Electricity North West Response to RIIO-T1 and RIIO-GD1 Price Control Strategy Document

1. Executive summary 2
2. Making sure stakeholders' views are heard 5
3. Determining and incentivising output delivery 6
4. Assessing efficient costs 7
4.1. Comparative efficiency modelling 7
4.2. Fast-track 9
4.3. Avoiding unintended consequences of annual efficiency sharing 10
5. Managing uncertainty 11
5.1. Principles 11
5.2. Cost indexation 11
5.3. Scope uncertainty corrections 12
5.4. Disapplication mechanism and mid-point review 13
6. Innovation 15
7. Financing efficient delivery 16
7.1. Principles 16
7.2. Asset lives and depreciation 17
7.3. Allowed Return 18
7.4. Assessing Financeability 27
7.5. Taxation 28
7.6. Pensions 28
7.7. Regulatory Capitalisation 30
8. Next steps 32

1. Executive summary

The publication of Ofgem's RIIO proposals represents a significant evolution in the way that customers, companies and regulators will agree future network investment plans. We recognise the importance of the upcoming price controls as they represent Ofgem's first translation of the RIIO principles into a price control with the intent of delivering long term benefits for current and future customers. The application of the RIIO principles will have a significant impact on our own price control review in 2015 and we have, therefore, thoroughly reviewed and considered these proposals.

We are concerned that the package of proposals presented within Ofgem's consultation fails to deliver a solution that will be acceptable to investors. This puts the delivery of the £32bn of investment in energy networks that Ofgem has identified in Project Discovery at significant risk. Whilst we support many of Ofgem's principles, we have a number of significant concerns relating to their application, particularly in relation to financeability.

Electricity North West's key objective from any price control settlement is to (a) secure sufficient revenues to deliver the level of service and outputs required by our customers at an efficient cost whilst (b) meeting key financeability metrics and (c) providing our investors with appropriate returns for their investment. We outline below the key aspects of our response against these important requirements.

(a) Setting appropriate allowances

We agree that Ofgem's approach to assessing the appropriateness of future business plans will need to be substantially different from the approach adopted in previous price controls. Future comparative modelling will need to evolve to take account of legitimate variations between companies' business plans.

- We support the proposals to consult with customers and stakeholders about network companies' plans. We believe that long term strategic planning statements should be a key component of this.
- We support ongoing work on outputs and will continue to work with Ofgem to develop the methodology and associated incentive mechanisms ahead of RIIO-ED1.
- In assessing plans, Ofgem must recognise that efficiency is not just about unit costs. Innovative network strategy, design, definition of scope and specifications have a much bigger impact on overall long term efficiency than low unit costs.
- We are pleased that Ofgem has committed to ensuring that a fast-track company is not worse off than others on a slower process, though we are not yet convinced that the fast-track offers an incentive that is sufficiently strong.
- Annual efficiency sharing adjustments will undoubtedly result in price instability and unpredictability for our customers. It may be difficult for Suppliers to factor into long term contract prices and will require companies to leave inefficient and costly headroom in their financing structures to ensure compliance with key ratios. We recommend that Ofgem continues to make adjustments at the conclusion of each price control period.

(b) Developing a financeable plan

We are concerned that a number of the financing principles outlined in Ofgem's consultation, if implemented only on a theoretical economic basis, could jeopardise the ability to deliver an acceptable price control package. We believe that if Ofgem plans instead to consider its financing principles as starting positions from which transparent and mechanistic financeability adjustments can be overlaid in order to achieve acceptable price control solutions then an appropriate settlement could be agreed. You must recognise that the financeability adjustments required to achieve acceptable solutions may be very material in the first RIIO price controls, given the need to transition from current modelling assumptions; transition over one price period appears aggressive.

- Ofgem must utilise the most appropriate financeability tools to ensure that the overall package is financeable.
- Financeability adjustments should be Net Present Value (NPV) neutral in order that customers do not pay more than they need to. NPV positive adjustments should only be considered once the neutral mechanisms are exhausted; depreciation transition and capitalisation should therefore be first choice.
- Ofgem's proposals for depreciation must recognise the short and medium term impact on cashflow. Any transitional arrangements must be in place for long enough to fix the problem they are there to fix; this may be longer than one price control. If depreciation lives are to be extended, we would favour applying the revised asset lives to new assets, allowing existing assets to continue to depreciate on the current regulatory basis.
- Equity injections are not an efficient way of addressing financeability issues. Equity is a limited and scarce resource that is highly mobile and will seek the most appropriate returns for investors. Equity injections give rise to increased risk, are relatively expensive and hence will force equity away from future investments. Any financeability adjustments that rely on equity injection must be assessed using the cost of equity to ensure appropriate returns to equity investors.
- Financeability test thresholds must be consistent with the views of Credit Rating Agencies. The definition of the PMICR needs to be aligned to the work on transitional arrangements to ensure that transition arrangements are not rendered impotent by the definition of PMICR. Any changes to the definition of PMICR must be agreed with the Credit Rating Agencies. Also the more traditional cash flow ratios of Funds From Operations (FFO) to Net Debt are likely to be adversely affected so Ofgem needs to use a wider range of ratios in its modelling.

