

Agenda

Advancing economics in business

A potential new regulatory framework for Britain's energy networks?

Ofgem has recently launched its 'Emerging Thinking on RPI – X@20'. This sets out for consultation a potential new regulatory framework for Britain's gas and electricity networks. If implemented, it would mean a fundamental change in what is asked of energy network companies, and a fundamental change in the way that Ofgem regulates them. Hannah Nixon, Partner at Ofgem, provides an overview of the regulator's thinking

RPI – X@20 is Ofgem's comprehensive review of how we regulate energy network companies. We are looking to the future on behalf of consumers and considering whether the current 'RPI – X' framework remains fit for purpose given the new and significant challenges faced by the gas and electricity networks.

Throughout the review we have taken an open and consultative approach. We have benefited enormously from considerable engagement in this project across the full range of stakeholders. Their input has been instrumental in forming our views.

The case for change

RPI – X@20 is not about needing to fix something that is broken. RPI – X has served consumers well over the last 20-plus years. Allowed revenues (and customers' network charges) have fallen by up to 60% since privatisation, quality of service has risen and there has been significant investment in the sector.

However, the future will be different to the past. The challenges of reducing carbon emissions to tackle climate change and wider sustainability issues are having a growing influence on Britain's energy sector. Going forward we need network companies to play a full role in delivering a sustainable energy sector. That means facilitating the move to a low-carbon economy, as well as continuing to provide safe, reliable and high-quality network services. They must also deliver these outcomes at value for money to both current and future consumers.

The level of uncertainty about the future shape and size of networks is unprecedented. Over the past 20 years there has been little technological innovation that has challenged the way network companies plan,

invest in and operate their networks. Forecasting future network requirements has primarily been about predicting energy demand growth (largely driven by economic growth). There has also been reasonable confidence that, over their long lives, assets will be used. Going forward, demand for network services is likely to change and may become less predictable—for example, as transportation and domestic heating move to low- (or zero-) carbon energy sources. In addition, a variety of types of technology may need to be trialled to determine what works in practice and what is cost-effective.

Given the uncertainty about what network companies need to do to deliver a sustainable energy sector, we think we need network companies that are innovative, focus on the long term, engage with their customers and wider stakeholders and join up with other industry parties to deliver whole-industry solutions. The RPI – X framework has not encouraged energy network companies to behave in this way.

The regulated network companies are very much creatures of the regulatory regime. We therefore think that we need to change our approach to the way we regulate to promote a change in mindset and focus at the network companies and deliver government policy in the future.

A potential new regulatory framework

The potential new regulatory framework set out in our Emerging Thinking consultation document is fundamentally about encouraging network companies to seek efficient and innovative solutions to delivering the outcomes that consumers want from their energy network—safe, secure, high-quality and sustainable

network services at long-term value for money. It is also about making sure that those companies that succeed in delivering for consumers are rewarded appropriately, while those that do not face real downside.

Although much would change if we were to implement this potential new framework, some of the features of the existing regime that stakeholders are familiar with and value would be retained.

- The regulatory control would remain an ex ante one.
 We would continue to set up front the level of revenues that network companies are allowed to collect from customers.
- We would retain the concept of the regulatory asset value (RAV), with no retrospective action affecting investments made under the existing regulatory framework
- We would retain strong incentives for long-term efficient delivery.
- We would continue to ensure that network companies that operate efficiently are able to finance their regulated activities.

An outcomes-led framework

Under the potential new framework, our starting point would be a clear view of what network companies need to deliver. The outcomes set out above—networks playing a full role in delivering a sustainable energy sector and long-term value for money—would be the cornerstone of a new regulatory framework, influencing how network companies plan and operate, and how we assess network planning and delivery.

We would translate these outcomes into high-level outputs, which would be closely linked to the outcomes that consumers value, rather than input measures such as length of pipe or units of energy delivered. We would set the minimum level of each output to be delivered. We would aim to minimise the number of output measures specified while capturing the outputs customers value and that companies can be held to account on.

