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Dear Hannah,

RPI-X@20 Recommendations

1. National Grid owns and operates the high voltage electricity transmission system in England and Wales and operates the Scottish high voltage transmission system. National Grid also owns and operates the gas transmission system throughout Great Britain and, through its low pressure gas distribution business, distributes gas in the heart of England to approximately eleven million businesses, schools and homes. In addition, National Grid owns and operates substantial electricity and gas assets in the US, operating in the states of New England and New York.
2. This is our response to the recent RPI-X@20 recommendations package of consultation material. Our UK networks will be subject to the regime that emerges from this consultation process as implemented through the upcoming TPCR5 and GDPCR2 price review processes.
3. This has been a thorough and timely review. The changing context for energy networks has been well documented and the consultation documents and working papers have examined a wide range of relevant approaches. The recommendations on which Ofgem are consulting contain few surprises which is entirely appropriate at this stage of a lengthy review.
4. We have engaged throughout the process in workshops, work groups and seminars; our views have been set out at length in written response which are available on the Ofgem website and, while we note a few changes in position in these final recommendations, for the most part we stand by these comments.¹
5. The recommendations contain many sensible suggestions. However, there remains a concern that many ideas are expressed at high level with much of the detail to be worked through in subsequent price control reviews. While this is perhaps inevitable, only following implementation will it be possible to conclude that the recommendations form a robust basis for long-term network regulation; much of our support is, therefore, contingent upon pragmatic implementation.

¹ For example:

<http://www.ofgem.gov.uk/Networks/rpi20/ConsultDocs/Documents1/NG%20response%20-%20Emerging%20Thinking%20General.pdf>
<http://www.ofgem.gov.uk/Networks/rpi20/ConsultDocs/Documents1/NG%20response%20-%20Emerging%20Thinking%20General%20-%20Embedding%20Financeability%20m%20a%20new%20regulatory%20framework.pdf>
<http://www.ofgem.gov.uk/Networks/rpi20/ConsultDocs/Documents1/NG%20-%20RPI-X%20-%20-%20Emerging%20Thinking%20General%20-%20Third%20party%20high%20level%20challenge.pdf>
<http://www.ofgem.gov.uk/Networks/rpi20/WorkingPapers/Documents1/NG%20Financeability%20Response.pdf>
<http://www.ofgem.gov.uk/Networks/rpi20/WorkingPapers/Documents1/NG%20Long%20term%20controls.pdf>
<http://www.ofgem.gov.uk/Networks/rpi20/ConsultReports/Documents1/National%20Grid%20comments%20-%20benchmarking.pdf>
<http://www.ofgem.gov.uk/Networks/rpi20/ConsultReports/Documents1/NG%20outputs.pdf>
<http://www.ofgem.gov.uk/Networks/rpi20/Stakeholder/Documents1/RPI-X%20-%20-%20Gas%20Futures.pdf>
<http://www.ofgem.gov.uk/NETWORKS/RPI20/WORKINGPAPERS/Documents1/NG%20Long%20term%20controls.pdf>
<http://www.ofgem.gov.uk/Networks/rpi20/WorkingPapers/Documents1/NG%20Financeability%20Response.pdf>
<http://www.ofgem.gov.uk/Networks/rpi20/ConsultReports/Documents1/NG%20outputs.pdf>

6. This letter contains an overview of our response to Ofgem's twelve recommendations and sets out in more detail our remaining key concerns.
7. In the end, these recommendations need to work in practice. Ofgem note their estimate that networks will need to invest £32bn by 2020 – part of a much larger infrastructure bill for the UK (with estimates running up to £500bn²). The regulatory regime which results from these proposals will need to offer network investors a sufficiently attractive risk/reward balance when compared against a variety of other investment opportunities.

Summary – Ofgem's key recommendations

8. By way of summary, we set out below our overview of Ofgem's twelve recommendations:
 - i **Overriding objective.** The overriding objectives set out in the consultation seem a reasonable starting point for energy network regulation. It is important to note that the efficiency of energy networks, which seek to provide optimal capacity to link sources of supply and demand, may not be synonymous the overall efficiency of the energy supply chain. While this is not recognised explicitly in the overriding principles, we believe this important principle is recognised elsewhere in Ofgem's package of recommendations and that the network's role of sending appropriate signals to help coordinate activity up and down the supply chain (e.g. through appropriate commercial terms and/or pricing signals) is sufficiently recognised.
 - ii **Industry structure.** It is appropriate that Ofgem's recommendations work within the confines of the existing market structure. Industry and market structure is primarily an issue for government, but Ofgem have a role making recommendations to government where they believe amendments may improve the delivery of energy policy objectives.
 - iii **Enhanced engagement.** We strongly support giving stakeholders more opportunities to influence the design of price controls and other regulatory structures. However, in taking their views into account, both networks and regulators will have to make a number of judgements. For example:
 - the extent to which some stakeholders, particularly those who have commercial interests elsewhere in the energy supply chain, may seek to represent their own commercial interests as those of consumers (or as supporting broader energy policy objectives); and
 - how to trade-off conflicting stakeholder views about a particular issue which may have distributional effects among stakeholders.

Enhanced engagement will not absolve networks or Ofgem from the need to undertake detailed analysis of the implications of particular approaches for consumers and for broader energy policy goals.

The early stages of TPCR5 and GDPCR2 have also raised process concerns as Ofgem and individual gas distribution and transmission networks all seek stakeholder views. It may be that a more structured process of engagement would allow stakeholders to engage more efficiently. This should be considered early in any review process.

- iv **Third party modification requests.** Ofgem have shied away from calling for the introduction of a formal third party right of appeal and have instead presented a detailed process for dealing with modification requests within the existing legislative framework. As set out in more detail below, we believe this position increases uncertainty and risk for network companies.
- v **Outputs-led.** We strongly support Ofgem's proposal to establish a more clearly articulated "regulatory contract" at price reviews. Our main concern is that the approach should be

² For example the paper "Delivering a 21st Century Infrastructure for Britain" co-authored by Dieter Helm, Ben Caldecott and James Wardlaw (Published by Policy Exchange in September 2009) estimated £434bn

pragmatic – in the way that the development of asset health measures in Transmission, for example, has been since the last price review. For a variety of good reasons, individual networks are unlikely to collect detailed information (performance or cost) on all likely primary outputs or secondary measures; moving towards an agreed set of measures and attributing costs to those measures is likely to take some time so implementation must be both practical and realistic.