(c) Providing our debt and equity investors with appropriate returns

Price control solutions must retain and attract investors to the sector to ensure that essential investment is delivered. UK network companies compete with global infrastructure companies for investors; if the regulatory settlement offers lower returns than equivalent investments overseas or in other sectors, or if investors perceive that the sector is riskier than alternative investments, equity investment will not be forthcoming. Ofgem must recognise the availability of equity is important to deliver the innovative networks investments which will be of a more discretionary nature and is less likely to be closely associated with primary outputs. If equity returns are insufficient, DNOs will focus on core investment, directly tied to primary outputs alone – none of the more discretionary investment which the other RIIO

principles are intended to incentivise will be delivered. Therefore, investment conditions must be favourable to ensure such investment is seen as a priority for companies and their financial backers.

- The proposed mechanism to index the cost of debt is totally inconsistent with the actual debt portfolios of network companies. The desire for simplicity in the index and the relatively short term nature of the metric creates a risk that it may not provide appropriate debt funding, thereby failing to discharge Ofgem's financeability duty. It is also necessary to consider whether the reasons for rejecting the use of a cost of debt index at the time of the DPCR5 Electricity Distribution price control have been properly addressed. Europe Economics' proposal that Ofgem should set the Cost of Debt start point following traditional complex analysis and then use the index to flex assumptions within the price control is a much better approach.
- Ofgem must recognise that a number of components of RIIO price controls increase risk to equity investors and hence will require compensation via increased cost of equity, for example:
  - Increased duration of cash flows will increase perceptions of risk of investing in energy networks;
  - Requiring investors to fund cashflow shortfalls in the short term increases the perceived risk that a future regulator might deem future returns inappropriate and disallow them.
- We support Ofgem's proposal to move to a 12 month annual average RPI uplift for revenues but it is important that the inflation of the RAV should remain a function of the average of March-April RPI to avoid unnecessary distortion and preserve investor confidence.

Electricity North West will be committing significant resources to the gas distribution and transmission price control reviews and will work with Ofgem to develop appropriate price controls to ensure the delivery of future low carbon networks.

2. Making sure stakeholders' views are heard

We agree that customers and stakeholders should be consulted about network companies' plans and welcome the increased emphasis on customer and stakeholder engagement. Customers must be able to engage with companies to ensure investments are efficient, timely and relevant.

Ofgem's intention to build on the DPCR5 stakeholder engagement process with a formalised approach is a welcome addition to the future regulatory framework. Our experience in the DPCR5 process has led us to conclude that:

- Stakeholder engagement provides wider benefits to network companies. Our recent work on demand side management and the Low Carbon Network Fund has been built upon the DPCR5 stakeholder engagement platform;
- Stakeholder views can assist in identifying relative priorities for non-core investments (eg flooding, worst served customers, high impact low probability events);
- Stakeholders are happy to defer to the company's experience for the core requirements of the network (eg asset replacement); and
- Stakeholders do not always agree because they have specific interests that may be contradictory. Network companies must always make the ultimate decision as to what is right for their network.

The role of the DNO will be to balance the needs of the customers across the network. There are different drivers in different regions of the country and these should be reflected in price controls that properly reflect the needs of customers and stakeholders in the region served by the particular network concerned. Ofgem must recognise that regionally-supported efficient business plans should be rewarded with a less intrusive challenge.

Ofgem must also be able to demonstrate how the level of engagement within the company business plans will be assessed. This would require improvements relative to the DPCR5 process where Ofgem was unable to demonstrate how good stakeholder engagement was rewarded within the Final Proposals.

We are concerned that the extension of the price control period to eight years alongside a limited scope of the mid-point review is at odds with the proposal to encourage network operators to engage in ongoing debate with their stakeholders. There is a risk that the creation of longer price controls may result in stakeholders becoming frustrated that investment that they fully support cannot be included within outputs for many years. It will be important to ensure that the scope of mid point reviews is able to accommodate changing stakeholder requirements. This could be effected by allowing companies the opportunity to submit 'well justified' mid period changes to planned outputs, reflecting the contemporary views of their stakeholders.

3. Determining and incentivising output delivery

We support Ofgem's ongoing work on outputs and are keen to work with Ofgem to develop this area further. We agree that the six categories proposed cover the appropriate dimensions of service and that under RIIO price controls the onus should be on the network companies to determine how best to deliver outputs over time. For most measures, we agree that it should be for companies to recommend and justify the proposed levels in terms of costs and benefits to customers. It will also be important for companies to set out and for stakeholders and Ofgem to understand the rationale for expenditure in the context of a long-term strategy for delivery of outputs. We believe that long term strategic planning statements would be a key enabler of this understanding.

For the gas and transmission controls, the move to develop Health Indices (HI) as a secondary measure appears appropriate and the introduction of a simple measure of criticality within the HI framework is a useful evolution which mimics company decision-making. For electricity distribution companies, our long-term joint aim should be to develop comparable tier 1 output measures (such as overall network risk) which can be used as primary measures.

In terms of reporting company performance against outputs, we note that output delivery will be assessed on a balanced scorecard approach using a traffic light system. Balanced scorecards are a method of presenting multiple metrics, however Ofgem must be careful about how the scorecard is balanced and who decides the appropriate weighting. It will be particularly important if the scorecard includes measures such as safety where targets are not graduated and merely have a pass or fail state. More clarity is required in terms of which aspects of the outputs framework will be directly incentivised and what weight will be placed on an aggregated scorecard view.

