

Response to OFGEM Second Consultation on Distribution Price Control Review

General

Climate Change Capital (CCC) welcomes the opportunity to respond to OFGEM's second consultation on the Electricity Distribution Price Control Review. This Price Control has long been recognised as a vital opportunity to begin to address those fundamental obstacles to the development of distributed power generation that are presented by the present regulatory framework. An effective and considered approach to reforming the structure of the Price Control will be of immediate benefit in resolving potential tensions with Government policies to promote low-carbon generating sources, thereby delivering greater economic efficiency. The introduction of appropriate regulatory incentives to deliver real, operational experience in advanced network operation will be of central importance to Government, OFGEM and companies in informing decisions over the long-term future of network at the time of the subsequent Price Controls.

Connection Charging

CCC welcomes moves to change the incentives on DNOs to connect embedded generation. Previously, large scale generation, connected to NGC's network, enjoyed a demonstrable advantage over small-scale generation. As transmission system operator, NGC was incentivised to connect new generation in the interests of promoting competition; by contrast DNOs were, at best, indifferent to generation connected to their networks. This imbalance will be partly rectified by the move to a "shallow connection" methodology for generation connected to distribution networks and the introduction of generation use of system charging. Indeed, adoption of shallow connection will help the DNOs meet their licence duty to promote competition in generation that was introduced relatively recently introduced in the Utilities Act 2000.

However, while this shift is welcome in addressing the asymmetry between transmission- and distribution- connected generation, it does not reflect the fundamental shift in technology, both in generation - driven by the transition to low-carbon forms of generation - and power systems engineering which will be a feature of network systems over the decades ahead.

Proposed Regulatory Incentives

The consultation paper recognises this future direction of distribution network developments, with networks offering the potential to accommodate increasing amounts of generation, and to shift away from historic modes of operation. The systems may become "active" rather than passive, such that it will become far more difficult to anticipate the flow patterns within a network. The DNOs will have to manage constraints on their network and possibly also reactive power and response, should these forms of generation increase at the distribution level. Accommodating such change will not be straightforward and we welcome OFGEM's two initiatives in this area; namely the Funding Incentive and Registered Power Zones .

We recognise that the introduction of these schemes may lead to higher costs in the short term; but the term may be extremely short and, in any case, eventually lead to lower overall costs of electricity supply. We believe there is a strong likelihood that this will be the case, since the initial increased charges will allow more distributed generation to be accommodated on the distribution network. This will allow competition between large and small scale forms of generation, which has previously been distorted by the more favourable treatment of generation connected to the transmission system. Such an increase in competition should lead to lower overall prices.

We do not believe, at this stage, that it is possible to prove this assertion. However, experience suggests that it will. For example, the higher costs of transmission imposed on customers in England & Wales by the separation of transmission from generation in 1990 led to the overall costs of transmission, including constraints costs and other system costs, increasing. However, this allowed the introduction of competition in generation and few would disagree that, overall, wholesale power prices are lower as a result. The evolution of the incentives for DNOs to connect generators enjoys parallels with this earlier process, and provides reasonable grounds to assume that customers will benefit from heightened competition arising from the proposed initiatives to facilitate the growth of embedded generation.

Similarly, it must be recognised that the necessary empirical evidence is simply not available at this point in time to make an accurate estimate of the scale of benefit of these initiatives. However, it is possible to draw a meaningful comparison to the last time OFGEM made such an innovative change. This was the introduction of the UMIS (subsequently the TSS) scheme in 1994. For a small increase in NGC's costs (~£5m) it became incentivised to minimise the costs of system support (constraints, reserve, response, ancillary services). Although the estimate for these costs amounted to £690m for 1994/5, the outturn costs, at £478m, were well under the initial target of £570m and later fell still further to £230m per annum.

The key feature of this mechanism is that it started to give NGC the incentive to manage the network at minimum total cost (i.e. assets and system costs) and so it could choose between spending resources on transmission infrastructure or paying consumers or generators to change their pattern of consumption/generation in order to maintain a stable secure network. At present, there is no mechanism for the DNOs to receive any income from better management of "system costs" on the distribution network, because these are not identified. Under these circumstances we believe that there is no alternative to some form of pump priming, and consider that the measured approach proposed by OFGEM would strike a sensible balance between the need to acquire operating experience and limiting consumers' exposure to any consequent cost impacts.

We also believe that case for the introduction of these schemes is, partly, linked to the form of the price control. In competitive industries, companies would undertake such research on their own behalf on the basis that they would enjoy the benefits of any efficiency improvements they make. Eventually, this benefit would be competed away as other firms adopted similar changes. However, such competitive companies do not have their "competitors" pouring over their books every five years and there is clearly a feeling amongst the DNOs that the fruits of any research would be passed on to customers by OFGEM at subsequent reviews.

