Hannah Nixon
Partner, Transmission and RPI-X@20
Ofgem
2nd Floor
9 Millbank
London
SW1P 3GE

Lakeside West
1st Floor
30 The Causeway
Staines
Middlesex
TW18 3BY

6th September 2010

Dear Hannah,

**Regulating energy networks for the future: RPI-X@20 Recommendations**

1. Thanks for giving us to the opportunity to respond to the Recommendations of the RPI-X@20 review. This non-confidential response is submitted on behalf of the Centrica Group of companies excluding Centrica Storage Ltd.

2. As you are aware, we are the largest integrated energy company in Great Britain without an interest in an energy network. We have therefore participated in the RPI-X@20 project without a conflicted perspective on the changes required to network regulation to meet the challenges ahead. We also spend over £2 billion each year on network charges, of which around £1.5billion will be reset from April 2013. We therefore have a very material interest in the outcome of this review.

3. Overall, the majority of recommendations set out in the consultation document have the potential to deliver real benefits for consumers. If implemented effectively, the "Revenue set to deliver strong Incentives, Innovations and Outputs" (RIIO) model should result in price controls that are a significant improvement over previous controls.

4. The RIIO recommendations are necessarily specified at a high-level. However, for the full benefits of the RIIO recommendations to be captured in GDPCR2 and TPCR5, there must be clarity over the way these principles should be interpreted. This response focuses on clarifying the principles set out in the recommendations document, and identifying a number of areas where additional guidance is needed.

5. We look forward to the opportunity of working closely with Ofgem and other stakeholders through the Forum and Working Groups for GDPCR2 and TPCR5 to establish how to make the principles work for those reviews.

6. Of the recommendations set out in the consultation document, we have identified five main areas where we believe further consideration of principles could help deliver increased benefits for consumers. These are:

   - third party appeals;
   - the eight year control and uncertainty mechanisms;
   - proportionate assessment;
   - transition arrangements for depreciation/financeability; and
   - anticipating and responding to future needs.

**Third party appeals**

7. We fully support the recommendations on third party appeals, and believe these have the potential to deliver a step change in network engagement with stakeholders. Crucially, this process must be viewed by networks as being robust and realistic if it is to lead to a tangible increase in engagement.

8. The publication of guidance on how the Authority will assess a request by a third party for a determination to be reviewed by the Competition Commission (CC) will help to give credibility to the concept of third party appeals. However, we believe there are three main areas where this guidance can be improved. These relate to:

   - ensuring that self-reviews by the Authority are effective;
   - ensuring the threshold rules that define what an effective contribution to a price control review are suitably clear; and
   - the timing of a request for third party appeal.

9. The risk of the model proposed by Ofgem for the assessment of third party appeals for the reference to the CC is that the Authority could have a conflict of interest in deciding whether or not to refer the control. In approving the original determination, the Authority will have considered all relevant information available to it. It is also very likely to have already been presented with the arguments included in the request by the third party. As a consequence, it could be argued that asking the same members of the Authority to decide whether to refer their determination to the CC means there is a low likelihood that a third party request for a CC referral will ever be granted.

10. There may be very good reasons why this would not be the case (e.g. if there were genuine areas of uncertainty or points of principle on which the independent view of the CC would be valuable). However there are ways in which this issue could be addressed more directly. For example, an assessment panel separate to the members of the Authority that made the decision on the price control could be formed to assess the third party request. This panel could comprise existing members of the Authority who were intentionally excluded from the original price control decision. Alternatively, a special Authority sub-committee could be formed to assess the request. Under either model, the crucial point is that the assessment panel would provide an independent view on the third party request. If it were not possible to ring-fence some members of the Authority then an alternative approach would be to establish an independent expert panel that could advise the Authority transparently on the merit of an appeal.

11. The draft guidance document states that one of the criteria by which a third party request for a CC referral will be assessed will be a check to ensure that the third party has "engaged effectively throughout the price control review process with Ofgem, Network Licensees and any other relevant party." Guidance on what would meet this requirement would be helpful. Any variation on this guidance for a specific price review should then be notified at the beginning of the review.