- vi **Ex ante control.** We agree with Ofgem that an ex ante approach to setting price controls should be retained. We examine the question of inflation indices below in Appendix 1 – Financeability but, in short, we agree with Ofgem’s current view that RPI indexation should be retained.
 - vii **Length of the price control.** The eye-catching proposal to extend the price control period to eight years has potential benefits and potential problems which we examine below. Our view is that the consumer benefits of such an approach are not obvious and are likely to depend on the detailed risk/reward balance established between networks and consumers through the price control process.
 - viii **Proportionate assessment.** The principle of proportionate assessment encompasses a simple idea: deploying effort on price control regulatory scrutiny on the basis of network credibility (as reflected in performance against past plans and the quality of the existing business plan). We have no objection to his idea so long as Ofgem apply a credible, transparent and fair assessment framework. Where we have questions, as set out below, is with the practicality of implementing a “fast-track” regime for the best-rated networks.
 - ix **Third party role in delivery.** On the whole, most networks (including those owned and operated by National Grid) already tender out construction work; where they don’t, it is reasonable for Ofgem to expect that networks will present evidence that their delivery approach offers value for money. However, as we set out below, we have misgivings about Ofgem plucking individual projects from an overall programme to test value for money or, even worse, taking on the role of central buyer for major network projects.
 - x **Incentives.** We agree with the desirability of implementing transparent rewards/penalties for output performance as a key part of formalising the “regulatory contract”. These will need to be carefully calibrated to encourage the right behaviours and we agree simplicity should be a design goal. We cannot argue with the desire to establish transparent, ex ante, symmetric sharing rules regarding under- and over-spends but would note that symmetry demands price control allowances are based on realistic estimates of likely efficient costs rather than arbitrary target costs.
 - xi **Financeability.** We continue to have serious doubts about Ofgem’s financeability proposals. Our extensive comments are set out in Appendix 1.
 - xii **Innovation stimulus package.** We strongly support the innovation stimulus package and we recognise the potential benefits of opening this to third parties. It is important that any stimulus effect is not lost in complex or off-putting procedures (either regarding the design of the application process, the qualification criteria or the rules regarding intellectual property). We would also note that third parties who wish to operate on network assets will have to ensure any works conform to the rigorous engineering, safety and reliability requirements.
9. We comment in more detail on some aspects of the recommendations below.

Detailed Comments

Third party modification requests

10. A major theme of the review has been improving the “legitimacy” of the price control process: by promoting more detailed discussion with stakeholders about what networks are doing for the money; by offering stakeholders options on the outputs that networks will deliver; and, by demonstrating a responsive attitude to stakeholders’ views. We agree wholeheartedly with these steps.

11. The review also considered establishing a third party right of appeal to the Competition Commission. In their recommendations Ofgem have stopped short of this but instead offered detailed guidance on how they would reach a referral decision in the event of a modification request from a third-party.
12. To characterise the resulting process:
- Stakeholders are encouraged to engage throughout the process.
 - Ofgem will make final proposals which balance their duties and the evidence which they have accumulated through the process – including that presented by stakeholders.
 - If third parties feel, in spite of this, that final proposals still operate against the public interest they can submit a modification request covering some or all of the proposed settlement.
 - Ofgem will judge whether the modification request has merits, and will decide on the scope of any reference to the Competition Commission.
13. A sceptical stakeholder might conclude that the chance of Ofgem accepting a modification request under these conditions – effectively Ofgem accepting that they may have got it wrong – is unlikely.
14. A sceptical network might worry that this approach allows Ofgem to make a judgement in the round but then, potentially, the discretion to pick and choose the issues that are then referred to the Competition Commission. This discretion seems to increase risk for networks: Ofgem should at least offer networks the protection that any “part referrals” could only proceed if the limited scope was agreed with the relevant network or that networks then had the right to seek a full referral.
15. It seems to us that the (presumably) unintended consequence of advertising a new process will be numerous modification requests which dress up the private interests of stakeholders as the general public interest. The prospect of limited appeal costs (and any associated reputational impact) is unlikely to deter requests, for example from:
- a sizeable supplier faced with any sort of material P_o increase who could reap, at worst, a sizeable cash-flow benefit from delaying implementation; or
 - a producer or generator worried about the distribution impact of the price control on their competitive position.
16. For some readers, this may beg the question of why networks themselves should have a right of appeal to the price control which affects them but, for a network, it is always a much more balanced consideration with potential upsides and downsides to be weighed. For many other stakeholders it is likely to be a small and relatively certain cost against a definite cash-flow benefit (if prices are to increase) and a possible big improvement in their competitive position (if they win some of the arguments on distributional factors).
17. Our expectation is that, having made considerable efforts in the RPI-X@20 package to improve the legitimacy of price control decision making, the admission of third party modification requests would be extremely rare. Ofgem ought to have had the courage of their convictions on the balance to be struck in the light of the evidence presented – as between networks and consumers and as between different classes of stakeholder – and continue to make it clear that final proposals are just that.

Length of the price control

18. The justification for an eight year price control appears to be that:
- It will encourage a longer-term mindset in network decision making.
 - It will lower the regulatory burden.

19. These are both worthy objectives, but the contribution of an eight year price control to these objectives is not compelling:
- A typical network decision requires a network to choose between a capital investment and a recurring operating cost (for example a constraint cost, an interruption payment or a maintenance cost). The trade-off period for such a decision is likely to be over periods of the order of the asset life rather than the difference between an eight and five year price control horizon. We therefore consider that any encouragement to long-term thinking is likely to be marginal and that the other innovations noted in the recommendations are likely to contribute much more to that objective.
 - The regulatory burden of price reviews – in the context of total network expenditure over a price control period – is trivial.
20. Against these arguable benefits, Ofgem identify a clear objection – that they are proposing a longer price control period just as the uncertainty about the future network requirements increases. Ofgem offer a partial solution - a mid-period review of which would be limited to changes in outputs - but they make it clear that this would not deal with unexpected cost variances.
21. Our concerns with this approach are:
- A mid-period output review is simple in concept, but any substantial change to outputs is likely to lead to a protracted negotiation about the impact on costs with a predictable impact on the overall regulatory burden.
 - While future regulators may be happy to look at outputs alone when a network's financial performance is as expected or (even) relatively poor, we consider that a future regulator will find it irresistible to consider costs in the case when a network is making high returns. This would seem to introduce the risk of longer-term financial asymmetry.
 - Network investors will need to be compensated for (or protected from) the additional cost risks they will face – both those over which can exercise some control and those which they cannot. This could be achieved through a variety of mechanisms: a higher cost of capital; higher cost-sharing factors; enhanced uncertainty mechanisms; hedging and insurance payments; or a combination of these. The costs of these interventions (or the price volatility that results) will be borne by consumers and the question of whether these costs will be outweighed by the benefits of longer-term thinking does not appear to have been considered in any detail.
22. Overall, the case for eight year price controls has not been convincingly made, and the overall costs and benefits of a longer price control for consumers probably depend on the exact details of a specific review – with the case being harder to make for networks subject to higher levels of uncertainty. Our recommendation is that the length of the control ought to be considered in detail during the price control process and that, at this stage, Ofgem and networks should only commit to assembling the data required for a longer review period

Proportionate assessment

23. It seems reasonable that those networks which have performed well, which have developed good relationships with stakeholders, and which have submitted well justified business plans should be recognised for that and subjected to a less intrusive price control process.
24. As we have noted in previous submissions, it is important that any assessment of networks' performance in that regard should be made transparently against relevant criteria. Subject to that caveat, the reputational enhancement which goes with such recognition should be a significant motivating factor for a management team.
25. We also consider that adjusting the pattern of investigation to focus on the difficult (or controversial) issues in a submission would make for more sensible use of the network's and Ofgem's resources.

