WHERE SHOULD RPI – X@20 BE HEADING?

Submission from Energy Networks Association (ENA) to Ofgem's RPI-X@20 Project

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Contents

Executive Summary

Ofgem's 'Emerging Thinking' document, due to be published in the next few months, will inform the issues on which the RPI – X@20 project will focus through to completion of the project. Above all, the project has been about whether a revamped regulatory regime might better facilitate the achievement of government energy policy, particularly in relation to decarbonisation of the energy sector, while delivering value for money to consumers. Ofgem's approach during the visionary phase has, understandably, been to range widely—covering 'big', relatively discrete changes to the current ex ante regulatory framework, as well as more incremental modifications. These bigger changes include:

- enhanced competition for, or in, network activities;
- a significant shift towards ex post regulation;
- an enhanced role for consumers in the regulatory process, including:
  - negotiation of parts of price control settlements between network users and network companies ('constructive engagement');
  - giving energy consumer and/or energy network users and/or other parties the right to appeal against Ofgem's price control determinations;
- having a 'guiding mind' which would specify at some level of detail what energy networks should be doing.

At the same time, and against the background of the ability of successive energy regulators to evolve RPI – X regulation over the last 20 or so years, Ofgem has looked at the sort of incremental changes which could improve the existing ex ante framework. Changes which it has considered include:

- more extensive use of the sort of output measures which have become an important part of the current electricity distribution price control review (DPCR5);
- 'richer' business plans from companies at price reviews—potentially covering: longer time periods than now; clearer links between spend and resulting outputs; options against a range of scenarios; and producing more evidence to underpin cost forecasts;
- an improved incentive framework—potentially including: longer price control periods; more incentive schemes to reward performance; and more risk-sharing.

In this document, we give ENA's views on these ideas and suggest what we think should be the focus of the RPI – X@20 project through 2010.

On the competition issue:

- we welcome Ofgem's recognition that network-on-network competition is not one of Ofgem's priorities for RPI – X@20;

– we welcome the fact that the more recent advice to Ofgem does not draw misleading and technically incorrect analogies with the telecoms sector in order to justify physical unbundling of the electricity equivalent of the telecoms local loop, as was the case with some of the earlier work submitted to RPI – X@20;

– we see no compelling reason in Ofgem's own analysis or in the analysis of its consultants for a significant increase in contestability of network activities or for a diminution in the role of the incumbent networks.

On the issue of ex post regulation, our view is that the LECG paper, prepared for Ofgem on this issue, provides a compelling summary of the reasons why a movement towards a notably more ex post form of regulation would be unlikely to achieve any of the objectives that Ofgem has set itself for RPI – X@20.

On the issue of an enhanced role for consumers:

– we support Ofgem's tentative conclusion in favour of continuing with its current policy of promoting 'advisory' consumer engagement, particularly to provide both Ofgem and network companies with greater information to be used in price control reviews;

– we are not convinced of the merits of constructive engagement in the energy network sector—in which networks would 'negotiate' parts of the price control settlement with designated counterparties—not least because of:

  - the lack of clear alignment between the interests of consumers and those of the obvious counterparties in a constructive engagement process, i.e. suppliers, at least at the distribution level;

  - the potential to conflict with the sort of market-based mechanisms for driving investment in network capacity which already exist or are being developed by Ofgem;

– we think that the issue of appeals against Ofgem's determinations is sufficiently complex to be worth considering in substantial depth in the second stage of the RPI – X@20 process, but think that Ofgem should be particularly mindful of the extent to which:

  - an appeal process might not help to balance the interests of existing and future consumers;

  - such a process might hinder the achievement of government energy and climate change policy;

  - an extended right of appeal might lead to Ofgem's own price reviews simply becoming a sideshow to the main (Competition Commission) event.

Against the above background, we support Ofgem continuing with the ex ante framework and with the modification of that framework, both to address internal weaknesses in the framework and to better deal with the evolving government objectives for the energy sector. At the same time, we think that some of the options considered to improve the ex ante framework are likely to be more fruitful than others.

In addition to some of the incremental changes considered by Ofgem under the heading of 'a modified ex ante framework', we think there are two other considerations which Ofgem should keep on its agenda.

Innovation.
Ofgem's own analysis suggests that even an enhanced ex ante framework would not deliver the sort of innovation that is required to improve the trade-off between delivering the government's decarbonisation agenda and the cost of so doing. This is, not least, because (a) the benefits of innovation often accrue to parties other than those undertaking the relevant investment, and (b) the outcomes of successful (or unsuccessful) innovation will often not be known until well beyond a feasible incentivisation period for an ex ante framework. We therefore agree with Ofgem that 'specific' incentives to undertake research and development will be required, whether in the form of allowances to individual networks (like the IFI scheme) or 'contestable' allowances, as proposed for the Low Carbon Network Fund.

The Guiding Mind.
There is currently something of a disconnect between, on the one hand, government objectives in respect of security of supply and sustainability, and, on the other hand, a price review process which emphasises the need for network companies to justify network investment on the basis of support (or financial commitment) from existing and would-be network users. This may be, at least in part, because the current position with respect to Ofgem's statutory obligations and the existing Environmental and Social Guidance does not give (or is not seen to give) Ofgem clear guidance on how it should prioritise between some of its various obligations. In particular, it may not be clear how far Ofgem's primary obligation in respect of protecting existing and future consumers should be informed by government objectives with respect to security of supply and sustainability. While this ambiguity remains, and while government policy is as it is, there needs to be more of role for a governmental guiding mind in specifying what networks should be doing. In the event that legislation aligns Ofgem's obligations more closely with government policy then that guidance could, in principle, come from Ofgem itself and form a natural part of the price control process.

1 Introduction

Ofgem is currently planning to report early in 2010 on its 'emerging thinking' on RPI – X@20. We have previously provided comments on particular aspects of Ofgem's work, but in this note summarise our views on the main issues that have emerged during the RPI X@20 project to date, and on where Ofgem might take the overall direction of the project in its second phase.

The note is structured as follows:

– Section 2 surveys the issues that have been the focus of the RPI – X@20 project to date and the main policies/instruments which have been considered for dealing with these issues.