12. We would expect this threshold to be met so long as the third party in question had made identifiable efforts to engage at key points in the control process. These efforts may vary according to the size of the third party (e.g. a stakeholder with very limited resources to engage with price control processes may be expected to have a lower threshold than a better resourced stakeholder).

13. However in general we would expect this threshold to be met so long as the stakeholder raised the concerns that were the focus of any request to appeal to the CC at all key milestones in the price control process once that issue had been identified. This would include in responses to consultation documents (published by both Ofgem and the

relevant network(s)), as well as making separate representations to Ofgem and the networks.

14. Finally, we believe that further thought should be given to the window in which the Authority will assess a request from a third party to escalate a specific price control to the CC. We believe it should be possible for a third party (or indeed a network) to ask the Authority to refer an issue to the CC for review partway through a price control. It is likely that an issue sufficiently material to trigger a request for a CC referral will be identified well in advance of Final Proposals. A good example from DPCR5 would be the fundamental disagreement between networks and ourselves on the appropriate methodology to be applied in the calculation of the cost of capital.

15. If the Authority was prepared to consider requests for CC reviews of specific issues during a price control process, then this may have significant benefits for the price control process. Resources that would otherwise be devoted to debating the recurring subject of disagreement could be used to develop other parts of the control. So long as the issue being referred was sufficiently self-contained (cost of capital being a good example of such an issue), then a CC assessment could be completed well ahead of Final Proposals.

16. It would also be helpful to understand more clearly what would happen in the event that the Authority decided to refer a price control to the CC following a request by a third party (i.e. would Final Proposals be implemented, then potentially amended once the result of the CC review was complete?).

17. We include a separate annex (Annex A) providing more detail on the ways in which we believe the guidance document could be improved. This annex also provides examples of possible solutions, and further justifications for what is being proposed.

**Eight year control and uncertainty mechanisms**

18. We understand why the recommendation has been made to extend price controls from five years to eight years. However we have concerns that an eight year control will fail to provide substantially greater revenue certainty for networks, while the range of uncertainty mechanisms being considered could result in a material increase in the volatility of network charges.

19. We are also concerned that the range of "uncertainty mechanisms" being considered will increase the complexity of controls. This will make it difficult for users to understand how revenues (and ultimately charges) will change in response to changes in underlying variables. It will also make it far harder for stakeholders other than networks to fully engage in price control review processes (given a lack of transparency of the way in which revenues are set).

20. DPCR5 made a number of important innovations in the way in which uncertainty can be managed in a price control. We believe that these can be developed further, and adapted for use in an eight year control. In particular, the use of limited numbers of reopener "windows" helps to mitigate the impact of charging uncertainty (giving clarity that changes in charges will be limited to specific points in the control).

21. The concept of logging-up of adjustments to subsequent controls is also very effective in mitigating the impact of uncertainty on consumers. In the RIIO recommendations, it is suggested that logging-up may not be appropriate for larger adjustments. We do not agree this is necessarily true. Logging-up is a mechanism for smoothing the impact of short term unpredictable movements in parameters on network charges. Over time, many of these may be offsetting. To the extent this is not the case, and adjustments in revenues are material it is unclear why short term funding requirements should be borne

by consumers immediately (rather than aggregating these until either some pre-specified materiality threshold is breached).

22. We suggest that analysis is undertaken early in the development of the two price controls into how logging-up can be developed further, and applied to an eight year control. Recognising there is a trade-off between providing greater certainty of cash-flows for networks and limiting volatility in network charges, it may even be appropriate for revenue adjustments granted through uncertainty mechanisms to be logged-up and applied to network charges at the interim review period.

23. We also believe there is a significant risk that the scope of the mid-period review could easily become a point at which most price control parameters are reset (i.e. effectively leading to four year controls). Valuable lessons can be learned from the water sector where this is exactly the problem that occurred there when a similar model was introduced.

24. We include further initial thinking on the application of the eight year control, and uncertainty mechanisms to price controls in Annex B.

**Proportionate assessment**

25. We agree with the principle of proportionate assessments for networks. The differential treatment of network companies based on the quality of their business plans and past performance at meeting agreed output targets should result in major improvements in the way networks engage with their stakeholders. If implemented successfully, this could result in real benefits for consumers. Indeed, we are already seeing differences in the performance of the GDNs in terms of engagement with stakeholders.

