halt. For example, at the time of the previous lecture he noted that the model was then under active consideration in several countries including Mexico, the Philippines, India and Thailand. However, there have been few if any subsequent developments there, at least on privatization and competition. Regulatory bodies have been set up, but they do not have much of a private or competitive market to regulate. The World Bank, too, is now more cautious about privatization and is rethinking its stance.

Littlechild is concerned about the stalling of the liberalization process. "I am very disappointed," he says, " because we thought it would be very beneficial in this country and it has been. It is disappointing that other countries have not gone through with the whole privatization, restructuring and liberalization process which would have brought benefits there too."

"California was the catalyst in the sense that it gave those people that were concerned a tangible excuse to say 'no further, let's wait and study this more'. Even in the absence of California, people would have been looking for reasons to slow it down or defer it. For instance, in some countries, where prices had been previously been held below cost, privatization would have meant putting up prices up to cover costs and that was politically unpopular. Elsewhere, there was a great resistance from the incumbent monopolies to be broken up and that was influential too."

Benefits underestimated

Although some of these concerns are understandable, the benefits of privatization and liberalization are far greater than any of its negative

impacts, says Littlechild. He cites the experience in the UK as clear proof that this is the case.

"At the time of privatization, people did not expect that fuel costs and other costs would go down at such a significant rate," he says. "In fact, one of the first things the government did was to increase prices before privatization to make sure they covered costs."

However, costs fell dramatically following privatization. In 1996, David Newbery and Michael Pollitt at Cambridge calculated that privatizing the Central Electricity Generating Board (CEGB) led to operating cost savings and reduced costs of capital expenditure with a net present value of about £9 billion (*see Power UK issue 130 p56*).

'Our preliminary calculation is that the total aggregate benefits were of the order of twice their figure ie more than £18 billion present value.'

Littlechild, along with Geoff Horton, ex-Northern Ireland power regulator, have taken another look at this work and, by making two modifications, have estimated that the benefits are significantly greater than previously thought.

"Costs of generation, transmission and distribution have gone down further since their study," he says. "Prices to customers have also gone down which means the total benefits are bigger than previously thought."

"In addition, we argue that the CEGB would have built more coal and nuclear stations than Newbery and Pollitt assumed, and that these would have been more expensive to run than CCGT plants. The fall in gas prices after 1996 increases the extent of these savings."

"We thought is was worth checking the assumptions they made. Our preliminary calculation is that the total aggregate benefits were of the order of twice their figure ie more than £18 billion present value."

The fashion up until recently has been to argue that the introduction of new electricity trading arrangements led to significant falls in wholesale prices. However, research by some academics, including Joanne Evans and Richard Green (*see Power UK 138 p 28*), seems to back up the claim that this is a myth – evidence that Littlechild does not dispute.

"We didn't ask what had caused that fall and haven't done a particular study of the reasons why," he says. "A number of other economists have looked at whether Neta or deconcentration led to lower generation prices. The balance of evidence nowadays seems to be that is was mainly due to deconcentration which I am quite content with."

In addition to factoring in the additional cost savings and price falls since the previous study, Littlechild and Horton use a number of different assumptions to come up with another what-if-privatization-had-not-happened scenario ie counterfactual – which portrays privatization in brighter light than the previous study.

"Newbery and Pollitt made a certain set of assumptions in their counterfactual," he says. "We make some different assumptions – in addition to arguing that there would have been a greater capital expenditure on coal and nuclear stations than they assumed, we also believe that the electricity industry would have had to raise its prices more than they assume because the Treasury was in the process of giving new guidance to the nationalised industries. We therefore think that, in the absence of privatization, not only costs would have been higher than they assume but also prices too would have been higher."

Benefits to customers

So why, after so many years, has Littlechild decided to look again at the Newbery/Pollitt study?

"It is an important study that is cited internationally that privatization is a good thing but customers do not get anything out of it," he says. "The previous study estimated that virtually all of the benefits went to shareholders. Our new work shows that the benefits were bigger and that investors and customers got of the order of half each."

He goes on to cite that in addition to benefiting from privatization's fruits, customers have also benefited from the introduction of retail competition.

"It has been an almost unqualified success in the UK," he says. "Price reductions have been available and customers have switched supplier. For the most part I think it is going in a most satisfactory direction.

"When we at Offer were first looking at market opening I was hoping that 10% of customers would switch and I was thinking that I can just about defend the policy if 5% do," he says. "The fact that 43% have switched is beyond anybody's expectations."

However, that still leaves a large rump of customers that have not switched suppliers since the introduction of domestic electricity competition (*see Power UK 122 p 37*). Even Littlechild seems slightly mystified that the figure is still so high after so long.

"I guess that it is not so important to some customers to get the price reductions that are on offer. They prefer the stability of the supplier they know than whatever might be involved in switching to

an alternative supplier," he says. "Those customers who care about lower prices have switched. Those that have not either don't care very much or are a bit uncertain about the process. That proportion is steadily reducing but clearly for half the customers it is not that important."

