SP Transmission, SP Distribution and SP Manweb (SPEN)

Regulating Energy Networks for the Future
RPI-X@20 Emerging Thinking

9th April 2010

Introduction & Overview

SP Energy Networks (SPEN) welcomes the opportunity to respond to Ofgem's Emerging Thinking Consultation.

We continue to believe that Government energy policy, including European energy policy and policies of the Scottish and Welsh administrations require development of the regulatory framework. That said, in general, we believe that the required changes could be described as "enhancements" rather than as constituting a radical overhaul.

While RPI-X regulation has been very effective at delivering cost reductions and incentive mechanisms have encouraged quality of supply improvements, further development of the "ex ante" regulatory framework are now necessary to ensure that the sector meets the challenges which the energy sector now faces. We believe that DPCR5 indicates how the regulatory framework can continue to be adapted. With further development, the "ex ante" framework should continue to serve customers and society well.

In our view, key requirements of the RPI-X@20 review are:

- Development of an "ex ante" regulatory framework that effectively facilitates energy policy;
- Sufficient flexibility to allow companies to change plans and respond as future challenges and needs become more certain;
- The need for a more streamlined, accessible and transparent process;
- Finances appropriate Investment in networks;
- For network companies to develop effectively the organisational and intellectual capabilities necessary to innovate and meet the challenges ahead.

Financeability, in practice, requires companies to have and maintain an investment grade credit rating. This is necessary to ensure that companies are able to raise finance from a wide base of investors on competitive terms.

Any step change to asset lives will lead to a step change in revenues and prices. It is likely that any adjustment to asset lives would therefore have to be smoothed in some way.

We remain committed to working with Ofgem, government, the industry, customers and all other stakeholders to meet the challenges facing the energy sector

1. A new regulatory framework for a sustainable energy sector

Question 1: *Do you think the desired outcomes for the future regulatory framework are appropriate? Are there any we have missed?*

The desired outcomes set out in the consultation paper are without doubt the core priorities for both Ofgem and the network companies.

It is encouraging that there is a clear strong emphasis by Ofgem on facilitating the delivery of a secure and sustainable energy sector. If we are to deliver these objectives, consideration must be given to a more coordinated approach to developing a regulatory framework across our industry. The framework must be flexible enough to facilitate and stimulate companies' abilities to meet future challenges and objectives.

In order to meet the sustainability challenges, not only must network companies evolve, but as an industry, we must also review the end-to-end energy supply chain. Perhaps the most fundamental challenge revolves around the lack of coordination between generation, network and electricity supply development in the UK. In particular in relation to energy services, with an expectation that supply companies will move away from the selling of energy as a commodity to energy solution providers. This is at a time when changes anywhere in value chain have a significant potential to fundamentally change the shape and requirements elsewhere in the chain.

We welcome the renewed focus on the longer term and, in particular, the explicit recognition of the interests of future customers.

Question 2: *Do you agree that we need a fundamental change to the existing 'RPI-X' frameworks to ensure these outcomes are delivered?*

Although we recognize the benefits that RPI-X regulation has delivered, the challenge of meeting climate change targets requires the regulatory framework to adapt. Nevertheless, we believe that the "ex ante" framework is sufficiently flexible to accommodate the necessary changes.

Whilst competition yields societal benefits where the conditions for a competitive market are met, free markets can never deliver public goods, of which a low carbon economy is a classic example. We believe that clearer direction may be required to augment the traditional economic model and associated incentives.

In general, we believe that successive refinements of the original RPI-X model by, e.g. incentivising quality of service, have improved outcomes. It is also clear that regulation has been very effective in delivering significant cost reductions to consumers. However, we accept that further developments are required to ensure that the sector meets the challenges which the energy sector now faces. We believe that DPCR5 indicates how the regulatory framework can continue to be adapted. With further development, the "ex ante" framework should continue to serve customers and society well.