– Sections 3 to 6 cover the 'big' ways in which the current regulatory framework might be changed:

  - o enhancing competition for, or in, network activities;
  - o significantly increasing the use of ex post regulation;
  - o giving consumers a more powerful role in the regulatory process;
  - o enhancing the role of a (governmental) 'guiding mind'.

– On the back of the analysis contained in sections 3 – 6, section 7 suggests why Ofgem should focus the remainder of the RPI – X@20 project on more incremental improvement to the ex ante regulatory framework, which, as Ofgem has itself acknowledged, has been a major success story[1] and which Ofgem has continued to develop, both to address inherent flaws in the framework and to respond to a changing energy and environmental policy agenda.

[1] Alistair Buchanan (2008), 'Ofgem's "RPI at 20 Project"', speech at SBGI, March 6th.

2 The main themes of RPI – X@20

One of the main points of the initial phase of the RPI – X@20 project has been to range widely, both in respect of the issues covered and in respect of looking far into the future as to how those issues might evolve. Underlying this quest have been the unattractive choices facing Ofgem as a result of the combined impact of:

– the government's climate change objectives, especially as they have an impact on targets for decarbonisation of electricity generation;
– Ofgem's duty to protect the interests of (existing and future) consumers, not least in respect of those consumers' energy bills;
– Ofgem's enhanced duties in respect of sustainability (and the possibility that those duties may become more demanding and more prescriptive in future);
– the prospective cost of developing energy networks to facilitate the achievement of the decarbonisation targets within the context of existing technology in the gas and electricity sectors;[2]
– the possibility that some of that investment in networks could eventually be rendered sub-optimal (ex post) by changes in the way that energy is produced and consumed over the coming decades.

Ofgem has therefore been looking for ways in which changes in the energy network regulatory regimes might facilitate the achievement of decarbonisation targets (and the maintenance of energy security of supply), while delivering value for money to consumers. As the number of seminars, working groups, working papers, consultants' reports and representations from various parties have accumulated, this search has focused increasingly on the following issues.

– **Uncertainty**. Ofgem is particularly concerned that the uncertainty, including technological uncertainty, about what sort of networks will best deliver a low carbon economy *in the long term* increases the risks that some of the investment undertaken in the more immediate future may turn out retrospectively not to have been efficiently incurred. Ofgem is also concerned, as it has been for the past few network price reviews, with the extent to which price controls need to be able to adapt in light of events turning out differently in a more general way from what was anticipated when the controls were set.[3]

– **Lack of innovation**. For Ofgem, innovation (whether technical or commercial) is seen as the only real way to improve what it sees as a currently unattractive trade-off between delivering a low carbon energy sector and the cost of so doing. Ofgem also sees the existing network regulatory regimes as not offering sufficient encouragement to that innovation.[4]

– **Definition of efficiency**. The notion of 'efficiency' runs through the statutory and licence obligations on networks—notably, the obligations to develop and operate 'efficient' networks—and provides one of the key normative underpinnings for the conduct of network price reviews. In the context of achieving long-term carbon

[2] A recent report has estimated that network investment will have to be of the order of £30 billion *over and above 'business-as-usual' spend*, in order to maintain secure energy supplies and meet climate change and renewable targets. See Ernst & Young (2009), 'Securing the UK's energy future: Meeting the financing challenge', February.

[3] Ofgem (2009), 'Ensuring the future regulatory framework is adaptable', October 2nd.

[4] Ofgem (2009), 'Innovation in energy networks: Is more needed and how can this be stimulated?', July 27th.

reduction goals, and the current uncertainty about what will turn out to be the least-cost ways of achieving those goals, Ofgem sees a need to refine the meaning of 'efficiency'. In past price reviews, efficiency has come to mean, in effect, achieving the lowest network costs over a five-year period, consistent with meeting network statutory and licence obligations. Given the objective of minimising the cost of achieving long-term de-carbonisation, the RPI – X@20 project is searching for a definition of efficiency which covers a longer period than five years, and which embraces efficient outcomes for the energy sector as a whole, rather than just the networks part of it. It is Ofgem's intention to then embed that definition in the normal price review process.[5]

To address these issues, the main options for regulatory change which have been considered are the following.

– **Enhanced competitive pressure on network activities**. Ofgem has always believed that competition will, in principle, be more likely than regulation to lead to 'efficiency' and 'innovation'. The question in RPI – X@20 is how this might apply to network activities which have at least elements of natural monopoly and where the costs (direct and indirect) and time involved in introducing competition need to be weighed in the overall balance, especially given the importance of time in achieving government de-carbonisation targets. Changes which have been considered under this heading include both competition *for* network activities (competitive tendering for network extensions and compulsory outsourcing of particular network activities, for example) and competition *in* network activities (for example, from independent networks or from energy service companies).[6]

– **Substitution of ex post regulation for ex ante regulation**. Linking strongly to its concerns about uncertainty, efficiency and the scope for increased competition, Ofgem has raised the question of whether network revenues should be more geared to outcomes—maybe outcomes over long periods of time—rather than to price controls set in advance of those outcomes.

– **Enhanced role of consumers in the regulatory process**. Various ways in which this could be achieved have been considered, including:

  - more extensive and more formal consumer consultation processes;
  - the sort of 'constructive engagement' between companies and customers which has been tried in relation to the BAA London airports, and which entails companies and customers negotiating at least part of a price control settlement, subject to the regulator's approval of the outcome of that negotiation;
  - giving consumers/network users the right to appeal against price control determinations.[7]

– **Enhanced role for government as a 'guiding mind'**. Against the background of government objectives, especially for renewable generation, the question

[5] Ofgem (2009), 'What do we mean by efficiency?', September 3rd.

[6] Ofgem (2009), Enhancing competitive pressures on regulated networks: Ofgem's current thinking', October 2nd.