Balanced scorecards to measure performance must also contain some comparable measure of the relative performance between companies. A company that narrowly misses stretching targets should be recognised as performing well if compared to a company that successfully achieves easy targets.

We note that under the current proposals, outputs will only be changed at the mid-point review if government policy changes or there is a recognised need for new outputs to meet the needs of consumers. We believe that this is potentially overly restrictive in terms of changing stakeholder requirements and suggest that network companies should additionally be able to propose changes to existing output targets based on well reasoned and justified cases that reflect emerging stakeholder priorities.

4. Assessing efficient costs

4.1. Comparative efficiency modelling

We agree that Ofgem's approach to assessing the appropriateness of future business plans will need to be substantially different from the approach adopted in previous price controls. Future comparative modelling will need to evolve to take account of legitimate variations between companies' well justified business plans.

- We agree that decarbonisation and an ageing network mean that the use of networks will change and that therefore historical spend is an increasingly poor indicator of future investment requirements;
- We recognise that future business plans will be shaped around regional customers. Each DNO may be asked by its customers to adopt a different risk profile, depending upon their needs and appetite to adopt commercial arrangements;
- We agree that equalisation of opex and capex means that historical disaggregated approaches will be less relevant in the future; and
- We agree that future schemes need to encourage innovation and agree that ex-post adjustments introduce a perception of regulatory risk that may discourage it.

Given that future business plans will be substantially different from the approach adopted in previous price controls, we agree that it is appropriate to benchmark forecasts as well as historical performance. However, we are concerned at Ofgem's suggestion that there is no requirement to take account of "noise" in comparing forecast data. This is not the case. We agree that it is sensible to develop a range of models to test the efficiency of plans. It will always be necessary to use a range of models to inform comparative efficiency assessments to avoid undue reliance on one model.

It will be important for Ofgem to remember in developing its models that efficiency is not just about unit costs. The identification of an efficient volume of activity to be undertaken, combined with the choice of innovative, efficient solutions will have a much bigger impact on overall long term efficiency than delivery of cheap unit costs. We accept that reflecting this issue in analysis might be a step too far given the data issues in the gas and transmission reviews. However, for the next electricity distribution review it will be more appropriate to review the costs of delivering outputs. This must be the long term objective for all future gas distribution and transmission price controls.

We are pleased that Ofgem has acknowledged the need to adjust its view of efficient costs to take into account real price effects. We support Ofgem's proposal to adopt the DPCR5 methodology to calculate allowances for real price effect adjustments using notional operating structures and equalised contractor and internal (non-specialist) labour rates. This approach will ensure that equivalent adjustments are provided to companies with differing operating structures, preserving the efficiency incentive mechanisms. Ofgem must satisfy itself that the allowances accurately represent the additional costs or it may risk underfunding investment requirements.

In a changing world, history is a weaker predictor of future network requirements and therefore future expenditure. As a consequence, Ofgem must be very careful using trend analysis as part of its assessment of efficiency of forecasts. In particular, for RIIO-ED1 we do not see survivor curve modelling, to give age based asset

replacement profiles, as being a relevant model. We accept it is probably required in the gas and transmission reviews, where its role should be similar to DPCR5, ie calibrating recent company activity against forecasts.

We are pleased that Ofgem has recognised the significance of boundaries and their potential to distort comparative analysis. This distortion will grow over time as the equalisation of incentives for opex and capex, combined with different appetites to employ commercial solutions, lead to very different approaches between companies. We accept that bottom-up disaggregated modelling allows more detailed assessment by cost driver that can explain differences in modelled efficiency in ways that simple total expenditure (totex) models may not. If Ofgem chooses to use disaggregated modelling as one aspect of its analysis, it must avoid cherry-picking if using those models to calculate efficient spend. We agree that use of matrix analysis and totex analysis may help remove this distortion.

Ofgem's current representation of matrix analysis tools only indicates the impact of boundaries qualitatively and cannot quantify any trade-offs. This approach will prove unhelpful if applied to more than two models or if no company is found to be frontier in all activities. The ultimate aim of any work on matrix analysis should be a quantification of the extent of boundary issues and marginal substitution between modelled blocks of cost in order to mechanistically adjust the assessment of efficient costs from disaggregated models for boundary distortions.

Any totex models developed will need to be carefully specified in order to ensure that they correctly assess the relative efficiency of companies' proposals. In particular, it will be necessary to carefully ensure appropriate normalisation for historical capex volumes and efficiency. The drivers proposed by Ofgem for totex modelling are not the real drivers of expenditure and hence comparative models constructed on this basis may not measure the true efficiency of forecasts. Ofgem should undertake work to develop comparative measures of required activity to use as drivers in future totex models.

All models must take account of fixed costs. Companies within larger groups can share fixed costs; Ofgem's analysis must recognise this to avoid inappropriately penalising smaller companies.

We agree that companies should be required to demonstrate efficient procurement as part of their well justified business plan. Indeed companies are already subject to EU procurement requirements. However, the option to require third party delivery should only be exercised when companies are deemed to be inefficient and when long term customer benefit from the approach has been unequivocally proved.

Ofgem must be very careful when comparing across sectors and internationally. For example, the Ofgem definitions of business support activities in the respective Regulatory Instructions and Guidance (RIG) for electricity and gas distribution do not align and hence make comparisons inappropriate. Such distortions are likely to be even more apparent on international comparisons.