26. However, we think that implementing this robustly as part of GDPCR2 and TPCR5 will be very challenging. Key parts of process of assessing whether a network warrants a potential "fast-tracking" through the price control assessment process are:

    - clear evidence that networks understand the linkage between deliver of primary output measures (developed through consultation with stakeholders) and delivery costs; and
    - an assessment of past performance (particularly in meeting commitments to deliver on committed output measure targets).

27. The two price controls will be the first time that networks have developed output measures, and attempted to link planned delivery costs to the attainment of output measure targets. As a result, we would expect networks to have limited evidence by which they will be able to demonstrate a robust understanding of how different combinations of inputs can be used to achieve output targets. To protect the interests of consumers it is important that Ofgem's threshold for deeming business plans as being "well justified" are not adjusted (downwards) to make allowance for this lack of track record.

28. Introducing the concept of proportionate assessment will lead to a major change to the process of running a price control review. It is therefore important that Ofgem provides more details on the rules it will apply when assessing whether networks have been acting appropriately in the current price control processes. Early indications of what would be an acceptable level of stakeholder engagement would be particularly helpful. Without such guidance, there is a significant risk that networks will challenge any attempt by Ofgem to deem their business plans lacking quality at a later stage in the process.

**Financeability**

29. The proposals for changes to the way that networks are financed are a welcome part of the RIIO package of recommendations. In particular, we support the clear statement that it is the responsibility of the network companies to determine their own financial structure, and that is they and their shareholders that bear the risks associated with the chosen structure.

30. We also support the introduction of a form of indexation to the cost of capital. We fully agree that long-term averages are the most appropriate way of calculating the cost of debt going forward (irrespective of forecast market rates). Indexing the cost of debt in a mechanistic way for changes in the long-term trailing average level therefore has the potential to deliver clear benefits for consumers. In particular, this will avoid the need to allow "headroom" in the cost of debt as uncertainty over the control will be mitigated.

31. While the concept of the indexation mechanism is clear, significant analysis will be needed to understand how this can work in practice. There are likely to be a number of alternative ways in which the model can be introduced. It will therefore be important to begin the development of the mechanism through the relevant working group as early as possible.

32. It will be particularly important for Ofgem to provide guidance on the way in which it will apply uncertainty mechanisms to the indexed cost of debt, and the way in which it is envisaged mid-control changes in the long-term average will impact network charges. We would be very keen to explore ways in which logging-up in particular can be applied to the indexation model.

33. Ofgem's proposed approach to the transitioning or phased implementation of the financeability principles will also have a material impact on the benefit to consumers of the RIIO recommendations. We recognise that the financeability proposals may have an impact on cash flows of some of the networks. However it is important that in determining whether any phasing is necessary, the interests of consumers are fully considered. We would also note the recent findings of the CC in the context of its provisional findings on the Bristol Water referral did not allow for any transition period[1].

34. There are a wide-range of other more detailed issues that will need to be addressed at each price control. For example, it is unclear from the document how Ofgem intends to calculate the notional gearing that will be applied at each control. In particular, we will be keen to understand how it might be appropriate for Ofgem to allow notional gearing to vary within each sector (if at all).

35. A further area that will have a major impact on consumers will be the way in which Ofgem's principles on capitalisation and depreciation will be translated into each of the gas and electricity distribution and transmission sectors. There are numerous approaches that could be applied to assess the rate of economic depreciation of assets in each sector. A critical issue will also be setting the fixed percentage of total expenditure to be capitalised during the price control period for gas distribution and transmission.

36. We look forward to engaging with Ofgem and the networks on all of these issues in the context of the joint GDPCR2/TPCR5 financial issues working group.

**Anticipating and responding to future needs**

37. Finally, we also support the recommendation to provide networks with increased flexibility to propose business plans that anticipate the future needs of users. Given the uncertainty facing the energy sector over the next decade, it is important that networks have clarity that their investment plans should be driven by the needs of their

[1] Section 10 of the June 18th Provisional Findings report

stakeholders, and that user commitment should not be the sole determinant of whether planned investments should be allowed to enter the RAB.