[7] References for this include: Littlechild, S. and Cornwall, N. (2009), 'Potential Cope for User Participation in the GB Energy Regulatory Framework, with Particular Reference to the next Transmission Price Control Review: Report to Ofgem', March 28th; Ofgem (2009), 'Consumer engagement in the regulatory process', October 1st; LECG (2009), 'Should energy consumers and energy network users have the right to appeal Ofgem price control decisions? If so, what form should the appeals process take?', October 7th; France, J. (2009), 'Consumers, Stakeholders and Appeal Mechanisms in the Regulation of Energy Networks', September 29th.

posed has been about the extent to which government itself should prescribe what networks should do in order to facilitate achievement of those objectives.[8]

– **A 'modified ex ante incentive framework'**. To the extent that total reliance for improvement in the regulatory framework is not placed on one or more of the above changes, the RPI – X@20 project has been about the more incremental ways in which the existing regulatory framework could be changed to encourage the achievement of desired outcomes. Ideas floated by Ofgem in this regard include:

  - o 'richer' business plans at price reviews—for example, covering longer periods than is usual for price review business plans and being more explicit about the options available in the context of different future energy scenarios;

  - o more extensive use of network output measures;

  - o incentives which would be focused more on delivering longer-term efficiency (including the use of innovation to deliver that efficiency) and the delivery of specified outputs on time.[9]

[8] Ofgem (2009), 'Delivering desired outcomes: who decides what energy networks of the future look like?', July 31st.

[9] Ofgem (2009), 'A modified ex ante framework', September 3rd.

3 Enhanced competition for, or in , network activities

In the past, Ofgem has believed simultaneously and logically that:

– where it is feasible, competition offers the most effective means of protecting consumers' interests;

– competition is not feasible in 'core' network activities.

> Ofgem combines independent regulation of monopolies with promotion of competition to meet customers' needs.[10]
>
> Ofgem's policy of looking to competition in wholesale and retail markets to protect customers' interests has continued to bring benefits. Competition puts pressure on suppliers to rein in prices and incentivises them to innovate and offer consumers diversity in products. In so doing, competition has delivered good deals for customers.[11]
>
> In sections of the industry where competition is not a realistic option Ofgem protects customers' interests by imposing controls and incentives. This applies to the monopoly businesses that run the networks of pipes and wires that carry gas and electricity to homes and businesses. In this way we ensure that homes and businesses get the best value for money and reliable supplies.[12]

However, as part of the RPI – X@20 project, Ofgem has revisited this position, posing the question as to whether enhanced competition in the network sector could better serve consumers' interests. Its consideration of the scope for increased competitive pressure on network companies seems to have two main aspects.

– First, it is asking whether there could usefully be more competition *for* particular network activities, whether through competitive tendering of specific projects, through compulsory outsourcing of particular services, or even through franchising of the existing network infrastructure.

– Second, it is asking whether future technical and economic change might open the way for different types of competition *in* network activities—ie, full network-on-network competition—not least from independent network operators or from energy service companies.

We consider each of these in turn.

3.1 Competition *for* network activities

Ofgem suggests the following three ways in which competition for particular network activities could be stimulated:

[10] Ofgem (2007), 'Ofgem Annual Report 2006-2007', July, p. 6.
[11] Ibid., p.16.
[12] Ibid., p.22.

– compulsory outsourcing;
– franchising to operate network infrastructure;
– competitive tenders of specific projects or outcomes.

Compulsory outsourcing

We note that, in its working paper on enhancing competitive pressures on regulated networks, Ofgem leans to rejection of this option,[13] giving a number of reasons:

– possible detrimental impacts from restricting companies from choosing their business model;
– losses in economies of scale at the network company level;
– the extent of outsourcing which already exists among energy network companies, and, therefore, the lack of scope for incremental efficiencies from compulsion;
– the potential impact on timeliness of project delivery;
– the limited scope for innovation within the standard outsourcing model;
– the potential lack of skills among new entrants to undertake the full scope of outsourced projects.

We think that Ofgem has drawn the correct (tentative) conclusion on this issue. This is not only for the reasons given above but also because compulsory outsourcing would, in effect, be an admission by Ofgem that it is unable to determine a way to incentivise efficient behaviour by energy network companies, including efficient behaviour with respect to outsourcing.

Franchising to operate (existing and new) infrastructure

In its working paper, Ofgem concludes tentatively against franchising to operate network infrastructure.[14] Reasons given for this include:

– costs of the franchising process;
– the inflexibility of long-term contracts;
– the 'problems and complexities' associated with transferring ownership of the assets;
– issues of contract incompleteness;
– potential losses of co-ordination;
– potential obstacles to timely delivery of projects;
– the risk that quality standards might drop towards the end of the contract.

In addition to this rather compelling list, Ofgem could have pointed to the recent experience with franchising in the rail industry to illustrate some of these problems in a context which is, in many ways, less problematic than that of energy networks. Even leaving aside the collapse of Metronet, despite the scope for periodic reviews of its revenue requirements, there is the situation with train operating companies (TOCs) where many of the key investment decisions are now taken by the Department for Transport, not least because the relatively short franchise periods, relative to the life of the assets involved, mean poor investment incentives for the companies themselves. Thus, long franchise periods, especially with relatively inflexible contracts, mean the scope for super-normal profits or big losses—not necessarily and simply linked to the efficiency or otherwise of the franchisee—as well as (a) difficulties in adapting franchise conditions to requirements which had not been thought of when the franchises were let and (b) the risk of non-investment towards the end of the franchise.

[13] Ofgem (2009), 'Enhancing Competitive Pressures on Regulated Networks', October 2nd, para 3.16.

[14] Ibid., paras 3.36–3.38.

Short franchise periods, on the other hand, mean little incentive on the franchise holder to invest at all in long-life assets, at least without complicated rules for adoption of the investment in question by the next franchisee. The Conservative Party currently plans to lengthen TOC franchises, not least to push investment decision-making out from the DfT to the companies. However, this will not resolve the issues associated with long franchise periods, especially when there are problems in knowing investment requirements when franchises are let. Such problems are likely to be greater with, for example, electricity networks than with, for example, rail rolling stock or rail stations (where the condition of assets may be relatively easy to determine). In other words, RPI – X@20 is, above all else, about the incentivisation of efficient network investment, and, on the basis of theory and of experience, franchising of the existing energy network infrastructure would be less likely to achieve that objective than a sensible ex ante regulatory framework.

In sum, we agree with Ofgem's (tentative) conclusion against the franchising of the existing network infrastructure, both for the reasons given by Ofgem itself and on the basis of recent GB experience with franchising in a context not far removed from that of energy networks.