Question 3: *Do you think the suggested new framework is the best way of delivering these outcomes in the future? Are there any aspects you would change? Have we missed any key aspects?*

We support the continued use of an "ex ante" price control framework that is set using the familiar "building block" approach. In particular, the RAV and associated return and depreciation components are essential features of the current framework, which provide reassurance to investors.

We recognize the need to make more explicit the outputs which will be delivered during a price control period.

The increase in uncertainty surrounding the transition to a low carbon economy makes it undesirable simply to extend the length of the price control as outcomes may increasingly different from the assumptions made when the price control was set. However, there is a need to set each price control within the longer term setting, for example, through the use of scenarios. In addition there may be scope for fixing some elements of the price control settlement for longer. These are discussed in Section 4.

Key requirements of the RPI-X@20 review are:

- Development of an "ex ante" regulatory framework that effectively facilitates energy policy;
- Sufficient flexibility to allow companies to change plans and respond as future challenges and needs become more certain;
- The need for a more streamlined, accessible and transparent process
- Finances appropriate investment in networks;
- For network companies to develop effectively the organisational and intellectual capabilities necessary to innovate and meet the challenges ahead

2. An outcomes-led framework

Question 1: *Do you agree that a new regulatory framework should focus on delivery of desired outcomes?*

We agree that the new regulatory framework should focus on delivery of the desired outcomes. Network companies which efficiently deliver the desired outcomes should be adequately rewarded. Those which fail to deliver should be proportionately penalised. To enable this, the outcomes need to be clearly defined, consistent with regulatory allowances and within the direct influence of network companies. Subjective assessment should be avoided, as this will not deliver the transparency and clarity required to provide confidence in the framework.

The outputs associated with the outcomes must be quantified and consistent with the principles used during the recent distribution price review:

- measurable, controllable, auditable and replicable over time,
- sufficiently aligned with the underlying business processes that are used to plan and operate the network,
- sensitive to the level of investment

Question 2: *Do you have any comments on the categories of outputs related to these outcomes?*

The recent distribution price review has established some outputs associated with some of the six categories listed in Proposition 3. These should be utilised as a starting point and future outputs should build on these, and those being developed within electricity transmission, to develop appropriate outputs which provide consistency across energy sectors. Consideration will need to be given on areas where outputs can be applied directly across all energy sectors, where outputs can be used with a consistent methodology but different implementation dependent on the energy sector and where energy sector specific outputs are appropriate.

It is appropriate for network companies to propose the level of outputs which can be delivered based on their plan. Where Ofgem decides to alter the plan, based on views of work requirements, network companies must have the opportunity to review and revise the associated outputs. As recognised in the recent distribution price review, the delivered outputs will vary from the agreed outputs and a mechanism is required for network companies to explain the variance and demonstrate that it delivers value for money to consumers.

Network companies will also need to demonstrate that they have consulted stakeholders in the development of their plan and taken the stakeholders view into account when determining the appropriate level of outputs.

The consultation suggests that delivery may be linked to specific project milestones. This approach should only be used in specific areas when the ‘usual/standard’ outputs cannot be used. Using specific project milestones will restrict flexibility and network companies’ ability to innovate to deliver value money for customers in the long term.

For example, SP Transmission are already proposing to provide “collectors” which serve a number of windfarms connected to the transmission system, as this is more cost effective than individual connections.

Question 3: *Do you have any comments on how these outputs should be incorporated into the new regulatory framework?*

The regulatory framework must ensure that outputs are clearly defined and targets agreed as part of the price review process. The framework must ensure that the level of output is directly linked to the efficient long-term investment and that network companies are incentivised to deliver outputs effectively and efficiently.

As with the recent distribution price review, the regulatory framework should provide appropriate regular reporting of output performance and provide opportunities to review progress and discuss variance from targets. The periods for reporting and review should be appropriate to the output being considered and the length of the price review in this area.

Ofgem may find it necessary to take a more prescriptive role, consistent with government guidance, in order to deliver government energy policy.