26. However, we are less convinced by the “reward” of a fast-track price control process. Our concerns are mainly practical: the understanding of price control issues (by networks, Ofgem and stakeholders) is always likely to improve as price control discussions progress. A price control settled early may have to be reconsidered in the light of issues uncovered in other network discussions and may get overtaken by events before the overall process ends. A network agreeing to an early settlement may want some sort of “most favoured nation” protection against the outcome of other negotiations while, in practice, Ofgem may need to reserve the right to reopen for issues revealed elsewhere. In practice, it is likely to prove unrealistic to expect either a network board or Ofgem to commit to a deal while other negotiations continue.
27. Stakeholders may also feel that any early deals (especially if they are seen to reward compliant networks) are more likely to risk getting the balance between networks and consumers wrong. A third party modification request for a review of a fast-track deal would place a considerable burden on Ofgem while they are trying to settle other network price controls.
28. We also perceive (in the TPCR5 and GDPCR2 process discussions as much in these recommendations) a trade-off between the stakeholder engagement process and the fast-track reward. It seems that the time for detailed and substantial stakeholder engagement at the start of these reviews is being constrained to allow time for a fast-track reward for compliant networks later in the process. This trade-off seems to play stakeholder legitimacy against the private interests of Ofgem and the fast-track networks - we feel that the balance may have been struck wrongly.
29. These fast-track issues may be more of a concern in the first rounds of price reviews under RIIO and may reduce as all parties become more familiar with the approach, but we recommend that a pragmatic approach is adopted in the first RIIO reviews: deploy the reputational incentives discussed above; adopt a discriminating approach to the assessment of business plans; but, leave fast-track mechanisms to be considered/introduced at future rounds of reviews.

Third party role in delivery

30. We think the recommendations oversimplify the factors around increasing the role for third parties in delivering network services.
31. The first point is that most networks (including National Grid) already tender out most of the construction work and consciously use that process to search out innovative and efficient technical solutions and more efficient contracting mechanisms. We cannot imagine how requiring additional third party tests for projects during a price review process will add anything other than cost and process complexity – particularly if those projects have already been tendered. We acknowledge these circumstances may not apply to all networks so we can understand why Ofgem might like to have the possibility within their “tool-kit” but it ought to be used sparingly.
32. The question of whether Ofgem ought, in defined circumstances, to be able to tender large, separable projects to third parties is somewhat distinct. In this case, Ofgem appear to be arguing that there are circumstances where they may be better placed than existing licensees to understand the long-term requirements for new network assets and then to specify and evaluate a tender for such assets.
33. The experience of the offshore transmission process is cited as a precedent for such activity but we would note that this long-drawn out process has so far only been applied to transfer assets which have already been constructed by generators. The extension of this regime to actually build new assets has so far only delivered policy papers, and we note that the latest round of these has readmitted the possibility that generators build the new assets and ownership is then transferred to transmission licensees once they are built.
34. We also note that Ofgem have not yet released the detail of their calculation of the benefits they claim for the first round of transitional contracts compared to the onshore regime³. This means it is hard to

³ <http://www.ofgem.gov.uk/Media/PressRel/Documents1/AugustOffshorePressNotice.pdf>

evaluate: how much of this benefit resulted from the low risk nature of the regulatory regime created around those asset transfers; how much from the fact that they are new and ready constructed assets rather than existing assets; and, how much from genuine operating efficiencies.

35. This seems to be shallow experience on which to build a case for Ofgem acting as a single buyer for certain assets classes. However, given the invitation offered by these recommendations to hopeful market entrants, we do not doubt that Ofgem will get much support and lobbying from potential developers.
36. We remain sceptical that:
- Ofgem can assemble the technical expertise to identify worthwhile projects and make the necessary informed buying decisions – for example distinguishing between the cost/risk profiles attached to different technical solutions;
 - Ofgem's incentives in exercising these decisions would be properly aligned with those of consumers – we would note that this alignment is much easier to achieve with profit seeking companies than with a regulatory institution subject to a much wider range of pressures;
 - Ofgem could develop the necessary contracting and licensing regime on a timescale which allowed timely delivery; and
 - the overall system which might develop following these proposals would offer material benefits to consumers
37. We recognise that these points sound like special pleading and we recognise that moves in this direction are likely to be influenced by further experience of the offshore transmission regime. We look forward to seeing more detailed analysis of the benefits of the transitional regime and to the development of further experience of the enduring regime.

Two appendices are attached to this letter. Appendix 1 covers Ofgem's financeability proposals and Appendix 2 covers more detail miscellaneous comments.

We would be happy to expand on any of the points we have raised.

Yours sincerely

[by e mail]

Paul Whittaker
UK Director of Regulation

APPENDIX 1 - FINANCEABILITY

- A1.1 It is in the interests of consumers and therefore a core requirement of the future regulation of energy networks that the arrangements enable NWOs to finance their activities efficiently. Ofgem have recognised⁴ that their proposals in relation to financeability and the changes that these entail was one of the two aspects of the RPI-X@20 Emerging Thinking which raised greatest concern. The updated financeability “straw man” published in May, and which is largely unchanged in the RPI-X@20 Recommendations, made some changes and clarified certain elements of the proposal but failed to address the fundamental concerns of the industry and of investors.
- A1.2 National Grid has previously explained its concerns with Ofgem’s proposed new approach to Financeability in our previous responses to “Embedding Financeability in a new Regulatory Framework” and the updated “Current Thinking Working paper – Financeability”, dated 9th April 2010 and 18th June 2010 respectively. We still hold these concerns and share many of those which have been raised by others, and so draw Ofgem’s attention again to our earlier correspondence and also that from other respondents. In addition, in this response we provide some further information and commentary on the proposals, and also make a limited number of comments in response to the four papers recently prepared for Ofgem by CEPA on particular financial issues which relate to financeability.
- A1.3 The new principles consist of a number of separate elements, as set out in the “*RPI-X@20 Recommendations*” document. These principles are said to be focused on ensuring that efficient delivery is financeable and that “*the balance of costs paid by existing and future consumers is fair, reflecting the expected balance of benefits received from investment in network services.*” Whilst this principle must be subsidiary to an overriding commitment and requirement for the aggregate revenues over time to be sufficient to fund and adequately reward efficient investment, it is the justification and reasoning that has been put forward for changing asset lives and as a result the calculation of the (regulatory) depreciation element of allowed revenues. However, on proper evaluation (see the section on “Depreciation and Asset Lives” below) this principle does not, in fact, support a change to the asset lives currently used in calculating regulatory depreciation for electricity networks.
- A1.4 The “*RPI-X@20 Recommendations*” document⁵ makes clear that the “*debates and discussions on the ‘numbers’ arising from implementation of these principles, and any associated transition arrangements*”, will be considered in price control reviews (giving companies the option of an Appeal to the Competition Commission if the overall package of proposals is not acceptable). Nevertheless, it is in the interest of consumers as well as industry participants to reduce uncertainty where possible, and this requires that the principles that are determined through the RPI-X@20 process, and which will form the starting point for these future price control negotiations, are soundly based and reasonably balance consumer interests with the legitimate expectations of investors and other stakeholders in the industry. This is essential if the outcome is to reinforce rather than undermine investor confidence in the regulatory commitment to fund and provide reasonable returns on efficient network investments, and so allow investors to continue to support the industry.
- A1.5 The “*Implementing sustainable network regulation*” paper⁶ recognises that the platform for financeability of energy networks is regulatory commitment (Para 12.5), and that consistency of approach is needed in future determinations (not least in respect of allowed return, capitalisation and depreciation) for even the notional company to be financeable (Para 12.43). It is self-evident that the need for consistency applies equally today, i.e. in relation to consistency with past price controls, as in the future. It follows that Ofgem’s own reasoning shows that changes in approach to any of these important aspects of the price control (so as to worsen cash-flows) will undermine financeability. This

⁴ “RPI-X@20: Summary of responses to Emerging Thinking consultation”, Paragraph 1.3, Ofgem, 2010.