Regardless of the modelling approach ultimately adopted, consistency of comparative data will be essential. This requires a significant investment of Ofgem resource to produce an industry-wide data set that Ofgem and all the companies can use to assess their relative performance and efficiency. Recognising the challenges that this issue now presents for gas and transmission, we need to get the RIIO-ED1 comparative models defined and established as soon as possible. The current models do not allow for meaningful/comparable analysis on a consistent basis.

4.2. Fast-track

We are pleased that Ofgem has committed to ensuring that a fast-track company is not worse off than others going through a longer price control process, though we are not yet convinced that the fast-track offers an incentive that is sufficiently strong.

We remain concerned that Ofgem's proposals fail to outline how it will mitigate the disadvantage of exposing fast-track companies to an extra 18 months of operational and uncertainty risk by requiring them to commit to price control plans many months before the control period commences. Additionally, we expect that fast-track companies will still be exposed to the same level of resource-intensive data requests in order to feed the requirements of comparative modelling to which the remaining companies are exposed; therefore being a fast-track company would not deliver any savings in the cost of price control activities.

Ofgem must consider the process of applying the IQI to the price controls very carefully as it may distort both the submitted plans and the incentive framework. We perceive a risk that a fast-track company may be penalised during the price control process by missing out on rewards under the Information Quality Incentive (IQI) mechanism if this is applied later in the process. We recommend that fast-track companies should automatically qualify for a 100% score on the IQI mechanism and receive all the associated benefits of performing well against that incentive.

We remain concerned that Ofgem currently does not have appropriate comparative models available to determine objectively which companies should be fast-tracked. Indeed, in the one area where Ofgem has historically undertaken modelling, comparative efficiency, the models developed for DPCR5 fell short of the robust modelling that should be expected when making fundamental decisions about companies' futures. Ofgem does not currently have any models available to compare objectively companies' performance in delivering outputs or engaging with stakeholders.

Ofgem needs urgently to dedicate appropriate resources to developing the objective comparative models that will be used to determine which companies will be subject to fast-track price controls. These models must be able to recognise that value for money includes a quality component relating to longer term flexibility (and therefore efficiency) which needs to be assessed. Electricity North West is willing to assist Ofgem in this very important and technically complex task.

The desired end result should be the publication of an annual report from Ofgem, using annually reported data that indicates the relative performance of all companies. This would assist the process of ensuring that these issues are well understood by all stakeholders prior to the commencement of a price control review and provide all parties with greater confidence in the assessment techniques, data and results.

Ofgem's current recommendations fail to address these issues, which increases our concern that Ofgem may not be in a position to determine accurately and objectively which companies deserve fast-track status.

4.3. Avoiding unintended consequences of annual efficiency sharing

We agree that it is appropriate that companies share the benefit of any efficiency savings with customers. The sharing factors applied must take into account the fact that any efficiencies delivered are available to all GB customers on an ongoing basis once new, lower unit costs are used to set future allowances. We believe that Ofgem's proposed range of 40%-60% will create a sufficiently strong incentive to encourage companies to seek efficiency savings. However, the ultimate attractiveness of this incentive to companies will depend not only on the NPV benefit to be retained but also on the timescales over which beneficial cash flows are received.

We identify two possible unintended consequences of Ofgem's proposed annual efficiency sharing mechanism that must be addressed. Firstly, annual efficiency sharing may result in price instability and unpredictability for our customers. This may be difficult for Suppliers to factor into long term contract prices. Secondly, annual adjustments to revenues and RAV will require companies to leave inefficient and costly headroom in their financing structures to ensure compliance with key ratios. We recommend that Ofgem re-thinks its proposals in this area and continues to make adjustments at the conclusion of each price control period. In this way annual variations in work volumes may counter each other and result in less volatile adjustments, and any revenue adjustments that are required would be concurrent with other adjustments that Suppliers will anticipate in their pricing assumptions.

5. Managing uncertainty

5.1. Principles

The overarching principle for uncertainty mechanisms in the RIIO handbook recognises that network companies should manage the uncertainty they face and that the regulatory regime should not protect network companies against all forms of uncertainty. We believe that this is a sensible starting point for discussing the allocation of risk and uncertainty. The RIIO framework also acknowledges that uncertainty mechanisms should be limited to instances in which they will deliver value for money for existing and future consumers while also protecting the ability of networks to finance efficient delivery. We agree that under certain circumstances, it may be better for customers for uncertainty mechanisms to be introduced rather than place risk directly on companies and consequently increase the cost of capital and hence bills. We would expect that most areas of the price control would not be subject to uncertainty mechanisms. This is most appropriate where there are large risks which companies cannot control and should be restricted to a small number. Wherever companies can control the risks, they should be managed by the companies.

Ofgem's primary focus in its discussion of uncertainty mechanisms is the protection of customers. Whilst we accept that this is important, Ofgem has dual responsibilities to ensure financeability of companies and failing to discharge these responsibilities will have implications on investors who will be needed to finance the £32bn of future network investment forecast by Project Discovery. The movement to longer term price controls with longer term returns to investors must be supported by clear and robust protection mechanisms to ensure financeability metrics remain robust.

We recognise that in most instances in the design of uncertainty mechanisms, there is a trade-off between simplicity and effectiveness. The RIIO principles place increasing significance on simplicity whilst Ofgem's statutory duties suggest that the overriding responsibility is to set mechanisms that are effective. Setting simple yet ineffective mechanisms increase the likelihood that Ofgem will be unable to demonstrate compliance with its duties. The proposed cost of debt mechanism is a prime example of a simple but ineffective uncertainty mechanism.