Competitive tenders of specific projects or outcomes

Ofgem's working paper concludes that: 'At this stage, our emerging view is that we should have the option of using competitive tendering models, in specific cases and where justified on the basis of an indication of net benefits'.[15] This is despite the list of reasons given by Ofgem against such tendering being not dissimilar to the catalogue of reasons invoked against compulsory outsourcing and franchising of existing infrastructure. The reasons it gives against tendering specific projects or outcomes are:

– the use already made of outsourcing;
– the costs of the tender process;
– the inflexibility of the long-term contracts that would be required to underpin the build of long-life assets;
– losses of economies of scale;
– risks of deterioration of performance by the operator towards the end of contract.[16]

Ofgem could also have added the time taken to set up tenders. The consultation on, and planning of, tenders for offshore transmission started back in January 2005—the date of Ofgem's first consultation on the issue—and the actual tender process is still in its early stages almost five years later. Even now, the only process which has started is the relatively straightforward one of tendering for assets which either already exist or are in the process of being built.

Given the apparent similarity between Ofgem's list of arguments against competitive tenders (for specific projects or outcomes) and its lists of the reasons against compulsory outsourcing and franchising, it is not clear why Ofgem wants to retain the option of competitive tenders. It goes on to list factors that might make individual projects *relatively* suitable for competitive tendering—effective competition between bidders, sufficient timeframe, stand-alone projects, amenable to long-term contracts, sufficient scale of the project—but it has not made an obvious case for competitive

[15] Ibid., para 3.30.
[16] Ibid., para 3.26.

tendering in principle. One is thus left, in effect, with a number of reasons why some projects might be *less unsuitable* for competitive tendering than others.

Moreover, some of the reasons which Ofgem gives for the relative suitability of particular projects have about them more than a trace of assuming away the problem.

– Ofgem suggests that there needs to be a sufficient timeframe for the project to be tendered, but government climate change targets suggest a rather compressed timetable for most of the key infrastructure projects that will help to achieve those targets (for example, the projects listed in the ENSG report from earlier this year[17]).

– Ofgem suggests that 'amenability to long-term contract' is another key issue, but has itself suggested good reasons why infrastructure projects may not be obviously amenable to such contracts, not least their inflexibility, alongside the duration that such contracts will typically need for long-life assets.

In sum, Ofgem itself has not, thus far, justified why competitive tendering for specific projects or outcomes is any more likely to be helpful to achieve timely and efficient network investment and operation than the other options which it has, in our view, rightly—and at least for the moment—rejected. Rather, it seems to have provided a rather powerful case for the reverse of this and for the obvious counterfactual—ie, the development of an enhanced ex ante regulatory framework.

3.2 Competition *in* network activities

In its working paper, Ofgem suggests that 'exploring the merits of direct network on network competition models is not a priority for the RPI – X@20 project.' This is mainly on the basis that, within current technologies and in the context of costs sunk in the existing networks, such competition could lead to cherry-picking and to the majority of customers paying more for the use of the existing network.[18]

However, the part of Ofgem's work on competition in network activities which has seemed most contentious to the ENA has been its work on how to enhance competition in the supply of energy services. In the context of RPI – X@20, this debate was launched, at least in the public domain, by a paper by Michael Pollitt for Ofgem.[19] In this paper, Pollitt used the analogy with local-loop unbundling (LLU) in telecoms to suggest that, in the context of the more radical of Ofgem's LENS scenarios, local energy service companies should have a right to buy DNO distribution assets 'at fair value', as a way of stimulating competition and innovation.

Since that paper, Ofgem has published an additional paper by Peter Boait on energy service companies.[20] This paper recognises, rightly in our view, that the analogy drawn by Pollitt with telecoms—and the resulting need for *physical* unbundling of a DNO's network—is misleading. Electricity networks are not 'switched' in the sense that telecoms networks are (ie, electricity networks are not controlled such that traffic

[17] ENSG (2009), 'Our Electricity Transmission Network: A Vision for 2020', March.

[18] Ibid., para 3.8.

[19] Pollitt, M. (2009), 'Does Electricity (and Heat) Network Regulation Have Anything to Learn from Fixed Line Telecoms Regulation?', April.

[20] Boait, P. (2009), 'Energy services and ESCos – Their Benefits and Implications for Regulation and the Consumer', October.

which enters at a particular point leaves the network at a pre-specified point). Any 'unbundling' 'must be on the basis of a continuing shared use of the local network'.[21]

Boait goes on to suggest that what is required for DNOs not to be a barrier to the creation and efficient growth of ESCos is that ESCos are charged an appropriately cost-reflective tariff for the use they actually make of a DNO's network. We agree with this conclusion, albeit we recognise the problems in structuring network tariffs which meet a number of potentially conflicting objectives and constraints (requirements by some for a high level of granularity versus other pressures for simplicity; prohibitions on undue discrimination; price controls which determine an overall revenue requirement for a DNO which may bear little relationship to the cost of building a new network, etc).

We note also that the Frontier Economics report[22]—commissioned by Ofgem to examine 'whether the current structure and role of electricity and gas networks could be a barrier to effective and efficient regulation of future networks'—comes down against reducing the role of monopoly networks. In fact, Frontier suggests that the activities of distribution networks may need to be expanded in certain areas for DNOs to take on appropriate SO roles at the distribution level. The Frontier report also suggests that there would be no net benefit from separating the ownership of SO and TO roles at the transmission level. We agree with both conclusions.

In sum:

– we welcome Ofgem's recognition that network-on-network competition is not one of Ofgem's priorities for RPI – X@20;

– we welcome the fact that the more recent advice to Ofgem does not draw misleading and technically incorrect analogies with the telecoms sector in order to justify physical unbundling of the electricity equivalent of the telecoms local loop;

– we see no compelling reason in Ofgem's own analysis or the analysis of its consultants for a significant increase in contestability of network activities or for a diminution in the role of the incumbent networks.

[21] Ibid., p. 14.

[22] Frontier Economics (2009), 'The Role of Future Energy Networks: A Report Prepared for Ofgem', September.