Costs

This means that those customers that have not switched are paying a lot for introduction of competition – firstly, they are paying for the systems put in place to enable competition while not receiving any benefit, and secondly, since prices are now rising again, they have effectively lost out by not taking advantage of the competitive prices, that undercut the regulated price, which were on offer for a period of years.

Littlechild does not accept either of these points. He argues that customers benefit from competition even if they do not switch, and lower prices are still on offer from competitors. But he now believes that more of the costs of introducing domestic competition could have been borne by the incumbent companies (the Public Electricity Suppliers) charged with setting up the market

"It seems to me that we could have left a few more costs with the Public Electricity Suppliers," he says. "There is no doubt that they haven't needed to cut their prices immediately to meet their competitors. Some of the rents have stayed with them and so one could have been a little more robust on leaving costs of opening the market with them. For instance, we could have left a greater proportion of information technology costs with the incumbents."

Net benefits

Research conducted at the Science and Technology Policy Research Unit at the University of Sussex (*see Power UK 127 p41*) estimated that between 1998 and 2002 the total cost of introducing competition amounted to over £1.6 billion, while the net benefits were no more than £650 million.

The SPRU research also argues that the price controls, or rather restraints between 1998 and 2002, were set in such a way so as to stimulate switching – since they only partly reflected the fall in generation prices following the ending of contracts put in place at privatization. The rate of net switching slowed markedly once the price restraints were relaxed in 2002 (*see chart p35 Power UK issue 122*).

Littlechild disagrees with this assessment. He says that the price restraints were set so as not to discourage switching, and does not believe that the price restraints had a significant impact on switching (in contrast to the situation in some other countries), He notes that the rate of gross switching remained about the same before and after the removal of the price restraints.

He points out that price restraints can deter switching but not artificially increase it. If they were deterring it by keeping incumbent prices too low then removing the restraints would have allowed incumbent price increases leading to higher net switching rather than lower. It is possible that the removal of the uncertainty and threat posed by price caps made it more attractive for incumbents to keep their customers.

This might have encouraged the companies to cut prices rather than raise them. He also argues that current switching rates, including among the pool of customers that have already switched once, show that price restraints were unnecessary.

"In retrospect, we probably didn't need a formal price control," he adds. "The purpose of the price control was two-fold – to make sure that the gains that resulted from the ending of the coal contracts got passed through to customers and also to avoid an embarrassing price increase pretty soon after the market opened.

"I haven't talked to the companies but I guess we could have got an informal assurance to get these things done," he says. "In that case we wouldn't have had to put a formal price control in. Why is that important? Experience in the UK and around the world shows that it is very difficult to get rid of a price control. It was unnecessary and it has proven to be very difficult to get rid of a price cap once you have got one. It wasn't easy to get rid of it.

"The evidence in other countries shows that prices are held lower than they otherwise would be and in some cases held below cost and used for political purposes," he says. "This kind of intervention makes suppliers uneasy and discourages competition."

"What we have seen from around the world is that many other countries have seen a steady rate of change," he says. "The fastest switching rate was in the UK which was 11% per year initially but I don't think that the price control helped stimulate switching. The price control was set at a level that did not materially affect the switching rates," he says.

Switching rates

Littlechild acknowledges that another market may have played its part in stimulating electricity retail competition viz. new entrants from the gas market, which was liberalized at more or less the same time.

"Let's not forget that Centrica came in from the gas sector with zero electricity customers and is now a significant player," he says. "We have had relatively few players in from scratch and at a small scale."

Whatever the impact of the price restraint or the opening of the gas market, it is undeniable that a proportion of electricity customers keep switching again and again – a dynamic force which keeps companies on their toes.

"In the last year, a net 13% of customers moved between non-incumbents, representing nearly 23% of their customers," he says. "These customers were presumably attracted by better offers within the competitive price range, quite independently of the level of the previous price cap."

"It is quite remarkable that a significant proportion of customers keep switching," he says. "I am inclined to believe that this reflects a healthy competitive market where there are many active players. Doing it once gives you a good deal of confidence to do it again. Perhaps initially, both we and others overestimated the ability and willingness of customers to learn quickly."

Littlechild seems to be quietly satisfied that the proportion of UK customers that have switched is much higher than around the world. There are few other countries where switching rates have come close to those in the UK – the Nordic countries being the exceptions (in Sweden and Norway 29% and 24% of customers have switched, respectively, after 5-6 years).

He acknowledges that one reason why the rate of switching in the Nordic countries is greater than in other countries is because average electricity consumption by customers is higher.

He says: "There is evidence there that there is more switching amongst those with all electric houses than there is amongst those with non-electric houses."

Small supplier concerns

However, the introduction of retail competition has not been an unqualified success. Earlier this year (*see Power UK issue 137 page 21*), Littlechild urged Ofgem to make a number of changes to the retail market to encourage small suppliers into the market and boost competition.

At the moment, the domestic retail market is dominated by six vertically integrated suppliers whereas small new entrants have only about half a percent of the UK domestic (residential) electricity market (excluding affinity marketing deals such as offers from the likes of Union Energy which is supplied by Scottish Power).

Littlechild notes that new suppliers have continually entered and grown but some of the faster growing ones have experienced difficulties and have been bought out by larger incumbent players.