One of the principles that Ofgem must consider is that uncertainty mechanisms should not create any additional financeability issues for companies. Ofgem discusses the need to manage volatility in the price control by reprofiling revenues with Ofgem's consent. By their very nature, uncertainty mechanisms may introduce additional volatility to correct either forecasting uncertainty or financeability issues. In the RIIO framework, Ofgem is looking to investors to inject equity to resolve short term financeability issues. Equity should be used to correct short term financeability issues only if they are created by uneven investment requirements ie growth in future revenue; there is no guarantee as to the availability of equity as a means of correcting "created" financeability issues.

5.2. Cost indexation

We support Ofgem's proposal to move to a 12 month annual average RPI revenue uplift rather than retain the existing 6 month average approach. In DPCR5 we identified that this measure of inflation can miss price spikes and had a notable impact on the distribution revenues when we were reviewing the company real price effects. Ofgem now recognises the impact this effect can have when setting Real Price Effect (RPE) allowances. We propose that Ofgem should use the January to

December average which will allow companies to use the most recent inflation information in setting prices for the coming year. We do not believe that transitional arrangements are required. It is important however that the inflation of the RAV should remain a function of the average of March-April RPI to avoid unnecessary distortion and preserve investor confidence.

In DPCR5, a great deal of work was undertaken by the DNOs to understand and develop a mechanism to provide compensation within the regulatory framework for real price effects. Whilst we were able to quantify the impact of real price effects on the company, we were unable to identify a simple measure which would mechanistically represent the cost movements of a “DNO basket of goods” taking account of copper and other metal prices, specialist labour costs and exchange rate movements. Ofgem’s ultimate solution was to calculate an allowance based upon business plan profiles and price effects calculated by its consultants. Whilst we are unable at present to understand if the allowances will be sufficient to compensate companies for the changes in costs, we believe that it is appropriate for this approach to continue. Ofgem must satisfy itself that it has provided sufficient allowances to allow companies to discharge its responsibilities.

We welcome Ofgem’s proposal to adopt DPCR5-type uncertainty mechanisms in RIIO-T1 and RIIO-GD1 for licence fees, business rates, pensions and tax. These are prime examples of material uncertainties that companies have very limited scope to influence. We also believe that including specific reopeners with suitable thresholds for the implementation of the Traffic Management Act and Critical National Infrastructure is appropriate.

5.3. Scope uncertainty corrections

One of the key tensions embedded within the RIIO framework is the trade off between operational and regulatory risk. As a number of parties commented during the RPI-X@20 project, increasing the length of price controls will encourage companies to take longer term views of business plans but will increase the likelihood that future realities differ from that assumed in plans. In short, increased price control durations will result in increased forecasting error. Whilst we will refrain from making specific comments on individual mechanisms in this response, we will make a number of observations on the principles for including mechanisms based on minimising forecasting risk.

As part of the strategy document, Ofgem should propose mechanisms for specific uncertain areas of expenditure (following negotiation with the companies). Companies should be free to identify additional mechanisms based upon their own individual (potentially regional) circumstances and include them within well justified business plans. Companies should also have the opportunity to include areas of uncertain expenditure if they are able to demonstrate regional stakeholder support and requirement. Ultimately, if a company can demonstrate it can protect customers from reasonable forecasting risk as part of its business plans, the costs should be included within the allowances.

Ofgem has made a number of proposals for some of the existing uncertainty mechanisms. We suggest that using output-style deliverables may be appropriate to use as a revenue driver mechanism if the costs can be closely correlated. The choice of revenue drivers, specific allowances, reopeners, pass through or indexation as appropriate mechanisms must be dependent upon the specific requirement. The important point to note is that whichever mechanism Ofgem chooses to adopt, it must be robust, timely and transparent. Setting materiality thresholds for uncertainty

mechanisms will provide some incentive to companies to manage costs if they are able to partially manage the impact of the risk. It may be appropriate for Ofgem to allow materiality thresholds within generic mechanisms but companies could specify the actual level of the exposure in accordance with its financeability and cost of equity package. Ofgem's proposal to amend the materiality threshold from the traditional percentage of revenue test to a fixed value will have differing impacts on companies depending upon their size, relative value of revenue and individual financeability constraints. It would therefore be appropriate for companies to propose an appropriate level based upon their individual circumstances and requirements. If they are unable to control the risk, pass through mechanisms provide the most appropriate mechanism.

Ofgem proposes to use reopener windows to minimise the regulatory burden of the mechanisms and create a degree of revenue stability. We support the use of reopener windows but Ofgem must recognise that their use can create additional financeability issues, increase cash-flow risk and put upward pressure on the cost of capital. Reopener windows should be timed to minimise price volatility for suppliers. Where appropriate, reopener adjustments should be timed to coincide with revenue adjustments following mid-point reviews. It is also essential that all activities subject to reopeners must also be subject to logging up at the end of the price control.