3. Effective engagement and accountability

Question 1: *Do you agree that it is appropriate for network companies and Ofgem to improve their engagement with stakeholders as a way of improving the quality and legitimacy of decision-making? Do you have ideas on how to improve engagement by network companies and Ofgem?*

We fully support the principle of additional stakeholder engagement during the price control reviews, but would stress that exercise should not simply be to get a "tick in the box". It is important that both the network companies and Ofgem take on board stakeholder comments to ensure that the network companies invest in ways that better take into account the needs of existing and future consumers.

We welcomed the opportunity to engage with stakeholders during DPCR5. However, we do not accept that the interests of suppliers are closely aligned with those of current and future customers. For example, supply companies, who were granted a significant voice at DPCR5, and their shareholders are not directly interested in quality of supply which is a prime concern of customers. Neither do they have any clear motivation to support the transition to a low carbon network, which will ultimately be funded by customers.

Therefore, we were surprised by the privileged status which appeared to be given to Centrica during DPCR5. Centrica attended a number of meetings which other stakeholders do not appear to have opportunity to do so. At future price controls we would wish to see a more balanced representation of stakeholders' views being taken into account.

We would support a programme of systematic market research to elicit the views of customers, themselves. In particular, we would encourage Ofgem to assess the impact on customers of recent developments and, where time allows, research customers' views on future initial proposals. It would perhaps be useful also for Ofgem to develop principles and good practice guidelines and that these form part of the core practices network companies will be expected to adopt as part of the price control review process going forward. This would also assist in enabling consistency across network companies.

Furthermore, ways to develop the role of a consumer representative, presumably Customer Focus, should be explored. This may require such a body to review its skills and resources, especially if it were to be granted a third party right to challenge Ofgem's Final Proposals.

As future customers clearly cannot express their views directly, an approach needs to be developed of protecting their interests. This will be especially the case if third parties are allowed a right of appeal.

Question 2: *Do you think we should consider introducing a third-party merits-based right to challenge our final price control proposals?*

We believe that the effect of a third party appeal mechanism would be to reduce Ofgem's role and that the Price Control Review would become merely a pre-cursor to the main decision making stage. Ofgem has developed substantial expertise in energy related matters over many years and it is very unlikely that another body would have the same degree of industry expertise.

An appeal process would inevitably delay the decision making, by at least several months. This would delay investment programmes and delivery of their benefits to customers and society. It would also hold back the progress of government energy and climate change policies. Implementation of other improvements in the price control, such as enhanced incentive mechanisms, would also be "put on hold" and the associated benefits would not be attained. The disbenefits of such interruptions and delays must be offset against any potential benefits of a third party right of challenge.

The possibility of a third party challenge increases the uncertainty surrounding the outcome of a price control and also the timing and scale of changes to use of system charges.

This would increase perceived regulatory risk, thereby raising the cost of capital. In particular, the introduction of the right of third party challenge would increase downside risk, as third parties would only be expected to intervene when they perceived the proposed price control to be less than sufficiently demanding of licensees.

There are clearly especial difficulties in adequately taking into account the interests of future customers which need to be represented in an objective manner during the process. The opinions of many representative bodies are based on their experience of issues which they have been involved with and, to varying degrees, the views expressed by their members or clients. Clearly, the views of future customers cannot be ascertained directly but, nevertheless, their interests must be protected. It is helpful that Ofgem's statutory duties have been clarified in this regard.

At present, we recognise that the involvement of stakeholders in price reviews could be usefully expanded, provided that appropriate representation of present and future customers is achieved. We believe that wider participation could be encouraged through a programme of coordinated market research, which would allow a much greater diversity of customers to express their views. Moreover, the market research can be designed to investigate the inevitable trade-offs involved in providing and operating gas and electricity networks.

This programme should be sponsored by a group including representative stakeholders, Ofgem and licensees. The funding of such a programme, however, would need to be considered further. For example, whether stakeholders would be expected to contribute to the costs or whether it was centrally funded by Ofgem and recovered through licence fees. One possible approach would be for Ofgem to fund the core research with supplementary research being funded by stakeholders, potentially on a shared basis.