⁵ “Regulating energy networks for the future: RPI-X@20 Recommendations”, Ofgem, 2010

⁶ “Regulating energy networks for the future: RPI-X@20 Recommendations: Implementing Sustainable Network Regulation”, Ofgem, 2010

further demonstrates that the proposed changes to electricity asset lives and the treatment of gas distribution repex should not be made, and great care must be exercised before any changes which could have adverse effects on cash flows and financeability are adopted.

A1.6 In summary, our **high level comments** are as follows

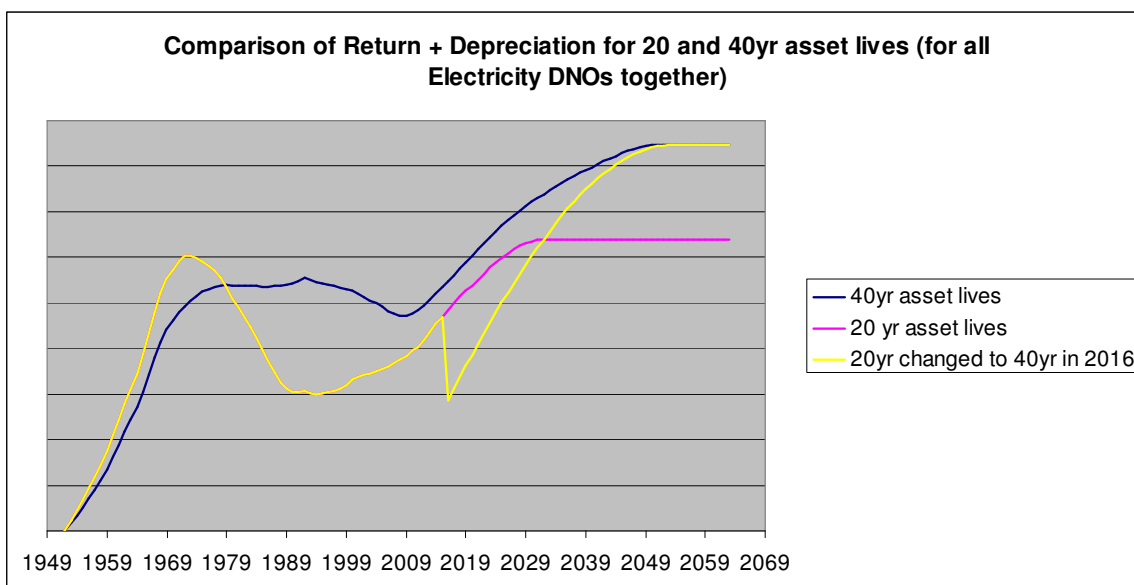
- Ofgem need to take care before making changes to the approach that has been adopted in the past in relation to financeability - precipitate action is likely to undermine investor confidence just as capital needs are set to increase.
- As discussed at greater length below, the proposed changes to electricity asset lives/depreciation and the treatment of gas distribution repex are not justified. Ofgem's stated future intention that "*depreciation should balance the costs paid by existing and future consumers*" would instead support retention of the existing asset lives and approach.
- However, if changes were to be made to electricity asset lives/depreciation and gas distribution repex treatment, transitional arrangements will be very important to future cash flows and financing requirements and would need to be designed carefully to minimise the short-term shocks caused by the proposed approach.
- Defining generic principles, and re-iterating the previously stated view that "*it is up to network companies to manage their business, including capital structure, to ensure they are financeable*", does not replace Ofgem's duty to "*have regard to the need to secure that licence holders are able to finance their activities*" and so to allow sufficient revenues in price controls for companies to be financeable.
- For networks to be financeable it is necessary (though not sufficient) for the allowed WACC to be high enough.
- However, a high enough WACC alone is not sufficient, as returns on network investments are only achieved in the long term, so the confidence of investors that the regulatory regime will eventually provide these returns is also essential. A willingness on the part of Ofgem to change its approach runs a high risk of undermining this confidence, particularly where the change delays or defers the returns to investors.
- Adopting a trailing indexation approach to fixing the cost of debt is unlikely to meet the requirement to estimate future financing needs.
- Pushing out cash-flows is likely to increase cost of capital – Oxera's paper for the ENA⁷ provided quantitative evidence and a qualitative consideration of this. CEPA has written a response to the Oxera paper for Ofgem but this is unconvincing and fails to address some of the main considerations identified by Oxera, including the "time-inconsistency" effect.
- Ofgem misunderstands or has failed to address the "regulatory commitment" problem: it is not enough for Ofgem to say they will stick to a set of newly-defined principles, or even to actually stick to them. Rather, because Ofgem cannot fetter their discretion (or that of future governments), investors always have to judge whether future regulators/governments will respect past investments. This reason alone would be sufficient to require a significant increase in allowed returns if Ofgem were to re-phase (i.e. push-back) company cash-flows.

The following sections give a more detailed response to and comments on particular elements of the proposed principles.

⁷ "What is the impact of financeability on the cost of capital and gearing capacity", Oxera report for the ENA, 9th June 2010 (available on the Ofgem website)

Depreciation and Asset Lives

- A1.7 Our previous responses and those of others have shown that Ofgem have a narrow view of intergenerational fairness, and that depreciation cannot be considered in isolation with the aim of balancing the interests of different generations of consumers.
- A1.8 However, even on the narrow basis on which Ofgem have approached this question, the basic argument that asset lives (for electricity networks) need to be changed in order to achieve the claimed objective of “*fairly balancing the interests of existing and future consumers*” and “*reflecting the balance of benefits received from investment in network services*” can be seen to be flawed. It is not the case that “*existing consumers [are] paying more for the assets than future consumers*”.
- A1.9 Figure 31 of the “*Implementing sustainable network regulation*” document illustrates the step change reduction in revenue that could be caused by changing depreciation rates on an electricity network, but this is just a consequence of changing asset lives from 20 to 40 years whilst ignoring assets more than 20 years old, and is not a fundamental feature of applying a longer asset life on an enduring basis. As we have previously explained, this step-change in revenue is a “distortion” that results from an attempt to unwind past regulatory decisions, rather than being based on a different level of depreciation that properly reflects a more principled approach.
- A1.10 Ofgem have previously published aggregate investment in electricity distribution since 1950, and this information can be used to calculate how the electricity distribution networks’ aggregate charges to current and future customers would change under different asset lives. This is shown in the figure below⁸, which shows return (at 5% p.a.) plus depreciation under two different asset lives (20 years and 40 years) if these asset lives had been applied consistently, as well as the effect of changing asset lives from 20 years to 40 years at the end of DPCR5.