38. For certain categories of investment, we therefore agree networks may need to invest ahead of financial user commitment by users. However, this will mean that networks will need to provide compelling evidence at the Proportionate Assessment stage of the price control that planned investments will meet the needs of users, while still delivering value for money.

39. The risk of this new approach to setting allowed revenues is an increased danger of networks investing in assets that are ultimately under-utilised. We support the development of secondary deliverables where these can be specified, which should help to mitigate the risk of asset stranding. However, we believe the best way of mitigating this risk is through clear guidance from Ofgem on the depth and quality of stakeholder engagement that networks should be required to undertake before significant anticipatory investments can be allowed in price control determinations. In addition, Ofgem should provide clear guidance about what stages of anticipatory investment are allowed before different forms of customer commitment are needed. This provides the company with sufficient allowance to be ready and meet appropriate timelines without creating the risk of significant under-utilisation noted above. Further work on guidance in this area is needed.

**Future involvement**

40. The RIIO recommendations have the potential to deliver a step change in value for consumers from price control outcomes. However, given the recommendations are necessarily specified at a high level, it will be essential that Ofgem involves all stakeholders during the current price control processes to apply these principles on a balanced way. We are very keen to engage in various working groups that have been established in TPCR5 and GDPCR2 to help turn the RIIO recommendations into a reality.

41. We hope these comments have been helpful. We would be very happy to discuss them in more detail if you would find this useful.

Yours sincerely,

**Tim Dewhurst**

Head of Network Regulation and Market Design
British Gas

## Annex A: Draft Guidance on Third Party Licence Modification References

As part of its RPI-X@20 recommendations, published in July, Ofgem released a draft guidance on the process according to which it intends to handle licence modification requests that are trigger by either a licensee or a third party. This short note discusses a number of issues that we have identified with regard to Ofgem's proposals as they apply to third party appeals. Specifically, it discusses two key areas:

- the "threshold of engagement" hurdle to lodging an appeal; and
- issues concerning the appeal being heard by the Authority.

### 1.1. Threshold of engagement

Ofgem's draft guidance set out six requirements from a third party lodging a licence modification request:

1. Provide a detailed explanation of the third party's interest in the price control review process.
2. Clarify which licensees the price control modification request applies to and provide a full explanation of how the issues raised in the modification request relate to the price control final proposals.
3. Demonstrate legitimate and material concerns as to why the third party considers that the price control final proposals either operates against the public interest, or may be expected to operate against the public interest.
4. Demonstrate how the licence modification request is consistent with the Authority's principal objective of protecting the interest of current and future consumers.
5. State and provide evidence (where appropriate) that the third party has engaged effectively throughout the price control review process with Ofgem, the licensees and any other relevant stakeholders.
6. State and provide evidence (where appropriate) that the third party had brought the argument and/or evidence it seeks to rely upon in the price control modification request to Ofgem's attention during the price control review process, prior to the publication of final proposals.

Of the six criteria, we see the greatest potential for confusion around the fifth – namely, the requirement that appeals can only be lodged by parties that have has a sufficient level of engagement in the price control review process.

Clearly, some hurdle is required to ensure that appeals are only lodged by parties that have a material interest in the outcomes of the price control review. However, we think that the way in which this "threshold of engagement" criterion is currently stated could cause confusion. Specifically, we are concerned about two issues:

- How will the threshold be defined? (i.e. to what extent does a third party have to engage in the price control review process to become eligible to lodge an appeal?); and

- Should different thresholds be set for different types of stakeholders? For example, should a newly established generator be expected to have engaged with the process to the same extent as, say, an established stakeholder such as Centrica? At the same time, the threshold cannot be set so low as to not be a hurdle at all.

To the best of our knowledge, no other regulatory regime applies a "threshold of engagement" in the context of third party appeals. As such, we consider it important that Ofgem should provide clear guidelines as to what constitutes effective engagement in a price control review process, and whether the threshold will be set as a "one size fits all" or whether different thresholds will be set for different types of stakeholders.