5.4. Disapplication mechanism and mid-point review

Ofgem conducted a review of the arrangements for dealing with a network company in financial distress before it concluded its thinking on the RIIO principles. One of the biggest financial impacts of the RIIO principles for network companies is the lengthening of asset lives in calculating the returns of slow money to investors. The reduced cash flow profile will place significant pressures on the businesses at a time when they need to significantly increase investment in, potentially risky, future network assets. It is therefore vital that Ofgem ensures that it provides sufficient revenues for companies at price controls and sufficient protection between controls. We have previously noted our concerns regarding Ofgem's assertion that the existing licence provisions provide sufficient clarity or protection for companies under financial distress. Whilst significant protection is in place for customers, investors need to be confident that Ofgem will provide sufficient and timely revenues should an event occur. The wording in Special Condition A4 (as referred to in the Ofgem documents) provides very little assurance to companies and relies upon the explicit discretion of Ofgem to waive the normal process. Ofgem needs to review its position to ensure the framework is transparent and fit for purpose.

We also suggest that Ofgem must be very careful with its proposals for the mid-point review. We agree that it is essential that the scope of the mid point review should be tightly defined to avoid the risk of effectively creating four year price controls. We agree that changes to outputs that can be justified by clear changes in Government policy and the introduction of new outputs that are needed to meet the needs of consumers and other network users should be within this scope. This limited scope should be slightly expanded to allow companies to propose changes to existing output targets based on well reasoned and justified cases that reflect emerging stakeholder priorities. Ofgem should not conduct annual efficiency adjustments on the basis that they will introduce unnecessary volatility within price control periods if major projects are deferred and recommend that Ofgem makes any adjustments at the conclusion of each price control.

Part of Ofgem's challenge is to recognise the interdependency between the scope of the mid-point review and the required uncertainty mechanisms. It is important that

these two processes are kept separate to maintain the limited scope of the mid-point review. If a reopener window occurred at the same time, Ofgem must be able to demonstrate that both processes have been completed independently. The design of the uncertainty and incentive mechanisms should include descriptions of how the arrangements would flex with changes in scope and scale to improve the transparency of the future mechanisms.

We believe that Ofgem should go beyond its statement that it would “not alter incentive mechanisms, the allowed return or other price control parameters other than as required to accommodate the change to outputs” and must outline the design of the incentive mechanisms and reward framework associated with delivery of outputs and how it could mechanistically adjust in response to output changes agreed at mid point review. This will minimise the duration of the mid point review and increase the transparency of the mechanism.

We suggest that the proposed 12 month mid point review duration is excessive. Ofgem and the companies should have a reasonable understanding of whether there is a need to reopen the outputs for the remaining four years but will need to consult with stakeholders to ensure that this position is accepted. Ofgem should reduce the duration of the policy development to three months as the review should simply reflect the need to change deliverables and how they impact upon the revenues of the companies. Reducing the duration of the review will minimise the uncertainty for investors created by the mid point review and allow managers more time to focus on delivery of network solutions and customer engagement.

6. Innovation

The scale of the changes required in the move to the future low carbon economy merits significant investment in innovation. The RIIO principles were designed to ensure that the regulatory framework enables this transition. We agree that there is a need for technical and commercial development and that this is most sensibly achieved in a separate innovation fund.

We agree that the size of the proposed innovation fund Tier 1 allowance should be based on the quality of company plans for investing in innovation and, for electricity distribution, take account of a company's track record of delivering innovation under historic mechanisms. However, Ofgem must recognise that, by its very nature, it will not be possible to identify all innovation in detail 8-10 years in advance.

We also agree that the Tier 2 innovation fund and hence the bidding process should be open to third parties, but a key test in selecting projects must be that the proposal could be practically implemented on networks to ensure the subsequent adoption and roll-out of any emerging best practice.

We observe that innovation in areas such as quality of supply, customer service and network design has delivered benefits for customers in terms of levels of service. Investment in asset management tools and techniques has also improved the targeting of investment and hence future levels of reliability. As such, future innovation incentive programmes must allow for investment in these areas and not be solely restricted to low carbon innovation.

Ofgem recognised in the development of the RIIO model that network operators face significant challenges to assist in the development of a sustainable energy sector, we are therefore surprised that Ofgem has chosen to make the innovation stimuli time – limited. Between now and 2050 each decade will provide a differing set of challenges on the journey to reduce carbon by 80% by 2050 and so we do not see a decline in the need for investment in innovation.

We are pleased that Ofgem recognises the potential disincentive of including innovative projects in business plans due to the potential negative effect on comparative efficiency assessments where they increase costs in a period but do not increase outputs. Such projects should be identified and removed from benchmarking exercises.

7. Financing efficient delivery

7.1. Principles

Electricity North West's key objective from any price control settlement is to secure sufficient revenues to deliver the level of service and outputs required by our customers at an efficient cost whilst meeting key financeability metrics and providing our investors with appropriate returns for their investment. Whilst the mechanics behind the revenue setting are important in terms of understanding how revenues have been calculated, the ultimate decision on the acceptability of a price control will be based on the sufficiency of revenues to deliver investments for customers and returns to debt and equity investors whilst maintaining appropriate financeability metrics.

We are concerned that a number of the financing principles outlined in Ofgem's consultation, if implemented on an economically "pure" basis, could jeopardise any potential to deliver an acceptable price control package. However, we believe that if Ofgem plans instead to consider its financing principles as starting positions from which transparent and mechanistic financeability adjustments can be overlaid in order to achieve acceptable price control solutions then an appropriate settlement could be agreed. Ofgem must recognise that the financeability adjustments required to achieve acceptable solutions may be very material in the first RIIO price controls, given the scale of the transition to be achieved to some of those starting positions (particularly depreciation lives). Ofgem must therefore consider whether the financeability payments that current customers will fund justify the changes that have in many cases been designed to reduce the costs borne by those same customers.