- A1.11 It can be seen from this chart that past (since 1978), present and future consumers would all pay higher charges under a 40 year asset life than under a 20 year asset life, due to the need to provide a

⁸ This chart assumes RAV additions from 1951/52 to 1990/1 equal to the capital expenditure shown in Figure 3.4 of the DPCR3 Final Proposals (December 1999), RAV additions from 1991/2 to 2014/5 taken from Ofgem’s published DPCR5 financial model, and annual RAV additions from 2015/6 onwards that are assumed to equal the average from 2010/1 to 2014/5, where all these RAV additions are expressed in the same money values. It is also assumed that the same vanilla return of 5% applies in each case throughout, even though as explained below a higher return would be expected if cash flows are re-profiled and delayed. For simplicity tax has been ignored in compiling the chart.

return on a higher enduring RAV. Whilst it is true that changing from 20 years to 40 years would give a one-off reduction in revenue and a temporary reduction in consumer charges (as can be seen from the chart above), this is just a feature of changing the approach and does not reflect a switch to a level of charges that, on an objective basis, is the “right” level of charges that correctly balances charges between today’s and future consumers. In fact, as the chart clearly shows, a change to the asset lives as proposed would result in a significant imbalance between the charges that would be paid by consumers shortly after the change and the charges that would be faced by consumers some years into the future and cannot be said to result in “*fairly balancing the interests of existing and future consumers*”.

- A1.12 If a similar chart was produced for electricity transmission, it would be expected to show a similar result. Given these observations, a decision to increase asset lives in any future electricity price control (whether in distribution or transmission), even if this was phased in over time, can be seen to be arbitrary and not based on sound principles. As a result such a decision would run the risk of significantly undermining investor confidence in the regulatory commitment.⁹
- A1.13 Turning to consider the gas networks, the RPI-X@20 documents (and some other recent public policy documents) have raised the question of whether the economic life of the networks may be limited and considered the possibility of shortening the asset lives used to calculate the depreciation element of allowed returns. The gas networks are clearly needed today, and indeed require ongoing investment (for example to accommodate changing sources of gas supply); we have also presented analysis that the gas networks are likely to provide a cost effective delivery medium for low (or relatively low) carbon energy for the foreseeable future. However, we can understand that reductions to the current asset lives may become appropriate under certain circumstances and, particularly with a move to longer price controls, there could be benefits from making changes to asset lives sooner rather than later, to minimise future increases in charges for a potentially declining customer base¹⁰. Once a reduction in asset life becomes appropriate, any delay would increase regulatory risk, i.e. raise the perception that the increases in charges that will be caused by reducing asset lives could become unacceptably large, and as a result some necessary, efficient, and economically incurred investment costs could be stranded. In such circumstances, a delay in reducing asset lives could be seen as weakening Ofgem’s regulatory commitment and increase the cost of capital for all the energy networks.

Capitalisation Policy

- A1.14 In relation to Gas Distribution, an important element of the overall price control package concerns the treatment of repex. Slide 44 of Ofgem’s July 2010 City Briefing “Introducing the RIIO model” indicates that in the future repex is likely to be treated as capex. This represents a change from the current treatment and is not justified.
- A1.15 The Final Proposals for the Transco Price Control 2002-7 explain that Ofgem adopted the approach of adding 50% of repex to the RAV (with 50% expensed) for a number of reasons, of which financing was only one. However, the main reason, as was explained in the Final Proposals (page 4), was one of principle and remains valid: “*As replacement expenditure is projected to increase significantly a key issue becomes the method of financing this enhanced level. **The renewal programme is primarily concerned with present safety requirements rather than increasing the network’s capacity or functionality for the benefit of future consumers, suggesting these costs should be expensed and met within the price control period. Nevertheless there will be some advantages to consumers in the future as replacement spending will be lower and newer assets tend to***”

⁹ Whilst it may be the case that the exact effect of Ofgem’s proposals to change electricity network asset lives can’t be established until future investment requirements are known more precisely (see Para 12.52 of the “implementing sustainable network regulation” document), as shown above the substantive effects of changing depreciation lives can be understood in advance of having exact numbers for future RAV additions.

¹⁰ Further, if reductions in asset lives and the resulting increase in gas transportation charges are delayed they could be expected to disproportionately affect those least likely to migrate early from gas to electricity, particularly the poor and vulnerable.

require less repair and maintenance. To deal with these tensions, ensure that Transco is able to finance its activities and ensure that price reductions are sustainable beyond the next price control period, 50 per cent of replacement spending over the next price control period will be expensed in the year that it is incurred and 50 per cent will be treated as capital and added to the regulatory asset base."

- A1.16 Ofgem have given no explanation why their previous analysis of the relative benefits of the repex programme to current and future customers was wrong. Without any such reasoning, any change to the approach would appear arbitrary and so would raise regulatory risk and increase the cost of capital, not only in gas distribution but for all the networks regulated by Ofgem.
- A1.17 Other than this major concern in relation to repex, there seem no strong objections in principle to the proposed approach of adding to the RAV a fixed proportion of total network expenditure, provided that for each company and each price control this proportion reflects the expected mix of costs that would be incurred by that company during the control. Ofgem should not seek to use this as another lever to manage "intergenerational fairness".

Transition Arrangements

- A1.18 If, in spite of these arguments, Ofgem were to go ahead with their proposed approach and make changes to asset lives and the capitalisation of gas distribution repex, transition arrangements would become necessary and the form of these transition arrangements would become critical. In order to mitigate the effects of the proposed changes adequately, it may be necessary for transition arrangements to apply for more than a single price control period. Our current thinking on the form that these arrangements might need to take is as follows, though these would need to be subject to careful consideration and detailed analysis:
- For electricity (Distribution and Transmission), given the scale of the investment programme required in the next decade if 2020 environmental targets are to be met, the need to attract the necessary finance into the industry is already a key issue, and it would be unwise to compound this by making changes to asset lives for assets that have already been installed. As a result, the only practical way of introducing revised asset lives would be to apply the new lives to future RAV additions only. In addition, given that past investments have been made under the existing regime with the reasonable expectation of a particular profile of cash-flows, the treatment of depreciation asset lives for existing assets should not be changed.
 - For gas networks (Distribution and Transmission), if it becomes clear that reductions to asset lives are appropriate, as explained above there could be benefits from making the changes earlier rather than later. A switch to the sum-of-the digits depreciation method for post 2002 RAV additions could be an alternative, interim measure which would also help to manage the potential longer-term impacts on consumer charges.
 - For Gas Distribution, if it is decided to increase the fraction of repex that is added to the RAV, this change should be phased in gradually.

Regulatory Commitment and Financeability

- A1.19 Financeability requires both short term and longer term considerations to be satisfied. As with any business, short-term cash flow considerations cannot be disregarded, but to ensure financeability a satisfactory position in respect of short-term cash-flow must be complemented by longer term confidence in the stability and reliability of the regulatory environment. In fact, because a licensee's cash flows beyond the end of the current regulatory period are completely dependent on the outcome of future price controls, any "longer term view of financeability" is entirely dependent on the faith of debt and equity investors that the regulator will in every case set future revenues at reasonable levels such that assets are not stranded (the RAV is honoured), a reasonable level of return can be achieved, and returns to investors are not indefinitely deferred.