We support the aim of improving the effectiveness of the regulatory regime. However, we believe that the focus of RPI-X@20 should be on making the price control review process more effective and transparent so that appeals would not be necessary. It is conceivable that the availability of subsequent appeal would reduce the perceived pressure to "get the Final Proposals right". Similarly, difficult political and social issues may be left to the appeals body to resolve. Also, there may be a perception that the price review process is only a preliminary stage and parties may be tempted to conserve resources and effort until the appeals stage.

There are significant differences between the energy sector and the regimes for communications and airports. This is reflected in the legislation which applies to each of these sectors. It is notable that the proposed reforms to airport regulation followed criticism of the CAA and a conclusion by the Competition Commission that "the current system of regulation of the designated airports (Heathrow, Gatwick, and Stansted) is a feature that distorts competition". Nevertheless, the DfT proposes[1] to limit third party appeals to Passenger Focus, as its perspective is judged to be more aligned with that of passengers themselves, and not to establish a right of appeal for airlines.

[1] Department for Transport (2009) "Reforming the Framework for the Economic Regulation of Airports – Decision Document", December

4. Incentivising Efficient long-term delivery

Question 1: *Do you have views on our suggestion that financial commitments could be provided for longer than five years for some elements of the price control? What would be the appropriate length of this partial 'longer' period? To which aspects of the control might it be appropriate to give a longer-term commitment?*

There are already some incentive mechanisms, for example, that for DG which are intended to continue beyond a single price control period. There are also roll-over mechanisms which extend the period for which financial effects apply into the next price control period. It is likely that a range of longer periods would be required, with some potentially extending up to the expected life of the assets concerned and others reviewed more frequently, especially those where the outcomes are subject to greater uncertainty.

However, we would not support simply extending the price control period to, say, ten years.

We note Ofgem's preference for incentives are based on outputs i.e. "outcomes". We believe effective outcome based incentives must focus on those activities which the network company has direct control over. With the implementation of DPCR5, we believe that a satisfactory balance of incentives is in place for the distribution companies that should apply for the period of DPCR5. SP Transmission, as a Transmission Owner, is willing to consider new incentives subject to it not being penalised (or rewarded) for factors that are outwith its direct control. That said, we believe that there are opportunities for incentive arrangements that, working with the GBSO, can be implemented in the near future.

We agree that that the regulatory framework should encourage and reward network companies for innovating and make necessary changes to play their part in delivering a sustainable energy sector. For example, we are very supportive of the Innovation Funding Incentive (IFI) mechanism introduced as part of DPCR4 and extended in DPCR5. We see IFI as a resounding success against which companies such as ScottishPower have levered further funding to develop and implement technologies with mid-range technology readiness levels. For example, the IFI incentives in TPCR4 have incentivised a number of projects which are aimed at long term use of the network and meeting the challenges of future expected generation patterns.

Question 2: *Do you have views on our suggestions on what business plans might look like in the new regulatory framework?*

We recognise the requirement for business plans to be linked to the outputs which are planned to be delivered.

There should also be evidence of how stakeholders' views have been incorporated into the plan.

Also, it is likely that plans will extend for a longer period, say, ten years, which would be consistent with the requirements of the EU Third Package, for transmission. It is likely that there will be a continuing need to set these in the context of even longer term scenarios, which should be developed on an industry wide basis.

Nevertheless, provision will have to be made for provision of summary plans, which are more accessible to third parties.

Question 3: *Do you have comments on our ideas on how efficient costs might be assessed in the new regulatory framework?*

Where outputs are clearly specified it should be possible to focus on the aggregate cost of their delivery. This allows companies greater flexibility in choosing how they deliver the required outputs. In addition, this would avoid the need for bottom-up cost modelling which is fraught with difficulties and yields potentially spurious results. Also, it should be easier to assess aggregate cost per output figures against willingness to pay measures.