The Case for Deeper Regulatory Reform

These considerations begin to raise more far-reaching questions over the adequacy of the present framework of regulation, characterised by the use of the RPI-X price formula and a series of periodic reviews.

We welcome OFGEM's approach to the treatment of capex and opex in that it is seeking to equalise the treatment of both. Owing to the inclusion of capex in the RAB but not opex, there has been an incentive for firms to favour capex. However, in order to cope with this distortion it is apparent that OFGEM has inevitably been forced to introduce greater complexity into the review process as it seeks to reward efficient operation. We support these moves to a more comprehensive and efficient basis for regulation, recognising that such complexity is an inevitable and inescapable consequence of a maturing regulatory framework responding to the challenge presented by increased levels of distributed generation. However, under such conditions it may be prudent to examine the case for a more radical restructuring of the relevant regulatory framework.

We recognise that the task of a network operator in a competitive market is to allow generators and customers to buy and sell electricity. Up to now, this requirement has involved the simple transportation of power from the national transmission system to customers' premises. To facilitate this, business models have focussed primarily upon the husbandry of assets. With more embedded generation, there will be more options open to the DNOs. They could choose to purchase local generation, for example, rather than upgrade a line. Alternatively, they could purchase load management. Under these conditions, any system of control must be structured with the objective of rewarding those DNOs that make a better job of providing such a service. In other words, the DNOs' profits should be related to how well they provide customers with what they want, rather than the size of their asset base. Such a move would represent a natural and logical extension of the present IIP scheme to cover a far greater proportion of the DNOs' activities and revenues.

One important aspect of this substantive evolution of the regulatory framework would be the requirement for OFGEM to benchmark DNOs' performance in respect of a series of parameters. These would reflect the prices of those services valued by customers; i.e.

- Quality of supply (voltage stability, minutes lost, number of interruptions)
- Time required to connect new capacity or demand
- Quality of call centre performance
- Safety performance (staff and public); and possibly
- Impact on the environment (undergrounding).

This exercise would necessitate the collection of a significant volume of new cost data, and be sufficiently sophisticated to recognise regional circumstances. However, in our view, the effort entailed would be no greater than that currently required by OFGEM as it seeks to determine the efficiency of operation at each review of the price control.

This system of benchmarks would provide the basis by which revenues could be set on the adjusted average unit costs of the above services, presenting companies with an appropriate incentive to operate the networks at minimum costs. Furthermore, under such circumstances, and without the attendant risk that periodic reviews would eradicate

the benefits, companies' incentives to invest in research would be significantly enhanced.

This framework also presents the prospect of reduced regulatory costs over the long-term, following any transitional phase. The move away from the cyclical burdens of a five-yearly price control should also deliver substantive efficiency gains.

Summary

CCC welcomes the opportunity to respond to OFGEM's latest consultation on the electricity distribution price control.

- We consider that OFGEM's proposals represent an important, if measured, step forward in developing a regulatory framework for distribution networks that face a fundamental shift in their physical configuration and pattern of operation as they accommodate and manage increased levels of generation capacity.
- The introduction of shallow connection charges is a critical first step in revising DNO's commercial perspective towards distributed generation.
- The more ambitious transition to a system of active management of distribution networks will not only facilitate higher levels of distributed generation capacity, but should deliver real consumer benefits through enhanced competition across a range of services that together comprise the generation market.
- The introduction of active management will require considerable levels of technical and operational innovation, in parallel with an adaptation of traditional business models. The five-yearly cycle of price controls inhibits incentives for research through its potential to curtail any rewards, and must be reformed in order to address this constraint.
- The proposals for the Innovation Funding Incentive and Registered Power Zones represent an appropriate response to the present circumstances. They should deliver incentives and provide valuable understanding of the technical, operational and cost implications of a shift towards more actively managed distribution networks. These specific outputs will augment the historical evidence that has demonstrated the consumer benefits of reforms in the regulation of network utilities. At the same time the proposed approach will limit any risk of imposing significant additional costs to consumers.
- The introduction of these incentives should be seen as the early stage in a transition to revised framework that provides a more rational and effective mechanism for regulating an increasingly complex system. The existing IIP provides a foundation for establishing a framework of performance-based regulation that can provide appropriate, enduring incentives for innovation and efficiency among DNOs, would facilitate greater competition in generation, and holds out the prospect for greater efficiency in the regulatory process.

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