We would believe that the minimum level of appropriate engagement would be:

- responding to Ofgem and company consultation documents;
- taking opportunities for other forms of engagement, such as participation in open meetings; and
- having clearly signalled at the draft determination stage concerns with the aspects of the determination that cause concern.

For a company such as Centrica it would be expected that engagement covered the majority of issues while a smaller, or more specialist third-party, could be expected to have only commented on those issues that pertain to its operations. For example, all aspects of the forthcoming TPCR5 review are relevant to Centrica and so effective engagement ought to be assessed against Centrica responding on the majority of issues. However, a new entrant generator might only be affected by decisions on cost allocation and the cost of capital and, as such, would be subject to a threshold for effective engagement concerned with having responded on those issues rather than elements that are of no interest or impact on them.

Different levels of resources could also mean that smaller stakeholders might only be expected to respond in writing while larger stakeholders would be expected to both attend meetings and provide written engagement.

Even though it is likely that Ofgem would have to accept a case-by-case definition of the threshold, some guidance along the lines outlined above would be helpful.

There are also some issues with the third criteria that would benefit from further clarification. For example, understanding what is meant by "material concerns" would be helpful.

### 1.2. The role of the Authority

According to the draft guidance paper, appeals will be heard by the Authority, which will then make a decision on whether a referral should be made to the Competition Commission (CC). According to the timeline presented in the draft guidance paper, the Authority is required to decide on whether to refer an appeal to the CC within 12 weeks of the publication of the final proposals. We consider it unlikely that the Authority would be willing to "admit that it got it wrong" so soon after approving the final proposals, and before the new price control is even implemented. For the sake of fairness it would seem to be essential that the appeal is evaluated by a body that was not so involved in the final proposals.

As such, an independent appeals panel would seem to be appropriate. We see three approaches for setting up an appeals panel:

- One option would be to appoint an appeals panel of outsiders (academics, heads of other regulators, etc.), which may number three or more individuals, as deemed appropriate. Such an approach is used by the Essential Services Commission (ESC) in Victoria, Australia in a system that has been in place since 1994 (applying to the ESC's predecessor prior to 2001) and has resulted in a number of ESC determinations being changed subsequent to an appeal.[1] The process of setting panels of outside experts for various issues is commonplace among UK regulators as evidenced, for example, by Ofgem's recent announcement of an expert panel that will decide on the allocation of Second Tier funding under the Low Carbon Networks Fund.
- An alternative approach would be to select a "ring fenced" appeals panel from within the Authority. This panel will not be part of the approval process of price control proposals and should, therefore, represent a more impartial judge of appeals. Given the size of the Authority, we think that such a panel – consisting of three members – could be set up, which will maintain a plurality of opinions both in the appeals panel itself and among the remaining eight or nine members of the Authority who will decide on price controls.
- An existing external body could be used. For example, third party appeals against decisions by Ofcom have the CAT as a gate-keeper while it is the CC that undertakes the appeal.[2]

Realistically the third option would probably require legislative change and so is not an appropriate solution in the short-term. The other two approaches could work since it is the Authority that is making the decision, just based on independent and transparent advice. But it would be important that the advice from the independent panel is published so that any deviation from their recommendation can be identified and understood. This would then allow a basis for a judicial review if the appellate or another third-party felt that the decision was inappropriate given the advice that had been received.

[1] It should of course be noted that unlike the expert panels in countries like Australia and Ireland the panel here would only be determining the merit of an appeal to the CC, not the appeal itself.

[2] It should be noted that the CC has recently, August 24th, announced a short investigation of the operation of the telecoms appeals process.