Question 4: *Do you have comments on our ideas on how efficient long-term delivery might be incentivised in the new regulatory framework?*

In principle, we support the equalisation of incentive rates across different types of costs. We also support the removal of potential periodicity effects, which may arise where benefits are retained for shorter and shorter periods as the price control period progresses.

DPCR5 has already established a claw-back mechanism for electricity DNOs that would operate if outputs are not delivered, which could be developed for other businesses.

Question 5: *Do you have comments on our suggestions of how the new regulatory framework might encourage network companies to anticipate and deliver on the needs of existing and future consumers and network users?*

Going forward, increasing levels of distribution connected generation will require networks to be more “active” in their operation and to recognise the possibility that this may result in export on to the transmission system. Distribution companies will need to consider solutions such as voltage control, power flow management, dynamic circuit ratings and potentially energy storage technologies to deliver a better and more efficient electricity transport. It is therefore vital that the GB network operators are able to innovate. The regulatory framework must be such that it does not create barriers to development through complex and uncertain economic schemes that are based around subjective reviews. For example, the development of the common structure of charges methodology has been contentious and the effectiveness of price signals alone remains unproven.

We believe that, as inevitably, intermittency on the system increases and balancing the system is faced with greater challenges, it will be increasingly important to seek out the opportunities for demand to follow low carbon generation. In the longer term, the application of smart grids and smart demand is likely to assist in the delivery of a lower carbon economy and supply security.

These new techniques, however, will not obviate the need for new centrally dispatched electricity generation for base-load, mid-merit and peak demand. Indeed, we think that such centralised generation will remain the main part of the solution for the foreseeable future.

The Government should encourage new thinking to augment current market arrangements to meet the operational and network challenge caused by future forecasts of supply intermittency. Such a response would be likely to lead to new supply and demand side measures emerging.

Question 6: *Do you have views on our ideas on how the interactions between charging and price review incentives might be taken into account at price reviews?*

Ofgem's imposition of a common charging methodology for electricity distributors along with suppliers' objections to unpredictable price changes will deter potentially innovative pricing by electricity DNOs. For example, further work is required to develop use of system charges for generation dominated areas of network, which will develop sooner in some areas than others. In any case, it is not clear to what extent suppliers will pass on use of system charging signals nor whether energy prices and associated taxes will dominate price signals.

In particular, we do not consider it would be appropriate to provide explicit rewards for those companies which implement new charging structures, in the context of a common charging methodology.

Question 7: *Do you have comments on our suggestion to treat companies differently at the price control, both in terms of process and incentives, reflecting planning and delivery performance?*

Any differential treatment must be objective, transparent and responsive to change in behaviour by licensees, for example, following change in ownership. We foresee severe practical difficulties, in terms of increased complexity and resource cost. We believe that the perceived benefits can be gained by incremental enhancement of existing arrangements.

Question 8: *Do you have views on our suggestion to open up some aspects of delivery to competition?*

Competitive tendering already plays a large role in delivery of our outputs, examples include:

- Design and Build contracts for major projects (eg major substations and/or circuits)
- Engagement of 'cable lying' and 'overhead line construction' contractors on a scale of rates (eg £/m or trench or £/joint hole)
- Procurement of bulk quantities of materials (cable, switchgear etc)

Given the above, 'Competitive Tendering' clearly has a role in future delivery strategies so, in assessing future tender strategies, Ofgem should also give consideration to:

- The likely incentives of the chosen option (for example a 'design and build' only tender encourages delivery of the lowest capital cost but potentially results in low cost / high maintenance equipment being used)
- Complexity - Encouraging multiple new asset owners into the arena will increase the burden on the system operator in co-ordinating maintenance outages, and may well require a complex commercial arrangement

However, it is important that competitive tendering arrangements do not delay delivery of the government's renewable energy and climate change targets.

Question 9: *Do you have comments on the design of a cross-sectoral time-limited innovation stimulus that is open to a range of parties?*

We support the development of the Low Carbon Network Fund, which was introduced in DPCR5, as a basis for a cross-sectoral innovation stimulus.