The price control packages must attract and retain investors. Our experience of ownership by infrastructure investors illustrates the importance of achieving appropriate returns to deliver the full extent of the £32bn of network investment identified in Project Discovery. Our equity funding is invested via infrastructure investment funds by institutional investors, pension funds and other companies seeking long term, stable returns. In making any decision to inject further equity into Electricity North West, potential investors will consider alternative equivalent-risk investments that are available to them. We compete with other infrastructure assets and infrastructure companies for investment; if the regulatory settlement offers lower risk adjusted returns than equivalent investments overseas or in other infrastructure sectors, or if investors believe that the risk/reward balance is inappropriate for the asset class or if cash yields (dividends) are less frequent or predictable than in alternative investment opportunities the required investment will not be forthcoming. Clearly a lack of financial investment would in the short term limit the amount of network investment for our customers. It is unlikely that the effects will be clearly observable in the first few years (a point which was recognised in our debates regarding network health). Faced with a scarcity of equity, companies will modify their investment priorities to focus solely on the core investment required to achieve primary outputs alone. Any discretionary investment, such as the investment the RIIO framework explicitly sets out to incentivise, is far less likely to be delivered. In the longer term a shift in allowed returns would be required in order to attract investors back into the sector. The UK has a long history of attracting investment founded on regulatory frameworks that are stable and transparent. It is therefore important that Ofgem ensures the introduction of the RIIO financing principles does not introduce an increasing level of regulatory risk or the perception of an increasing risk.

In the following sections we highlight a number of our concerns with the theoretical economic proposals contained within the Strategy paper.

7.2. Asset lives and depreciation

Asset Lives

We agree that the low carbon transition will centre on the electricity sector and that peak electricity demand will grow significantly over the period to 2050. In addition, we also recognise that the technical asset lives for current electricity distribution assets are longer than the current regulatory electricity asset lives of 20 years. However, as recognised in the paper produced by CEPA, there are a number of uncertainties facing the industry that could significantly influence the average economic lives within the electricity distribution sector.

The move towards smart grid technology and the increased use of short life technology assets will have a material impact on average technical lives and should not be underestimated. The desire to use commercial agreements (eg demand side management) as a mechanism to minimise investment is also likely to reduce the "solution asset" life. We therefore do not believe that the proposed asset life range is reflective of the future network asset life or the uncertainty associated with developing and utilising innovative operating practices.

In addition, as is made very clear in DECC's Electricity Market Reform Consultation Document, December 2010, competition between energy sources will not be decided just by the market but, to a large extent, by government policy. Recent history suggests that views on climate change and the policies that deal with it change frequently. This could lead to changing requirements of networks and potentially technical obsolescence. Recognising the uncertainty about future energy markets, future energy technologies and future energy policies it is not sustainable for investors to be asked to wait 45-55 years to get a return on their investment. We suggest that such a proposal would only be acceptable to investors if a substantial cost of equity premium were made available to compensate for the longer duration of cashflows and increased risk.

One of Ofgem's goals for the RIIO price controls is to deliver the investment required to support the move to a low carbon energy sector. Ofgem must recognise the availability of equity is important to deliver the innovative networks investments which will be of a more discretionary nature and are less likely to be closely associated with primary outputs. Therefore, investment conditions must be favourable to ensure such investment is seen as a priority for companies and their financial backers. As with low carbon generation assets, investors in networks have already provided some finance to customers (via companies) on specific terms, namely a return on and return of capital over a predetermined time period (20 years for electricity distribution). Any significant change to the regulatory contract materially increases investors' perception of regulatory risk and could damage investor confidence (recognised by the DECC in its discussions of Grandfathering arrangements for low carbon generators). We have already seen evidence of energy network equity investors reacting negatively to Ofgem's proposals in this area.

The claim that Ofgem has given adequate warning of changes to asset lives, particularly with regard to existing assets, is incorrect. The reaction of network companies in their responses to the proposal for changing asset lives contained

within the RPI-X@20 paper "Embedding financeability in a new regulatory framework" illustrated its unexpected nature. This proposal had, up to this point in time, not been a major part of Ofgem's published thinking, either as part of RPI-X@20 or otherwise.

Depreciation Profiles

We note the comments made by both CEPA and Ofgem on depreciation profiles with regard to electricity distribution. We agree with CEPA that a back-end loaded depreciation profile would be inappropriate for electricity distribution or transmission given the expectation that network utilisation is expected to be relatively balanced across the generations of customers. Using a straight line depreciation profile has the added attraction of relative price stability compared with any other profile. We therefore support Ofgem's suggested approach that a straight line depreciation profile should be used.

Transitional Arrangements

We welcome Ofgem's recognition of the importance of transitional arrangements in any move to a new approach to depreciation for electricity distribution assets. However, the view that the transitional arrangements should not exceed a single price control period (potentially eight years) is not one we agree with and we do not support. Transitional arrangements need to be in place for as long as it takes to resolve the problem they were designed to fix. This may potentially be longer than one price control period and likely to extend to 20 years. We note the two proposals for transition arrangements contained within the consultant's report: applying revised asset lives to new assets or stepped depreciation lives. Both of these mechanisms may require longer than one price control to fully unwind; the effectiveness of the mechanism in mitigating financeability issues must take precedence over any desire to constrain the mechanism to an artificially limited fixed time period. Applying the revised asset lives to new assets and allowing existing assets to continue to depreciate on the previous basis will help to maintain investor confidence in the regulatory system and be consistent with the process of "grandfathering" regulatory arrangements under an existing regime.