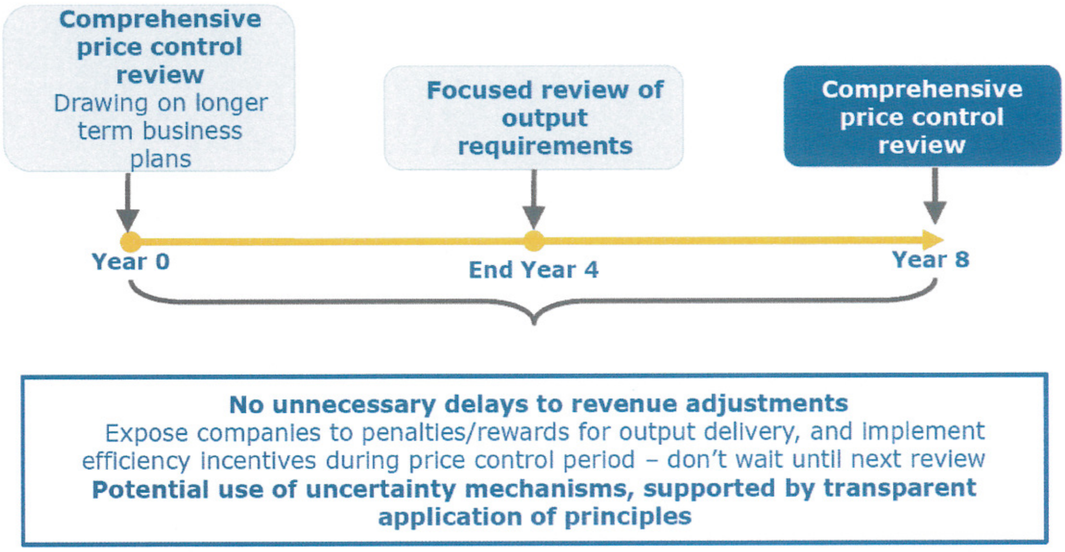
## Annex B: Ofgem's eight year price control proposals

The proposal to extend the existing five year to eight year price controls contains two elements:

- a comprehensive price control review every eight years instead of every five; and
- a review of material changes to output requirements at the mid-point of the review period.

This structure is depicted in Figure 1 below:

*Figure 1: Overview of eight-year price control*




*Source: Ofgem*

This proposal has come as part of a wider move to encourage "long-term thinking" in the regulatory regime. The five-year cycle has value partly because it is well understood by network management and investors. However it has become a focal point that has arguably distorted companies' decisions to the short term. Ofgem cite consultation evidence that the framework to date has "led network companies to minimise short-term costs and reduce expenditure on technical innovation, training and their staff costs."

However, price control duration cannot receive sole blame for companies' actions. These problems would be smaller if network management cultures were less ready to focus on the next price control, ignoring many of the benefits of a longer-term vision. Cultural change will be important, but this will hinge on the credibility of Ofgem's framework to ensure short-termist solutions are never the rational ones.

A three year extension is unlikely to have revolutionary impact on its own. Ofgem have stressed that the "real upside" from this strategy will come from its complementarity with other elements of the RIIO framework designed to engender long-term thinking. It would be useful if Ofgem were able to provide more information on how these interactions will work in practice.

Choosing to lose such a well-known feature of the regime is surprising, and may create uncertainty around the future of other well known elements of the regime. However the disruption may have some benefit if it proves to nudge companies out of bad habits, focuses them on other elements of the regime, and persuades them in many cases that it is not the regulator but themselves at the root of their short-termism. The danger for Ofgem may be that if real benefits cannot be seen, this intervention may come across as high-profile but inconsequential tinkering.

*Price control duration*

Table 1 lists the potential benefits and drawbacks of extending the price control presented in Reckon's report for Ofgem's RPI-X@20 consultation on longer-term price controls.

*Table 1: Potential benefits and drawbacks of longer-term price controls*

| Potential benefits | Potential drawbacks |
|---|---|
| • Companies have a greater financial stake in their performance in planning network investment and anticipating customer needs beyond the five-year horizon.<br>• Companies keep more of the rewards from innovation that reduces their expenditure requirements beyond the five-year horizon.<br>• Less distortion to decision-making that may arise from fixed-term price controls, particularly as companies approach the end of a price control period.<br>• Lower administrative burden.<br>• Lower regulatory risk. | • Less adaptable.<br>• Financeability risks and the cost of capital.<br>• Risks of perceived windfall profits.<br>• Greater scope for prices to become out of line with costs.<br>• Risks of re-opening price control.<br>• Less frequent use of benchmarking information.<br>• Hikes in prices following price reviews.<br>• Slower feed-through of performance to profit.<br>• Unanticipated consequences. |

*Source: Reckon*[1]

The tradeoffs shown above help to consider what the optimal price control duration might be. Ofgem's choice of eight years is framed as the furthest they could extend the price control towards asset management horizons without compromising their credibility. No other regulated utilities in the UK have such a long price control. Ofwat initially ran a ten year price control for water and sewerage companies but this degenerated to a five year cycle as options to conduct full interim reviews were exercised. Internationally, there are examples of longer term regimes, for example with a ten year control in place for Electricity and Gas in New York State (See Box 1), but either with re-openers or sharing mechanisms included.