Question 10: *Do you have comments on our straw man on how we would embed our financeability duty into the new regulatory framework?*

Financeability, in practice, requires companies to have and maintain an investment grade credit rating. This is necessary to ensure that companies are able to raise finance from a wide base of investors on competitive terms.

Ofgem should be aware that depriving network operators of the likelihood of maintaining adequate financial ratios, as required by the major credit rating agencies, would significantly increase the cost of debt and limit the range of investors from which finance could be raised. This would threaten the investment which is required to facilitate the transition to a low carbon economy.

Furthermore, some network operators would face breaching their loan covenants, which would, as a minimum, result in significant refinancing costs. In more serious cases, network operators could be pushed into financial distress. In our opinion, such consequences would be inconsistent with Ofgem's statutory duties and we would expect any parties that are forced into that position to challenge Ofgem's decision.

The Competition Commission in its report on Stansted Airport has recently re-affirmed its view[2] that price controls should be set on the basis of an investment grade credit rating which is sufficient to provide a buffer to enable the airports' financial profile to help them absorb downside shocks. This again justified the targeting of a credit rating that is comfortably within investment grade.

PIMCO, a leading global investment management firm, in a recent note[3] in its Bond Basics series sets out its approach to credit research:

> "When drilling down into a specific sector, it is critical to differentiate between issuers. For this, the analyst uses credit metrics including leverage and interest coverage as well as other industry-related metrics. Credit metrics provide a convenient way to compare issuers. They list key factors for each individual issuer, including:
>
> - Rating
> - Net Debt
> - Earnings before Interest, Taxes, Depreciation and Amortization (EBITDA), last 12 months
> - EBITDA Interest Coverage
> - Net Debt/EBITDA

[2] Appendix L, paragraphs 21 and 22

[3] PIMCO (2009) "Quantifying Risk: PIMCO's Approach to Credit Research, Bond Basics, October

- Funds From Operations (FFO) /Net Debt
- Debt/Cap
- Five-Year Credit Default Swaps (CDS)

Whether or not Ofgem agree with the views of credit rating agencies has no bearing on the impact of their judgements on the capital markets, which is what determines the cost of debt. For example, a downgrade from investment grade to high yield often has wide implications because of potential guideline violations in investment portfolios: certain market participants would be forced to sell their positions in such a “fallen angel” issue.

Any step change to asset lives will lead to a step change in revenues and prices. It is likely that any adjustment to asset lives would therefore have to be smoothed in some way. Possible approaches include:

- Phasing a series of smaller changes over a number of price control periods; or
- Maintaining the existing asset life for assets already in the RAV but changing the asset life for subsequent additions to the RAV.

Whilst we understand Ofgem’s concerns, in principle, surrounding “arbitrary” financeability adjustments, it is vital that practical consequences are fully taken into account and that inter- and intra-sectoral differences in circumstances continue to be considered.

5. Cross-Sectoral solutions for a sustainable energy sector

Question 1: *Do you agree that a new regulatory framework can deliver our desired outcomes within the existing industry structure?*

Yes: we strongly support Ofgem's rejection of "ex post" regulation and "constructive engagement"

Question 2: *Do you agree that it is appropriate to encourage network companies to work with others to identify cross-sectoral solutions to the challenges the sector faces?*

We acknowledge the requirement for network operators to provide appropriate access terms on a non-discriminatory basis.

However, it is not the role of network operators to "pick winners".

Electricity DNOs already participate in a number of industry fora; where appropriate membership could be extended to include other parties, including energy services companies.

We would be concerned if a transfer of assets from the regulated network operator were to facilitate the creation of what might become effectively a local monopoly

Question 3: *Do you agree that the regulatory framework should ensure energy network companies facilitate effective competition in energy services?*

No: the requirement on DNOs should simply be that they do not discriminate between energy services providers. It is not at all clear, in any case, that the market conditions exist that foster the benefits that competition would otherwise undoubtedly bring.