- A1.20 The “*RPI-X@20 Recommendations*” document recognises the importance of regulatory commitment and of retaining a regulatory framework that investors, network companies and other stakeholders are familiar with (see 7.5 and 7.6). However, the tangible effect on regulatory commitment of defining any general principles is very limited. As shown by Ofgem’s consultation on pension principles during 2008 and 2009, a regulator is able to revisit its publicly stated principles even if these were only established 4 or 5 years earlier. As a result, and given the long-term nature of returns on asset investments (even with 20 year asset lives), defining principles which (in Ofgem’s opinion) would ensure that efficient delivery is financeable can give no meaningful regulatory commitment other than in the very short term.¹¹
- A1.21 The inability to bind the decisions of future governments and regulators means that regulatory commitment is something that must be demonstrated by Ofgem through its actions and through consistency of approach over time, rather than being something that can be established through a statement of intent alone. Any significant changes to the approach to financeability, including both changes to the way in which Ofgem assesses whether its proposals are financeable and any changes which seek to delay or defer recovery of costs, can be expected adversely to affect the perceived level of regulatory commitment amongst debt and equity investors and rating agencies. Clearly, if such changes were made the cost of capital for the network companies and consequently charges to consumers (in present value terms) would increase as a result.

Assessing Financeability

- A1.22 The “*RPI-X@20 Recommendations*” document suggests that financeability is something that would be “*informed by a number of sources including ratings agency credit metrics considered over the long term*”. However, in practice metrics need to be at acceptable levels in the short and medium term as well as the long term (which in any case extends beyond the duration of a single price control for which revenues can be predicted), and it is not sufficient only for average and/or long-term values of the metrics to be acceptable.
- A1.23 The “*Implementing sustainable network regulation*” document also confirms that going forward, in assessing financeability Ofgem intend (either principally or perhaps only) to consider net debt/RAV and PMICR. Whilst these ratios may be used by some agencies, they are not used uniformly by all of the main rating agencies, and, critically, neither are they used in isolation¹². For an assessment of financeability to have any value and relevance, Ofgem must continue to reflect the approach of the agencies and look at a wider range of ratios, including FFO/Interest and RCF/Debt which as recently as DPCR5 were described by Ofgem as “key credit metrics”, and FFO/Debt (which was considered in TPCR4).
- A1.24 The “*Implementing sustainable network regulation*” document suggests that the Competition Commission’s Provisional Findings report on Bristol Water emphasized that “*as long as the price control included an “appropriate” allowed return it would not be in the consumer interest to raise prices to enable a company to meet a financeability test*”. However, this does not fully reflect the Competition Commission report:
- The report is written in relation to Bristol Water, and care should be exercised in assuming that particular conclusions or findings reached in this specific case would apply to other companies or industries.

¹¹ Short-term regulatory commitment does not, in any case, need to be strengthened: within a price control period companies operate within allowed revenues that have previously been determined, and at the start of a new price control companies have the option of an Appeal to the Competition Commission if they feel the proposed package of proposals is unattractive and unjustified.

¹² They are also not the metrics applied by rating agencies at group/parent level, even where a group entity is dominated by its regulated subsidiaries, so focussing on these ratios could significantly interfere with a company’s ability to choose its finance structure. It is also important to note that an operating company rating will be linked to the group rating, further reducing the overall importance of the net debt/RAV and PMICR ratios.

- The report acknowledges that investors must have confidence in the RAV;
- Any anticipated requirement of Bristol Water to raise equity has not been caused or compounded by a change to the established basis for calculating regulatory depreciation, and so was considered in the absence of such factors.
- The report recognises that the financeability cross-check is a check that factors such as depreciation and cost of capital have been set properly;
- In relation to the advancement of revenues, the report (at Annex O) suggests that this might be appropriate if a financeability problem was temporary, for example due to a short-term spike in capital expenditure. In addition, a need for advancement of revenue is seen as an indicator that *“the calculation of regulatory depreciation (and/or other allowances for capital consumption) was too low. Any such need should be a trigger for a re-evaluation of the methodology used in these calculations.”*

A1.25 The *“Implementing sustainable network regulation”* document also suggests that by placing a greater onus on companies to maintain their investment grade credit ratings, *“it reduces the requirement for Ofgem to make adjustments to other areas of the price control.”* However, Ofgem’s requirement to make such adjustments stems from their financing duties and not from any action or inaction on the part of companies, and companies will only be able to maintain investment grade ratings if price controls provide sufficient revenues.

Notional Gearing

A1.26 It seems reasonable that the assumed gearing should reflect a company’s risk exposure, where all the risks that a company is exposed to need to be taken into account, not just regulatory risks, and the assessment must also consider an appropriate timeframe. However, the report by CEPA that starts to consider how this assessment could be carried out has a number of important limitations and starts to show that such an assessment is not straight forward (see the Financeability Annex below). It is therefore important that a number of other considerations are also taken into account in assessing the appropriate level of notional gearing, including: consistency with previous assessments (to avoid shocks); the need to recognise that changing gearing carries a cost and takes time; the impact of gearing on cost of capital; the views of rating agencies¹³ and also investors (both debt and equity); and a comparison to the established practice of other comparable companies.

A1.27 The *“Implementing sustainable network regulation”* document suggests that cash-flow will not be advanced to address short-term dips in cash flow metrics, and that instead these should be addressed through equity. This is not appropriate, as equity should not be seen as a short-term commodity. There may be circumstances where it might be reasonable to expect networks to raise equity, but addressing a short-term cash-flow need, particularly if this is a consequence of a regulatory decision such as a change to asset lives, is not one of these.

Allowed Return/WACC

A1.28 The allowed return is an important element in a price control but the overall settlement can only be considered in the round. In relation to the allowed return itself, this has been built up from separate components and even if the overall value has been accepted by companies (as part of the overall price control) this doesn’t imply that companies have agreed with the individual values assumed for these separate elements. If a different approach is adopted for one element in the future, e.g. the cost of debt, there may need to be a compensating adjustment to a different element, e.g. the cost of equity.

¹³ Notional gearing, i.e. the net debt/RAV ratio, has historically been recognised to be a key ratio and the *“Implementing sustainable network regulation”* document identifies the ratio as important in future assessments of financeability.