It would then be for network companies to discuss with their customers whether they wish to deliver a higher level of outputs and how they could best deliver over the longer term. Each company's business plan would then need to set out its delivery plan, demonstrating:

- how stakeholders' views have informed the plan;
- the link between outputs and costs:
- that a range of scenarios and delivery options have been considered and how optionality has been built into the plan to deal with uncertainty;

 why the proposed delivery plan is expected to be best value for existing and future consumers.

Ofgem would then hold the companies to delivering the high-level outputs, but not necessarily the individual components of the business plan. In other words, we would focus on what is delivered rather than precisely how.

Incentivising efficient long-term delivery

To stimulate longer-term thinking, we are looking to put the regulatory framework on a longer-term footing. There are a range of ways in which this could be done, from simply requiring network companies to set their five-year business plans in a longer-term context to extending the price control period. We think that a partial lengthening is most appropriate, where some aspects of the regulatory framework are put on a longer-term footing but where we retain a more regular, say five-year, review for others. We are still considering which aspects of the framework could be lengthened, but possibilities include output specification, the incentive framework and financeability.

We have said that we would retain, and possibly strengthen, incentives for efficient long-term delivery. We would need to take a longer-term view of efficiency, recognising that this may mean that costs are not the lowest possible within a shorter time horizon and that, by the nature of innovation, some initiatives will fail but that this still provides valuable learning. We would set the incentive rate—ie, percentage of outperformance/ underperformance to be retained by companies—up front, with no discretionary adjustments. If network companies fail to deliver required outputs in full, we may reclaim the value of undelivered outputs for consumers, depending on the reason for non-delivery.

We are also proposing to differentiate between companies in the way we assess their business plans, both to enhance incentives for efficient delivery and in the interests of better, more proportionate regulation. This would mean that we would take a lighter-touch approach for companies that provide well-justified business plans and have a track record for delivery, freeing up considerable management time for good performers to devote to running their businesses. Those companies that we have concerns about in terms of their ability to plan and deliver, or their historical performance, would have a more onerous and intrusive regulatory approach than currently. The criteria that we use to differentiate would be objective and set out up front. There would also need to be clear sanctions for those companies that lose a good track record. Differentiation could also occur in terms of the risk/reward package offered to companies.

With strong incentives for efficient delivery over the long term, companies will also face strong incentives to

innovate. However, we intend to retain a specific innovation stimulus, building on the Low Carbon Networks (LCN) fund introduced at the recent electricity distribution price control review.² As discussed in our November 2009 article for *Agenda*,³ this is partly due to the absence of a robust carbon price (which means that not enough innovation needed for the transition to a low-carbon economy will occur), and partly due to the need to kick-start innovation in the sector. Going forward, we would look to open the fund up to third parties and to all four network sectors. The fund would be expected to be time-limited, with clear criteria set out up front on the conditions under which it would be removed from the regulatory framework.

The existing RPI – X framework gives network companies incentives to procure services from third parties where efficient as a means of reducing the costs of delivery. In the new regulatory framework, these incentives would be strengthened, with a greater focus on understanding when and to what extent it is beneficial to market-test delivery solutions. Larger, discrete network outputs and investments could be opened up to greater competition through tendering where there is strong evidence that this would drive innovation and long-term efficiency, but only where it would not threaten timely delivery of the challenging emission reduction (or renewable) targets, or the integrity of the way the networks are operated. We expect that we would decide to tender a project, or require the incumbent to, only in exceptional circumstances. However, putting tendering in the 'regulatory toolkit' could have strong incentive effects on companies.

The network companies would be encouraged to seek out delivery solutions that involve working closely with other parties, within the sector or in other sectors (eg. transport or communications). Related to this, the regulatory framework would encourage energy network companies to facilitate viable energy service companies. We want to encourage them to innovate in providing fair, non-discriminatory access to network services. They will need to provide transparent and fair access terms. But we are also considering whether we need to do something more to encourage network companies to engage. Options include providing rewards for leadership in this area and/or potentially requiring companies to lease or sell assets where agreement cannot be reached. The network companies could therefore be much more responsive to existing or new companies with new technologies or new approaches and so no longer be (or be perceived to be) a barrier.