4 Greater use of ex post regulation

Not unrelated to its interest in enhancing the contestability of network activities, Ofgem has been keen to explore the greater use of 'ex post regulation' as a (partial or total) substitute for its current ex ante regulatory model. It has not always been totally clear what Ofgem has meant by ex post regulation. However, a paper prepared by LECG for Ofgem sets out very clearly:

– a description of what could be meant;

– why moving significantly towards ex post regulation, in its various possible forms, would be a rather bad idea.[23]

4.1 What is ex post regulation?

The LECG paper suggests that the distinction between ex ante and ex post regulation is best represented by a spectrum, with existing energy network price controls at or near the ex ante end and, at the ex post end, the use of competition policy alone. In between, the paper suggests a number of stopping-off points:

– ex ante regimes with ex post adjustment mechanisms;
– ex post price control with an ex ante specification of the approach to cost to be taken at the ex post decision point;
– a 'threshold regime' whereby prices are not approved ex ante but where a review (and potentially full price control) might be triggered if, for example, achieved rates of return exceeded a particular threshold;[24]
– information and disclosure which relies on provision of information boosting the countervailing power of large customers.

4.2 Why ex post regulation is unlikely to be the way forward for GB energy network regulation

The LECG paper evaluates, in particular, two versions of ex post regulation relative to ex ante regulation:

– a 'pure' form—ie, competition policy alone;
– an intermediate threshold variant.

Each of the options is judged against five criteria:

– prevention of excessive pricing;
– encouragement of efficient and timely investment and innovation;
– incentives to achieve operational efficiency;
– regulatory burden;
– predictability and stability.

The headline conclusions are that:

[23] LECG (2009), 'The case for Ex Post Regulation of Energy Networks', October 7th.

[24] Such a regime is described in another piece of work carried out for the RPI – X@20 project: CEPA (2009), 'New Zealand Gas Industry Regulation: Lessons to Learn for the British Energy Sector', March.

– both versions of ex post regulation score worse than ex ante regulation against the five criteria, taken as a whole;
– the threshold variation, the more plausible version for GB—given that no one seems to be seriously contemplating regulating energy networks through competition policy alone—scores even worse than exclusive reliance on competition policy.

The main reasons why a threshold regime scores so poorly against the LECG criteria are as follows.

– A threshold regime will be less effective in **preventing excessive prices** because:

    o a threshold is unlikely to be as finely calibrated to costs as an ex ante regime, not least because one of the points of a threshold is to give the company some leeway on pricing;

    o thresholds are inherently asymmetric—'if the threshold price is set below cost, the firm can choose to breach the threshold and trigger a favourable reset. However, if the threshold price is above cost, the firm can price at or just below the threshold and earn excessive profits'.[25]

– As far as **incentives to invest and innovate** are concerned:

    o investment in energy networks will often be lumpy (see, for example, the projects covered by the ENSG report, referred to in section 3), and will therefore tend to involve breaching a threshold. In turn, this leads to uncertainty about returns and to an incentive to defer the investment;

    o ex post regulation, in general, will not lead to the sort of investment and innovation required for decarbonisation because a less regulated market will tend to respond to the demands of existing, rather than future, consumers. As the LECG paper points out, a deregulated market for metering has not delivered smart metering.[26]

– Although both ex ante and (each form of) ex post regulation can provide strong **incentives to improve operating efficiency**, the efficiency gains under ex post regulation may not be passed through to consumers—which the LECG paper suggests would not seem consistent with Ofgem's statutory duties.[27]

– Although one of the standard arguments for ex post regulation is a **lower regulatory burden**, the LECG paper states: 'Our study has found that, in practice, threshold regulation results in the lengthy and resource intensive investigation of breaches. In practice, therefore, such regimes may offer little advantage in terms of regulatory burden'.[28]

– As far as **predictability and stability** are concerned, the LECG paper suggests that ex ante regulation in GB has combined stability with scope to adapt the framework over time without unduly damaging certainty to investors, whereas: 'Threshold regimes in other jurisdictions have been subject to continuous change

[25] Ibid., para 1.19.
[26] Ibid., para 1.30.
[27] Ibid., para1.34.
[28] Ibid., para 1.37.

and do not appear to be durable over time. There have been complaints that such regimes cause too much uncertainty for investors and other market participants.'[29]

On the basis of the above, we would draw the following conclusions about ex post regulation.

– No real-world network regulatory regime is purely ex ante or purely ex post. The current GB energy network regime, for example, has a variety of mechanisms for allowing revenue to be adjusted in the light of events—and other mechanisms are still being considered as part of DPCR5.

– What the LECG paper does is to provide a compelling summary of the reasons why a movement towards a notably more ex post form of regulation would be unlikely to achieve any of the objectives that Ofgem has set itself for RPI – X@20.

[29] Ibid., paras 1.40–1.41.

5 Enhanced role for consumers in the regulatory process

Ofgem's primary duty is to protect the interests of existing and future consumers. It is therefore not surprising that one of the main workstreams in the RPI – X@20 process has been devoted to whether, and how, the role of at least existing consumers should be somehow enhanced. Ofgem's own working paper on the issue tentatively concludes that:

– there is a need for 'more engagement with consumers and network users across all of the network sectors to ensure that consumer interests can be better reflected in the regulatory settlement', albeit that 'certain sectors may be more conducive to increased engagement';[30]

– increased engagement should, at least for the immediate future, be 'advisory';[31]

– 'there may be a future role for consumer representatives, network users and potentially other parties in agreeing decisions on the regulatory regime with network companies'.[32]

Furthermore, Ofgem is still considering whether to allow all parties affected by a price control settlement a right of appeal against that settlement.[33]

In addition to Ofgem's working paper, other contributions to the debate about the role of consumers in the regulatory process have come from Littlechild and Cornwall,[34] LECG (for Ofgem),[35] CEPA (for Centrica)[36] and John France of CE Electric.[37]

What emerges from these contributions (including Ofgem's), taken together, is the following.

– The desirability of enhanced consumer engagement in the regulatory process is relatively uncontroversial.

– The spectrum of degree of potential engagement runs from (a) more actively facilitated consultation, through to (b) giving consumer representatives a more formal involvement in advising Ofgem, through to (c) giving consumer bodies/representatives a role in decision-making. (c) then potentially comprises an 'ex ante' role for consumers in determining at least part of Ofgem's price control determination (as with 'constructive engagement') and/or an 'ex post' role in being able to appeal a determination (probably to the Competition Commission, CC) once Ofgem has made it.