A1.29 We continue to support our previous comments on the proposed method for setting the cost of capital but in the interests of brevity do not repeat them here. However, we also have the following additional comments:

- Whilst the approach that is proposed for setting the cost of debt may be based on similar information to some of the evidence which Ofgem has considered in recent price controls, a method based on past values may not be appropriate in all circumstances. Previous price controls have recognised the value of taking different evidence and ways of estimating the cost of debt into account, and this more flexible approach should be retained.
- Fundamentally, for a regulator to define a prescriptive basis for calculating the cost of debt that is to be used in calculating allowed returns in all future reviews raises complex and far-reaching questions and issues. For example:
 - the approach may prove to be incompatible with a regulator's duties, in particular to have regard to the need to secure that licence holders are able to finance their activities. Ofgem have a duty set price controls which reflect the cost of capital (including cost of debt) during the years of the price control, and cannot avoid the need to estimate this properly simply by defining and using a particular index-based method.
 - the logic for the approach relies on a consistent approach in all future price controls, but consistency cannot be guaranteed by today's regulator;
 - the regulator is seeking to commit to funding debt costs (on behalf of consumers) that would be incurred if companies follow the regulator's "chosen" debt strategy (i.e. as embedded in the method adopted) **for all time**, but this goes beyond the role and remit of the regulator;
 - if the method is to be applied consistently in all future controls the chosen method of setting the cost of debt becomes critical, yet this has been the subject of little debate, and in practice there can be no objective basis for choosing a particular tenor or form of debt (including real vs nominal, and fixed vs floating) that will always be efficient (and so represent good value to consumers) and appropriate for funding a regulated company's assets. In practice Treasury decisions are complex and good practice generally involves a mix of different debt instruments, in line with market availability and to achieve diversification, yet Ofgem's proposed measure appears to represent the cost of a single type and tenor of instrument which will not evolve with changes in debt markets and corporate funding practice.
 - any indices selected for calculating cost of debt may not always be appropriate, and over time they could become distorted or may even cease to be published.

Unless these issues can be answered and addressed satisfactorily, the proposed approach can never be any more than one option for setting the cost of debt in future price controls, and so even if the method was fully defined it would add nothing by way of regulatory commitment.

- In seeking to prescribe in advance a method for setting the cost of debt (and also indexing the cost of debt during a control), it is important that any index that might be used is widely available/reproducible, and chosen in advance and then applied consistently to avoid "cherry-picking". It is also important that the incentives on companies to finance their networks efficiently are not removed, either retrospectively or on a forward-looking basis.
- Whether a particular index is appropriate could not be considered until the details of the index and method are properly defined.
- We do not agree with CEPA's response to Oxera's report for the Energy Networks Association (see the comments on CEPA's report in the Annex to this letter), which in any case does not address all the considerations identified by Oxera. We continue to believe that if changes are made which increase the duration of cash flows, the cost of capital will increase.
- We support no changes being made to the approach previously used to set the cost of equity, which uses a range of techniques including CAPM (although cost of equity needs to be considered within the overall framework of a price control). However, with the evolution of the regulatory

framework as a result of the RPI-X@20 review, and with increasing investment requirements in the years ahead, it will be even more important to ensure that the concerns of investors are addressed. This means that the cost of capital, and in particular cost of equity, needs to be set in a way which provides a competitive return to investors compared to that available in other industries and investment opportunities. As a result it would be unwise to rely too heavily on CAPM, and cross-checks to other methods may become increasingly important.

RAV Indexation – RPI vs CPI

- A1.30 The inflation indexation that is applied to the RAV and is used within price controls to index allowed revenues should continue to be based on RPI. Fundamentally, indexation of the RAV in the UK regulatory model is intended to achieve Financial Capital Maintenance (FCM), i.e. to preserve the purchasing power of investors' funds. For RAV indexation there is no rational basis for switching to CPI, and as Ofgem have pointed out there is benefit from applying a consistent approach over time in order to avoid increasing regulatory risk.¹⁴
- A1.31 Importantly, CPI-linked sterling bonds do not yet exist, but even if they started to develop an efficient, sizeable and liquid market would need to be established before they could be used as a meaningful reference point. As a result a move to using CPI for RAV indexation would need to be carried out in conjunction with an increase in the headline rate of return to reflect the forecast margin between CPI/RPI. Ofgem recognise that this would be difficult to estimate and require a high degree of judgment. A move to CPI could also be seen as merely moving part way from a Real WACC to a Nominal WACC, which has been rejected in the "RPI-X@20 Recommendations" document, and so would affect the inter-generational balance of charges to consumers.
- A1.32 It follows from this discussion that there is no principled reason to change from RPI to CPI, and this change would have important drawbacks whilst bringing few, if any, advantages. A switch to CPI would unnecessarily increase risk, complexity and financing costs, and so we agree with Ofgem that the RAV of the energy networks should continue to be indexed using RPI.

Conclusions

- A1.33 The proposed financeability principles need to be seen in the context of a realistic assessment of the real regulatory (and political) risks that networks face. As a result Ofgem must exercise caution before making changes to the approach that has been adopted in the past in relation to financeability, which would run the risk of undermining investor confidence just as capital needs are set to increase.
- A1.34 Important concerns with some of the proposals remain, including the proposed approach to assessing financeability and the proposed approach to setting allowed returns (including the proposed use of a cost of debt index). In addition a switch away from use of RPI in indexing the RAV and allowed revenues within a price control would not be justified. We also have concerns with the proposed changes to asset lives for electricity networks which, as shown in this letter, are not justified on the grounds of "*fairly balancing the interests of existing and future consumers*", although it may become appropriate to reduce the regulatory depreciation asset lives for gas network assets. The current treatment of gas distribution repex should be retained.
- A1.35 If the proposed changes to electricity network asset lives and the treatment of gas distribution repex were made, they would go against past precedent and disadvantage the networks (and indirectly consumers) without being based on a sound justification. As a result, the confidence of investors in the regulatory commitment would be significantly weakened. When this is combined with the effect on

¹⁴ Even if CPI, or a different index, was to be used in conjunction with "real price effects" within the duration of price controls for automatic adjustments to levels of allowed costs (whether opex or capex), this would not imply that RPI was no longer the appropriate index that should be applied to the RAV or used to index allowed revenues within a price control. This would lead to the "hybrid" approach identified in the "Implementing sustainable network regulation" paper, though we note and agree with Ofgem's preference to retain the existing RPI-based approach.

cost of capital of the re-phasing (delay) of returns to investors that would result from these changes, there would need to be a significant increase in allowed returns, both to reward existing investors adequately and to ensure that the funds needed for the expected level of future investment in the networks can be raised. In addition, transitional arrangements would need to be chosen very carefully in an attempt to mitigate the scale of the adverse effects of the proposed changes that would otherwise be expected.

Financeability Annex - Responses to Recent CEPA Papers

This annex provides limited, high-level comments on four papers that have recently been written by CEPA for Ofgem and published on the Ofgem website. Although these papers are not consultations and do not invite responses, we hope that Ofgem find these comments helpful. Where we have not commented on a particular issue raised in the original CEPA paper, this should not be taken to imply that we agree with CEPA on this point.

1) *"Cashflow profiles and the Allowed WACC"*

- a. The paper fails to recognise the true nature of the time-inconsistency problem and the fact that the measures proposed (e.g. extending the length of price controls) do nothing to address the real regulatory risks
- b. The limited references to the Bristol Water and Phoenix Natural Gas cases need to be considered in the context of the specific circumstances of these companies, and so cannot be seen as support for CEPA's arguments in general.
- c. CEPA's analysis looking at the debt yield curve, and the conclusions drawn from this, seem flawed.
- d. In the past the allowed WACC has been part of an overall price control settlement that has (usually) been accepted by companies as a package. It is not the case (as CEPA claim) that the regulated companies have not articulated that it is only because of advanced cashflows that the WACC has been acceptable: we and others have strongly argued that with longer cash-flows returns would need to be higher.

This CEPA paper is a response to the Oxera paper "What is the impact of financeability on the cost of capital and gearing capacity" but is unconvincing and fails to address some of the main considerations identified by Oxera, including the "time-inconsistency" effect. We support Oxera's analysis and believe that there remain strong reasons to believe that the Ofgem proposals (if implemented) would be likely to materially increase the cost of capital for regulated energy networks.