Financeability

In the interests of consumers and in line with our statutory duties, the regulatory settlement must be

financeable for network companies that operate efficiently. This means that they must be able to access finance on reasonable terms and on a timely basis. It is also in consumers' interests that we do not 'bail out' companies that operate inefficiently. This has always been Ofgem's position and will continue to be so.

Beyond this, our principles for embedding financeability into the regulatory framework are not always clear to those outside the process. As part of RPI – X@20 we therefore want to establish a set of principles for financeability that are clear and transparent, and balance the interests of current and future consumers appropriately.

We have put forward a 'strawman' proposal for how we might do this. In summary, we are proposing that the return on the RAV embedded in the price control reflects the riskiness of the cash flows, and that the assumed asset life used to depreciate the RAV reflects the expected economic life of the assets. These are both easier said than done. But we think we could move a significant way towards this in both cases. In addition, we would establish clear principles to determine how expenditure is added to the RAV.

We think that we need to have a methodology for establishing whether a given regulatory package is likely to be financeable for an efficient company. However, given the risk profile of regulated companies, and the recent difficulties that credit rating agencies have had in anticipating financial distress, we are considering how best to assess financeability and what the role of existing credit rating agency metrics might be.

Enhanced engagement

As well as network companies engaging effectively with stakeholders, it is also important that we continue to engage effectively with consumers and other interested parties.

Ofgem is increasingly likely to be making decisions against a backdrop of greater uncertainty about how best to deliver at value for money, as well as increased costs associated with delivery of a sustainable energy sector. It will therefore be more important than ever that our decision-making is, and is seen to be, accountable and legitimate. It is also important that network companies' plans and delivery are consistent with the interests of existing and future consumers. This includes the interests of network users, including suppliers, generators and shippers.

Under the potential new regulatory framework, we would develop current processes to understand better what consumers need and to ensure that our policies are consistent with those needs. This would mean

building on current processes: ensuring that information is targeted and concise, making better use of existing fora, and providing a specific forum for engagement around price control reviews.

Some have argued that allowing third parties a fuller right to challenge—over and above their existing rights by way of judicial review—could balance the right available to the network companies, and might also help make engagement more effective. Others, including the network companies, have highlighted the potential disadvantages, particularly in terms of a possible increase in the number of appeals leading to uncertainty and delayed investment. The pros and cons are finely balanced and depend crucially on the precise design of any such right. We have yet to decide whether to introduce a right and are currently consulting on the issues as well as potential design.

Next steps

We think that the potential regulatory framework outlined above, and set out more fully in our

consultation document could deliver real value for consumers and encourage the delivery of a sustainable energy sector.

Any changes to the regulatory framework should not undermine the certainty and predictability of the current framework, which has allowed us to continue to attract significant investment in the energy networks at a cost of capital well below that required in many other countries' regulated energy sectors. We must make sure that any changes do not threaten the timely delivery of the investment we will need in the networks to meet Britain's challenging environmental targets.

We will consider carefully the responses to our consultation before working up our more detailed recommendations for the summer. Any new framework would first be implemented at the next transmission and gas distribution price control reviews in 2013.

Hannah Nixon

If you have any questions regarding the issues raised in this article, please contact the editor, Dr Gunnar Niels: tel +44 (0) 1865 253 000 or email g_niels@oxera.com

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¹ Ofgem (2010), 'Regulating Energy Networks for the Future: RPI – X@20 Emerging Thinking', January 20th.

² Further information on the LCN fund is available at http://www.ofgem.gov.uk/Networks/ElecDist/lcnf/Pages/lcnf.aspx.

³ Nixon, H. and Cook, H. (2009), 'RPI – X@20: Is More Innovation Needed on Energy Networks?', *Agenda*, November. Available at www.oxera.com.

⁴ The consultation document on how we might embed financeability into a new regulatory framework is Ofgem (2010), 'Regulating Energy Networks for the Future: RPI – X@20—Emerging Thinking: Embedding Financeability in a New Regulatory Framework', January 20th.