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[30] Ofgem (2009), 'Consumer Engagement in the Regulatory Process', October 1st, para 7.1

[31] Ibid. para 7.2.

[32] Ibid. para 7.4.

[33] Ibid. para 7.5.

[34] Littlechild, S. and Cornwall, N. (2009), 'Potential Scope for User Participation in the GB Energy Regulatory Framework, with Particular Reference to the Next Transmission Price Control Review', March 28th.

[35] LECG (2009), 'Should Energy Consumers Have the Right to Appeal Ofgem Price Control Decisions? If so, What Form Should the Appeals Process Take?', October 7th.

[36] CEPA (2009), 'Consumers' Right to Appeal Regulatory Decisions: Report to Centrica', October 14th.

[37] France, J. (2009), 'Consumers, Stakeholders and Appeal Mechanisms in the Regulation of Energy Networks', September 29th.

– As noted above, Ofgem favours facilitated consultation and is still thinking about third parties having a right to appeal Ofgem decisions.

– Littlechild and Cornwall favour the use of some form of constructive engagement in the next transmission price control review.

– LECG and CEPA both favour a right of appeal for some third parties, albeit recognising that much work would need to be done to decide what bodies or individuals might have that right, and what sorts of other filter mechanisms might apply to reduce the risk of trivial or vexatious appeals.

– The France paper concludes against allowing a third-party right of appeal, but suggests that, if appeals were to be allowed, the right of appeal should not be conferred on suppliers since their interests are not intrinsically aligned with those of consumers.

ENA's views on these issues are as follows.

– We note and welcome that Ofgem is already overseeing and encouraging a progressive increase in the involvement of consumers/network users in regulatory processes. Instances of this include the process by which National Grid's SO incentives are now set, as well as the encouragement of stakeholder engagement as part of the current electricity distribution price control reviews.

– The debate about the nature and extent of consumer involvement in the regulatory process has become somewhat confused as to whether the issue is about 'consumers' or third parties more generally. Much of the debate about, in particular, a right of appeal against Ofgem's determinations seems to make a major leap of faith that allowing a potentially wide variety parties to appeal against Ofgem's decision would somehow reflect the views of consumers. Ofgem needs to be clear as to whether what it is trying to do is to enhance the role of consumers or some wider constituency. If the former, there is the question of who represents consumers. Should it be, for example, an existing organisation like Consumer Focus? If the latter, just how wide should the net be cast?

– We agree with those who have suggested that there is no natural alignment between the interests of suppliers and consumers, not least for the reason suggested by France that, because an individual supplier will typically not obtain a competitive advantage from the development of networks, suppliers collectively do not have the interest in the benefits of that development that consumers might have.[38] On this basis alone, we remain sceptical about the benefits of constructive engagement with suppliers as a means of promoting consumer interests. In addition, and especially given that constructive engagement could be expected to be particularly concerned with new network investment, constructive engagement would look to sit rather uncomfortably with the market-based mechanisms for driving new network investment which already exist for gas transmission and in respect of distributed generation, and which are currently being developed by Ofgem for electricity transmission.

– Ofgem's primary duty is to protect the interests of both existing and future consumers and it therefore has to balance those two interests. The debate about giving consumers (or their deemed representatives) decision-making powers, including the right to appeal Ofgem's decisions, would seem to elevate the power

[38] France (2009), op.cit., pp. 13–17.

of existing consumers over future ones. This would be contentious at any time, but would seem to be particularly problematic at a time when government energy and environmental policy is explicitly about incurring higher costs now—through, for example, subsidies to renewable generation as well as by encouraging the reinforcement of electricity networks to transport renewable electricity—for the benefit of future generations. Allowing existing consumers to have greater influence over price control determinations would therefore seem to be unhelpful in delivering government policy, as well as unhelpful in facilitating Ofgem's balancing of its duties to existing and to future consumers.

– As the already cited papers by LEGG and CEPA make clear, any decision to allow third-party appeals against price control determinations would need to be accompanied by deep consideration of who would be able to make such appeals. Two (not necessarily mutually exclusive) approaches have been suggested: designation of particular entities who would have the right to make appeals; and setting criteria for allowing a body to appeal (such as being materially disadvantaged by the Ofgem determination) and giving the Competition Commission, as the appellate body, the right to decide whether a particular body met the criteria. On the first option, we repeat that there needs to be clarity as to whether the policy is to promote the involvement of consumers or a broader range of interested parties in the regulatory process—environmental pressure groups, for example. On the second option, giving the CC the ability to refuse to hear particular appeals—we note the CC's oft-repeated desire to hear more price control appeals and wonder whether the CC would, in effect, be a particularly draconian filter of potential appeals.

In sum:

– we support Ofgem's tentative conclusion in favour of continuing with its current policy of promoting 'advisory' consumer engagement, particularly to provide both Ofgem and network companies with greater information to be used in price control reviews;

– we are not convinced of the merits of constructive engagement in the energy network sector—in which networks would 'negotiate' parts of the price control settlement with designated counterparties—not least because of:

    o the lack of clear alignment between the interests of consumers and those of the obvious counterparties in a constructive engagement process, i.e. suppliers, at least at the distribution level;

    o the potential to conflict with the sort of market-based mechanisms for driving investment in network capacity which already exist or are being developed by Ofgem;

– we think that the issue of appeals against Ofgem's determinations is sufficiently complex to be worth considering in substantial depth during the second stage of the RPI – X@20 process, but think that Ofgem should particularly mindful of the extent to which:

    – an appeal process might not help to balance the interests of existing and future consumers;

    – such a process might hinder the achievement of government energy and climate change policy;

– an extended right of appeal might lead to Ofgem's own price reviews simply becoming a sideshow to the main (CC) event.

6 The role of a guiding mind

One of the main questions underlying RPI – X@20 is that of who or what decides what energy networks should be doing. Sections 3 and 5 of this submission have both, in different ways, dealt with the question of whether existing consumers and/or network users should have a bigger role in making key decisions, through:

– giving consumers or their representatives an enhanced role in the regulatory process;

– increasing competitive pressures on networks, with one implication of this being that networks would then be compelled by those pressures to respond more vigorously to the demands of existing and would-be network users (whose interests may or may not be aligned with those of consumers).