2) *"Short term relationship between equity and asset betas"*

- a. This report presents analysis that suggests that gearing and equity beta do not seem, empirically, to be related in the way you would expect (at least in the short term).
- b. CEPA are unable to reach a firm conclusion as to why this is.
- c. The paper concludes that regulators should be careful not to base decisions on recent trends alone: we agree with this view.
- d. We also agree with CEPA's conclusion that it would be better to rely on long-established trends when estimating equity beta and asset beta, and the cost of equity in general.
- e. The apparent breakdown in the expected relationship between asset and equity betas suggests that care needs to be exercised in estimating the cost of equity based on CAPM.
- f. It is therefore advisable to cross-check an estimate of the cost of equity using other methods.
- g. In particular, given wider uncertainties, the proposed changes to the approach to financeability, and the levels of investment needed, a regulator will need to consider the level of return needed to make the sector attractive to investors (both in an absolute sense and in comparison to other sectors/industries).
- h. At a more detailed and technical level, we note that there are alternative ways of expressing the relationship between asset beta and equity beta, for example to take account of tax, and we endorse the view expressed in the report that caution should be applied when looking at the information that is presented on National Grid, Scottish Power and Scottish and Southern Energy.

3) *"Cost of raising equity"*

- a. The paper suggests that for regulated utilities, raising equity incurs direct costs but (at least for regulated utilities) no indirect costs. However, we believe that there are always indirect costs as well as direct costs from raising equity, for example:

- i. Straight placings or open offers are often carried out at a discount to ensure a successful launch, but this discount with either of these structures is a cost to existing investors;
 - ii. In a rights issue the market in nil-paid right rarely develops with sufficient liquidity to price nil-paid rights at their theoretical value. As a result, non-subscribers face a cost, but even investors who subscribe to a rights issue may be expected to face costs, e.g. a transactional cost to trade out of other investments to fund the subscription cash, and an opportunity cost associated with the alternative investment foregone.
 - iii. Where future requirements for a rights issue are anticipated the share price will be affected and cost of equity increases.
 - b. There is also likely to be an impact on the required cost of equity following an issue. Equity holders cannot be expected to support new issues if the return on equity does not justify it, and so regulators need to reward new investment sufficiently if they wish to incentivise companies to invest in the networks.
 - c. We note and agree with CEPA's conclusion that, until such time as there is sufficient new evidence to the contrary, *"retaining the regulatory precedent of 5 percent would seem to be appropriate"* as the CORE (Cost of Raising Equity).
 - d. The paper raises the question of whether the CORE should be rewarded ex-post, ex-ante, or ex-ante with an ex-post adjustment. Notwithstanding our concerns over the wider approach to financeability and its potential over-reliance on new equity as currently proposed, the method of funding the CORE needs to be considered carefully to avoid unintentional effects. It is clearly right that under the UK regulatory model efficiently incurred costs of any kind should be funded, whilst a means of incentivising and rewarding efficient operation and management of the networks, including their financing arrangements, is also desirable.
- 4) *"Equity wedge principles"* – this paper considers some of the principles Ofgem will need to take into account in adjusting notional gearing for risk.
- a. Ofgem have elsewhere argued that financeability should be seen in the longer-term, but the approach in this paper is very short term (single year). It would clearly be inappropriate to mix up and simultaneously adopt a short-term approach to setting the equity wedge and a long-term approach to financeability.
 - b. The paper seems overly simplistic – for example, as a starting point it seems to think that there would be no need for equity if there was no (regulatory) risk, but this cannot be the case (as shown, for example, by the approach to ratios that rating agencies adopt).
 - c. It treats RoRE as a way of predicting company failure (i.e. negative RoRE would equate to company failure), but where companies fail this is often for cash-flow reasons, not because of negative RoRE.
 - d. In practice, it may be necessary to take account of multiple-year effects and time lags on cash-flows.
 - e. We would agree that a number of different approaches to setting gearing need to be considered and brought together into a holistic whole (which CEPA start to consider in the "triangulation" method proposed in the paper). As the paper recognises, amongst other factors this should involve an assessment of comparator companies and a recognition that the views of rating agencies need to be taken into account.

APPENDIX 2 – MISCELLANEOUS COMMENTS

- A2.1 Paragraph 5.26 of the summary paper considers decoupling the timing of future Transmission and Gas Distribution price controls (following the linking of TPCR5 and GDPCR2). Mindful of the effort required of stakeholders, we do think that the length of the first price controls set under RIIO should be staggered so that future reviews occur at different times.
- A2.2 At various points, the recommendations discuss the importance of commercial frameworks and charging methodologies as an efficiency lever (for both network operations and the overall efficiency of the energy supply chains of which networks form a part). We agree that these are important levers which should be covered in price control business plans but would also note that these are levers which are subject to a range of influences within the price control period itself – more so if periods are extended. On transmission networks, for example, different short-term and long-term network price signals will affect locational demand for capacity and likely constraint costs. The way these frameworks develop is not within the sole control of the networks so it may be necessary to take account of changes to the framework at mid-period output reviews or to develop revenue drivers which respond to different development paths for these commercial factors.
- A2.3 The use of totex for both business plan assessment and combined cost incentivisation is recommended at various points. The thought behind this is that, all things being equal, networks ought to be encouraged to adopt the lowest net present cost mix of investment and operating spend over time.
- On plan assessment, however, as Ofgem notes at various points, future uncertainty may argue for higher short-term costs to preserve optionality for the future. It is likely that Ofgem will face a range of capex/opex arguments from networks which are justified on the basis of the particular conditions that they face; benchmarking data will increasingly need to be treated with care.
 - On cost incentivisation, a similar set of considerations apply – Ofgem may well be creating an incentive which skews capex/opex spend away from the long-term optimum. This is not to argue that the current separate approach is any better; simply to point up the difficulty of avoiding the creation of perverse incentives.
- A2.4 Box 10 in the detailed recommendations paper sets out the argument for high efficiency incentive rates to avoid networks having an incentive to over-invest. Without commenting on the parameters necessary to make the example work, we would simply note that too high an incentive rate and/or too low an allowed return will also create a perverse incentive to under-invest. It is telling that Ofgem continue to focus on the risk of over-investment when almost all stakeholders tell them that the impact of over-provision of capacity on the efficiency of supply chains is generally minor (a small amount of extra cost offset by other benefits such as storage or reduced constraints) while the impact of under-provision may be critical even for short periods of time (constraint costs, lost production, general interruption of supplies).
- A2.5 The Impact Assessment is contained in a separate consultation. Ofgem note (Paragraph 1.14) that “the nature of the proposals means that it is difficult to quantify the costs and benefits associated with implementation of Sustainable Network Regulation”. We agree: there is reason to expect that a number of the proposals will improve the long-term efficiency of energy supply chains and, as we have noted in this response, we expect that some of the proposals will lead to complexity and potential confusion. The over-riding risk is that the regime that results is unattractive to investors given other opportunities available to them; to avoid that risk Ofgem will need to work closely with networks and other stakeholders to ensure that implementation is pragmatic rather than dogmatic.