[1] Reckon (22 December 2009) "Longer-term price controls: paper prepared for Ofgem's RPI–X@20 review" http://www.ofgem.gov.uk/NETWORKS/RPIX20/CONSULTREPORTS/Documents1/reckon%20lt%20controls.pdf

**Box 1: Ten year price controls for Electricity and Gas in New York State**

Niagara Mohawk Power Corporation is a utility company in New York State owned by National Grid PLC. Its regulatory regime is based on an earnings sharing mechanism, with a defined acceptable target for Return on Equity (ROE). Electricity delivery rates were determined by a 10-year rate plan (from 31st January 2002). A 10.6% to 11.75% (post tax) target deadband was defined for the electricity ROE, with earnings above this threshold shared with customers. A similar arrangement was agreed for gas.

Niagara Mohawk has the right to request an increase in rates at any time. However, if it does so, it may lose any excess returns from the date of the new review. A "shipwreck" re-opener is also in place where if cumulative earnings over the first four years exceeded 11.75 percent, in addition to the sharing of benefits, a re-opener can be triggered. Prices are then to be adjusted by half of the annualised amount of excess earnings. Only one re-opener is allowed during the price control period.

*Comprehensive price control review*

Ofgem are proposing that in each of the four energy network sectors, a comprehensive price control would occur every eight years.[2] This would cover all aspects of the price control. Principles and incentive arrangements established at this stage would be fixed for the full eight years, including financial elements such as the WACC, depreciation profiles and capitalisation policy. If an eight year price control is implemented, a new and important element of the eight-yearly process will be how rules are set for any subsequent mid-term review.

The final decision on the length of the price control will be made at the start of each review. All options should be considered and consulted on including a return to the five year cycle in light of new evidence.

*Mid-term review*

Ofgem aim to address the increased uncertainty from the extended price control by introducing "the potential for a mid-period review of output requirements." In order to maintain the incentive properties of the longer review, this is described as a tightly-scoped review to deal with all material changes arising over the four years in one go.

Ofgem do not anticipate that the review would revisit past expenditure, financial parameters such as the WACC, efficiency arrangements or output incentives. Performance against initial output targets would also be out of the scope of the review. The reviews would instead be a structured review of "step-changes in the primary outputs that companies are expected to deliver." Examples of qualifying changes include:

- a change in the scale or urgency of requirements for connecting electric vehicles; or
- unexpectedly tight renewable targets.

Ofgem would need clear evidence that existing outputs didn't meet customer needs before any revenue changes could be mandated. At the mid-term review, Ofgem would assess if output

[2] Ofgem note that they will consider staggering the transmission and gas reviews in the future and therefore either the TPCR5 or GDPCR2 price controls may be under eight years. It is possible that one of the reviews will be five years but it is not clear which this will be at this stage. Presumably there would be no mid-term review.

requirements needed to change. In the case that there is no case for change, the review would be little more than a short consultation. A danger with this approach is that it is not clear where the burden will lie to prove material changes. Companies will have strong incentives to lobby for positive adjustments; however it is unclear that revenue reductions will be argued as forcefully, potentially to the detriment of consumers.

In the case that changes are required, Ofgem would determine the required changes in revenue (either positive or negative) and output requirements. This process would include stakeholder engagement, a draft adjustment and supporting analysis for consultation. Changes would not apply retrospectively.

In order to support predictability and avoid scope creep, both the scope and process for these reviews would be set out formally in final proposals and licence amendments. Decisions made (or indeed not made) at interim reviews could be referred to Competition Commission or be subject to Judicial Review.