However, as noted in section 5, issues which arise in giving consumers a more direct role in driving energy network operations and investment include:

– Ofgem's statutory obligation to balance the interests of future, as well as existing, consumers;

– the existence of a government policy with respect to climate change which requires that existing consumers and those in the immediate future pay more for their gas and, in particular, for their electricity in order to fund a process of decarbonisation which will benefit future generations.

If the development of energy networks is not to be driven solely (or even primarily) by consumers/network users, the question arises as to what are the alternatives. In its third 'working paper'[39], Ofgem considered three 'models' of who should take the key decisions:

– 'Central Government Led' (CGL);

– 'Joint Industry Led' (JIL);

– 'Adapted Regulatory Framework' (ARF).

The three models all have certain features in common, including that:

– the government sets environmental and social objectives;

– the government determines energy policy;

– the Secretary of State provides guidance to Ofgem on environmental and social matters;

– individual networks are responsible for determining their own business plans and for delivering those plans, within the context of their licence obligations;

[39] Ofgem (2009), 'Regulating Energy Networks for the Future: RPI – X@20, Working Paper 3, Delivering Desired Outcomes: Who Decides What Energy Networks of the Future Look Like?', July 31st, para. 4.3.

– Ofgem is responsible for setting an economic regulatory framework which ensures efficient costing and delivery of those plans.

Against this common background, the main differentiating factors of the models are that:

– the CGL model would see central government (or a government agency) specifying, in rather more detail than it currently does, what networks should be doing to facilitate the achievement of environmental, social and security of supply objectives;

– the JIL model would see an industry body (comprising either just energy network companies or wider energy industry membership) providing that detail;

– the ARF would see the detailed specification of what networks should do arising from networks responding to enhanced incentives to efficiently deliver outputs specified by Ofgem.

Ofgem's conclusions in its working paper are that:

– the CGL model might be the quickest route to putting in place a plan for meeting environmental targets, but might be expensive, inflexible, not particularly conducive to innovation, and might be over-influenced by short-term political considerations (with the latter feature potentially being mitigated by the lead coming from a government agency, rather than from a government department);

– the JIL model could improve on the above by better bringing industry knowledge and expertise to the assessment of options for delivering outcomes, but could stifle innovation, not least if the focus was on network solutions only;

– the ARF is 'potentially the most likely to ensure value for money for existing and future consumers over time', not least, and by implication, through moving more slowly to deciding what needs to be done by energy networks, as well as by using a more decentralised model for making these decisions.

In concluding in favour of the Adapted Regulatory Framework, Ofgem seemed to be making two judgements:

– about the relative importance of meeting the government's *volume* targets, especially for renewable generation and for reduced carbon emissions, and the *cost* of achieving those targets—Ofgem's apparent view being that the CGL model might indeed deliver network investment more quickly, but that such investment would be less innovative and more expensive than with Ofgem's preferred model;

– about the degree of uncertainty which surrounds investment requirements for energy networks—Ofgem's preference for the ARF seems to hinge, in part, on a judgement that there is considerable uncertainty about what needs to be done to develop energy networks and that the CGL model would be less well equipped to adapt as and when that uncertainty was resolved.

Against these two judgements, ENA suggests the following points.

– Although there is considerable uncertainty about how networks (and the energy sector more widely) should develop over the longer term in order to facilitate the

meeting of government environmental targets, this should not necessarily mean that networks should not be given a clearer steer on what is required in the shorter term (in relation to which there is significantly more consensus on what is required).

– If it is to be government targets for renewable energy which are a major part of what will need to be met in that period—and given that Ofgem's current statutory obligations (and associated Environmental and Social Guidance) are not totally unambiguous as to the relative weight which it should give to its different objectives—it probably needs to be government which gives that steer, and sets out more clearly than it currently does just what networks are meant to be doing. This is a statement about the current legal position and does not preclude government refining Ofgem's obligations such that Ofgem would then take more responsibility for being the guiding mind about what is required of networks to deliver against government environmental (and other) objectives.

– Whether as a result of more specific guidance from government or as a result of the refinement of Ofgem's obligations in relation to government targets on renewable energy and carbon emissions, Ofgem will need to structure a regulatory regime which is more clearly linked to these targets than is obviously the case at present. It may be that Ofgem plans that the 2020 targets will be met largely through enhanced transmission incentives to deliver the sort of programme outlined by ENSG and referred to above.

– If that, in turn, means that Ofgem's search for a new regulatory model is more about what needs to be achieved beyond 2020—and that achieving 2020 is broadly about an industry-driven ENSG-type selection of projects, alongside a refinement of the incentive structure for network companies to deliver those projects—then it would be useful for Ofgem to be explicit about this in its Emerging Thinking document.

7 The way forward — evolution: an enhanced ex ante regulatory framework, innovation and a guiding mind

The previous sections of this submission have covered proposals for relatively discrete breaks from the current way in which energy networks are regulated. However, Ofgem has always made it clear that it has never been a presumption of the RPI – X@20 project that such change was necessary. In addition, in the past Ofgem has rightly claimed credit for the way in which the RPI – X framework has evolved and continues to evolve. Examples of this evolution include:

– the reduced link of regulated revenue with energy transported, not least to reduce incentives on networks to boost energy consumption;
– incentives to encourage improvement in quality of supply and service to customers in general;
– incentives to encourage efficient investment in new network capacity, notably for gas transmission and in respect of distributed generation, as well as the proposed 'enhanced' incentives for electricity transmission;
– incentives to encourage accuracy in the companies' forecasts of future costs;
– the introduction of 'rolling incentives' to reduce the periodicity effects associated with five-year price control periods;
– incentives to encourage efficient asset replacement, notably in gas distribution;
– various mechanisms to make price controls more adaptable to actual circumstances through a price control period, including revenue drivers, logging up, pass-through of selected cost items and specific re-openers;
– encouragement of stakeholder engagement in price reviews, notably in DPCR5 and particularly with respect to network investment plans;
– specific incentives for network innovation, including both the existing Innovation Funding Incentive and the proposed Low Carbon Networks Fund;
– the more detailed specification of outputs which energy networks are expected to deliver.