"I would have liked to see more newer entrants because it is important to have a continuing flow of new entry," he says. "I am concerned that some of the situations they face, such as entry processes, tend to favour the larger incumbents."

He also urges Ofgem to consider removing the licence condition that requires all customers to be able to cancel any contract at 28 days notice.

"I think the 28 day rule restricts competition generally because it either restricts, prevents or discourages suppliers offering longer term contracts, typically at fixed prices," he says. "The concept of signing up for several years has been discouraged both by the 28 day rule but also by Ofgem's approach to this. I regret introducing that rule now and I think we could stimulate competition more by getting rid of it."

A change to this rule could encourage companies to offer more sophisticated, technology related deals to customers and encourage so-called 'facilities competition' – mirroring what has happened in the telecoms market.

For some years, much of the debate in the telecoms sector was about how to stimulate 'service competition' – where new entrants buy access to a network and effectively resell existing services offered by the host telecoms company to customers.

However, more recently, with the advent of broadband technology, discussion has shifted to how to stimulate 'facilities competition' – where new infrastructure needed for a new service, eg broadband services, is built by new entrants.

A parallel debate is going on at the moment in electricity. For the most part, competition so far in power has been about services competition where companies effectively resell the same power that flows through the wires to customers. Littlechild hopes that competition can now move to a new phase where companies invest in new infrastructure as part of a customer's supply deal.

"If suppliers had a longer term contract they would find it worthwhile to put in new bits of kit, say for smart metering or energy efficiency for example," he says, "which up until now they have been discouraged from exploring."

Is the logical progression of this a shift to embedded generation?

"In principle, the answer is yes," he says, "but I suspect that the technology for embedded generation is not economic yet for an individual householder," he says. "It could be the next stage of retail competition after smart metering."

Transmission shake-up?

Littlechild is now turning his thoughts towards shaking up the regulatory framework governing transmission assets.

He argues that analyses of transmission policy need to incorporate explicitly both market and regulatory failure, to evaluate the likely extent of each, and to take steps to minimize the extent of this. Analyses also need to recognise that a significant part of transmission investment seems to be driven by considerations other than economic efficiency.

He says: "It would seem more sensible to recognise and quantify any 'non-economic' considerations, and to enable both merchant and regulated investments to qualify for an associated remuneration."

Littlechild says that he would like to see customers getting more involved in the decision making process and perhaps following in the footsteps of Argentina where decision-making power was transferred from transmission companies and regulatory bodies to transmission users and proposed investments were put out to competitive tender.

"It brought about greater efficiency in Argentina," he says, "by disciplining decisions about whether and how to make transmission expansions, and securing their construction and operation at lower cost."

"I would like to see users to get more involved in transmission network decisions," he says. "These would be large and small electricity users as well as the generation companies. When it comes to major expansions I think there is a case for letting them have their say and expressing a view about where they want the expansions and whether the expansions are worth paying for."

Of course, one of the big issues facing the UK on the transmission front is the growth in renewable energy in Scotland and resulting need for lines to export the power to the demand hungry south.

"If you have other criteria than benefits to customers, such as providing transmission expansions for windfarms that would otherwise be uneconomic," he says, "then the government needs to get involved and say 'we think that customers should pay for this' as a way of improving environmental output."

Drawbacks

But he stresses that he is not advocating that government does this. On the contrary, he voices concern about the increasing involvement of government in the energy sector in the UK.

"Energy policy, emissions, renewables, nuclear power, security of supply, affordability and social justice, rising prices and energy efficiency – is it not remarkable that all these important issues concerning the future of the industry are now the responsibility of the government rather than the regulator or the market?

"In the past, these issues were left to the market and to the regulator who would determine the costs and benefits of such a proposal. Governments do not always want the outcome of a competitive or regulated market, and prefer to take their own decisions," he says.

"This is not quite what I had in mind in arguing for reducing the role of regulation. I am interested in ways of reducing regulation that transfer important decisions to customers and other market participants rather than to government."

In the forthcoming government reviews that will cover energy and environmental policy he asks whether it might be worth adopting some radically different approaches to climate change issues – nuclear is one option that could be looked at.

"The costs of renewable energy seem to be high," he says, "and the National Audit Office is predicting that these costs will rise even higher. They seem to be extremely expensive. It makes sense to ask whether this is the cheapest and most effective way of meeting that environmental goal. Clearly, nuclear has to be looked at in that context."

However, he goes even further and asks whether the government should stop and take a radically different view of the environmental problem.

"I wonder whether we should take as given those environmental objectives at this stage or whether there might be some merit in waiting a little longer before we decide what is the most sensible and cost-effective policy," he says.

"For example, would it be more sensible and economic to deal with the consequences of global warming than to try and postpone it? None of these measures avoid it, they only postpone it a little, perhaps it would be better to work out how to cope with it instead?".

Personal profile:

Professor Stephen Littlechild is currently emeritus professor at the University of Birmingham and a senior research associate at Judge Business School, University of Cambridge. He also works as an international consultant on privatization, competition and regulation, especially in electricity and telecommunications.