Given the current lack of data on outputs and experience of output-based mechanisms, we expect that at least the next price control in each sector will retain some focus on inputs. Therefore Ofgem will have to be clear about how this would be reflected in the scope of the mid-control review if outputs represent a smaller portion of revenues than currently envisaged. Further information on how this will work is required before we can understand how limited this review really can be.

*Managing uncertainty and the role of the extended price reviews in the longer term approach*

The role of the UK's energy networks are likely to experience major turning points over the next two decades. This means that formalised flexibility and adaptability are likely to be important as Ofgem reduce their opportunities to change tack. Box 2 sets out Ofgem's principles for introducing "uncertainty mechanisms." These mechanisms allow revenue to change within the price control period.

**Box 2: Overview of Ofgem's approach to uncertainty mechanisms**

- In general, we would expect network companies to manage the uncertainty they face.
- Uncertainty mechanisms should only be used where they would deliver value for money for existing and future consumers while also protecting the ability of networks to finance the efficient delivery of outputs.
- When designing uncertainty mechanisms we would be mindful of the need to ensure that they were transparent and as predictable as possible, enabling those that pay network charges to be better able to predict potential changes.
- We would consider the appropriate timing at which mechanisms might be activated to ensure the impact on network charges was managed by network companies as far as possible, and to ensure that the impact on Ofgem and company resources was proportionate.
- We would consider how mechanisms work together in the package, limiting risks of unintended consequences arising from interactions between mechanisms.

While Ofgem's principles are sensible and show good intent, greater clarity would be beneficial in terms of their overall scope and how they will work as a package. We would expect Ofgem to give more concrete details on what uncertainty mechanisms would be used and when.

We understand that uncertainty mechanisms do not only benefit networks. They benefit customers if it means that Ofgem don't have to add headroom to their cost estimates. While uncertainty mechanisms may reduce overall costs for regulated companies, they may impose additional costs on consumers if charges become more volatile.

It would be good to see Ofgem provide some commitment to customers about how much and often charges could change. Limiting adjustments within the price control, would provide a strong signal that Ofgem fully understand the mechanisms and have considered how they may play out in practice.

There are a number of options for how Ofgem could do this:

- logging-up all changes and only implementing revenue/price changes at the mid-term review and at the end of the review;
- limiting the number of adjustments allowed, either in terms of number or value;
- annual limits on uncertainty mechanism changes, with extras being logged up or down;
- limits on the portion of revenue subject to adjustment;
- limits on the number of reopeners; and
- earnings sharing based on limits on the return on equity.

The ultimate choice of any such option would need to be based on a transparent assessment of their impact on incentives, as well as their expected effectiveness in relation to the risks at hand.

Ofgem should ensure all mechanisms in place are well understood and take account of how variations in external factors can naturally balance out over time. This may include considering the covariance between the uncertainties being managed and could inform decisions regarding how many mechanisms are used. The principles in Box 2 are sensible, but we would hope that Ofgem will provide evidence of how these are fulfilled when they are established at each review. Also, while it is difficult to plan for the unknown unknowns, Ofgem should provide greater clarity on the types of exceptional circumstance in which it would intervene.

*Conclusion*

While overall, the proposals will likely deliver benefits if implemented properly, Ofgem should continue to consider alternative strategies. Long-term project-based approaches appear to be successful in the OFTO regimes. Ofgem should set down principles for how it might expect to replicate this elsewhere. They should also consider what approach to take if RIIO fails. Approaches that harness companies' short-termist tendencies in ways that approximate long-term behaviour could be a fruitful area for further research.

The greatest amount of work to be done is the process for how within-review revenue changes will be made. These are essential to the success of the extended review. Increased commitment is valuable but only if it is credible. The RIIO proposals place a lot of trust in companies operating in new ways. Ofgem are making a number of fundamental changes to the price control process and the biggest danger is that if RIIO does not work as planned, eight years is a very long time to be wrong.

Further, while we can begin to consider how the longer controls will work in practice, most of the details will emerge as they are developed for each sector in their upcoming reviews. Consequently we expect this to be a major area for consultation and engagement over the next six months.