What these changes suggest is that, in the normal course of business, Ofgem has evolved the regulatory regime to deal with issues as they have arisen or been anticipated. These issues have included several of the main problems identified by Ofgem as reasons for the RPI – X@20 project, including dealing with uncertainty (at least with respect to uncertainty about what is going to happen within a given price control period) and innovation.

In addition, and as part of the RPI – X@20 project, Ofgem has itself suggested more incremental changes *within* the existing ex ante regulatory framework, alongside the 'bigger' changes associated with competition, ex post regulation and enhanced consumer involvement in the regulatory process. As noted in section 2, these incremental changes to create a 'modified ex ante incentive framework' include:

– more extensive use of output measures—maybe along the lines of the load index and asset health index being developed as part of DPCR5, but recognising that it may be difficult to measure some of the outputs which are most important for consumers and for sustainability;

– 'richer' business plans at price reviews—Ofgem suggests that this might include:

- covering longer time periods than at present;
- showing clear links between spend and resulting outputs;
- giving options against a range of scenarios;
- more evidence to underpin cost forecasts;

– an improved incentive framework, including:

  - incentives on energy networks to provide richer business plans;
  - longer price control periods;
  - regulatory commitments in respect of ex post adjustments;
  - more incentive schemes to reward performance;
  - more risk-sharing.[40]

In our view, some of the options considered by Ofgem in this paper are likely to be more fruitful than others.

– If Ofgem stays broadly within the ex ante framework but is trying to get a better handle on how to handle future uncertainties, then richer business plans will be required.

– More extensive use of outputs is an inevitable result of the requirements from networks becoming more complex, not least as a result of the energy and environmental policy considerations which provided much of the motivation to set up the RPI – X@20 project.

– More incentive schemes are likely to be a corollary of more extensive use of output measures.

It is, on the other hand and for example, less obvious what would be achieved by longer price control periods, not least because:

– Ofgem itself sees one of the key issues being increased uncertainty which would itself tend to imply either shorter periods or much more extensive use of 'uncertainty mechanisms';

– it is not clear that lengthening price controls by a few years would be a great benefit when the underlying mismatch is between price control periods and the life of network assets—and the average life of those assets is of the order of 40 years or so.

However, the more important general conclusion which emerges from Ofgem's discussion of modifications to the existing ex ante framework—when taken alongside its discussion of innovation, efficiency, uncertainty, ex post regulation, network competition and enhanced role for consumers—is that there is no magic bullet. On the one hand, Ofgem would like to get away from the ex ante framework because, among many other things:

– it focuses attention on relatively short time periods when decisions taken in those periods will have long-term consequences, not least because of the cost and long life of the assets involved;

[40] Ofgem (2009), 'A Modified Ex Ante Incentive Framework', September 3rd.

– it requires complexity to incentivise desired behaviours and to define, in a price control, a relatively 'complete' regulatory' contract with network companies;

– neither Ofgem nor anyone else knows whether, in the longer term, those currently desired behaviours will turn out to have been so desirable after all;

– it offends the instincts of those who believe that competition will always be preferable to monopoly;

– it encourages companies to respond to explicit regulatory incentives, rather than to the wider agendas for which those incentives are designed to be a proxy.

On the other hand, in the same way that capitalism and democracy are often judged to be desirable only by default, ex ante regulation is probably better than any of the obvious alternatives—and this is suggested by the bulk of the papers published so far as part of the RPI – X@20 project.

– Greater competitive pressure (than already exists in the form of extensive outsourcing of many network activities) is likely to have, at best, a limited role to play, for the reasons listed in Ofgem's own paper on enhancing competitive pressures and otherwise covered in section 3 of this paper.

– Making a major shift to any realistic form of ex post regulation is likely, for the reasons given by Ofgem's consultants and summarised in section 4 of this paper, to weaken Ofgem's ability to protect consumers from excessive prices; to worsen incentives to improve operating efficiency and to deliver efficient and timely investment and innovation; and to reduce the predictability and stability of the regulatory process (with consequences for networks' cost of financing)—and all without resulting in any significant reduction in regulatory burden.

– Giving third parties a role in deciding price review outcomes—by, for example, allowing such parties to appeal against Ofgem's price control determinations—is likely to make it more difficult for Ofgem to balance the interests of existing and future consumers and, partly the same point, make it more difficult to help networks deliver the government's sustainability objectives.

Given these considerations, the focus of the RPI – X@20 project in 2010 should therefore be on the sort of incremental changes to the ex ante regulatory framework which are discussed in Ofgem's paper. It is more important that Ofgem's Emerging Thinking document points in this general direction than that it has a detailed list of every incremental change to the ex ante framework which remains worth considering.

Beyond this, we think that two issues from Ofgem's analysis, to date, are worth also highlighting.

– **Innovation**. Ofgem's own analysis[41] suggests that even an enhanced ex ante framework would not deliver what is required in this area. This is, not least, because
(a) the benefits of innovation often accrue to parties other than those undertaking the relevant investment, and (b) the outcomes of successful (or unsuccessful) innovation will often not be known until well beyond a feasible incentivisation period for an ex ante framework. We therefore agree with Ofgem that 'specific' incentives to undertake research and development will be required, whether they

[41] Ofgem (2009), 'Innovation in Energy Networks: Is More Needed and How Can This be Stimulated?', July 27th.

be in the form of allowances to individual networks (like the IFI scheme) or 'contestable' allowances, as proposed for the Low Carbon Network Fund.

– **The guiding mind**. There is currently something of a disconnect between, on the one hand, government objectives in respect of security of supply and sustainability and, on the other hand, a price review process which emphasises the need for network companies to justify network investment on the basis of support (or financial commitment) from existing and would-be network users. This may be, at least in part, because the current position with respect to Ofgem's statutory obligations and the existing Environmental and Social Guidance does not give (or is not seen to give) Ofgem clear guidance on how it should prioritise between some of its various obligations. In particular, it may not be clear how far Ofgem's primary obligation in respect of protecting existing and future consumers should be informed by government objectives with respect to security of supply and sustainability. While this ambiguity remains, and while government policy is as it is, there needs to be more of role for a governmental guiding mind in specifying what networks should be doing. In the event that legislation aligns Ofgem's obligations more closely with government policy, that guidance could, in principle, come from Ofgem itself and be a natural part of the price control process.