7.3. Allowed Return

A WACC based allowed return

In principle, we believe that a Weighted Average Cost of Capital (WACC) based approach to allowed return is appropriate. However, we have a number of issues with the details of the mechanisms proposed in arriving at the constituent parts of the overall WACC. These issues are detailed in the relevant sections below.

Notional Gearing

We recognise that the current proposal is to take a principle-based approach to the calculation of notional gearing, with the size of the notional equity reflecting the company's risk exposure and potentially varying within and between sectors.

We believe that there should be an industry-wide debate about generic risks that companies face. Whilst there may be individual adjustments overlaid based on specific risks faced by companies, the starting point should be from a gearing position informed by discussions with investors and Credit Rating Agencies. This

debate will identify appropriate targets to enable the sector to secure investment grade ratings (at A-/BBB+). This is consistent with the approach taken by Ofgem in previous price control reviews. Companies could choose to vary this position depending upon the risk appetite of their investors and financiers as part of a well justified business plan.

Cost of Debt

Ofgem has proposed that, in future price controls, the cost of debt will be calculated on a long-term (eg ten year) trailing average of forward interest rates of a chosen market index. The index will be based on the real yields of sterling issuers of a similar credit rating to regulated utilities. As a consequence, the revenues allowed during the price control period of eight years would be adjusted annually and mechanistically to reflect changes in the real yield on the long term trailing average of the index.

We recognise that the proposed debt indexation mechanism aims to protect companies should the cost of debt increase markedly during the price control period and conversely ensures that consumers do not pay excessively if the cost of debt were to fall in a sustained manner. However, we do not believe the proposed cost of debt indexation mechanism is appropriate in principle and creates a significant risk to Ofgem's ability to comply with its financing duty.

Cost of debt indexation

We remain of the view that the reasons why Ofgem rejected the concept of debt indexation during the DPCR5 review remain and continue to represent very real barriers to a fair and reasonable mechanism. Ofgem specifically stated in its DPCR5 settlement that:

> "a suitable index to base the trigger on does not, in our view, currently exist",
>
> "Our analysis concluded that the ex ante approach provides the appropriate incentive mechanism for DNOs to obtain better rates and put in place an efficient debt structure. Interest rate risk is best managed by DNOs and a transfer of this risk to the consumer via indexation would be sub-optimal. Further, there is no single index that can be universally accepted as representing the cost of debt for DNOs"
>
> "constructing an appropriate benchmark index would involve a wide range of equally arbitrary assumptions, in addition to being fraught with technical difficulties. The issue of materiality depends heavily on the assumptions used for the construction of the index and in particular the choice of the benchmark, the sensitivity of the index to actual movements in rates, and whether it would be applied only to new debt or also to embedded debt. Overall, although there seem to be some potential benefits, we believe that these are outweighed by de-incentivising DNOs to manage interest risk."
>
> "Our analysis echoes the Competition Commission's conclusion in September 2007 that '… indexation would start to erode one of the core foundations of RPI-X regulation – i.e. that shareholders are asked to manage cost risk for periods of five years at a time – without offering sufficient benefits to justify the apparently suboptimal allocation of risk"

We agree with Ofgem's DPCR5 position.

We do not agree with the principle of debt indexation and, in any event, we have significant concerns with the proposed application mechanism. Our concerns and further observations regarding the proposed approach to debt indexation are detailed below.

If Ofgem insists that an index must be used, a careful balance must be struck between favouring a simplistic approach to any cost of debt indexation methodology and ensuring that this is not at the expense of delivering a "materially right" cost of debt allowance for companies. It may be necessary to settle for something that is more complex to get the right answer.

Any backward looking debt index cannot equate to the weighted average cost of debt for an efficient network company unless it has issued debt in equal amounts and at the same frequency and duration as those used to make up the index. It is worth stressing that bond indices are produced to act as a benchmark for assessing the performance of investment managers and individual company's bonds and are not implicitly a proxy for cost of debt.

The use of the proposed 10-year trailing average of 10 year bonds will not, as Ofgem suggests "provide a reasonable proxy for the cost of debt of network companies". Indeed in this section Ofgem suggests that Europe Economics recommends an index of 10-year maturities. In fact the Europe Economics report reads "It is for Ofgem to decide the trade-off between accuracy and simplicity associated with the following likely options" and then goes to list four options of which it recommends an option which Ofgem has not proposed using.

The recommended option set out by Europe Economics is for an index only to be used to calculate adjustments to a "baseline" cost of debt calculated at each price control on the basis of a real mix of debt instruments. We agree that with a suitable make up of this "baseline" cost of debt this mechanism may be an acceptable way forward.

In the context of this recommendation Europe Economics recommends use of a 10-year index as what it considers the "standard financial market benchmark". We find this conclusion surprising since the analysis in the Europe Economics report very clearly shows that the tenor of bonds at the time of issue by the network companies are very significantly weighted towards maturities of 20 years and longer with a very large proportion over 30 years. Companies issue long term debt to minimise their exposure to debt market distortions and to better match against economic asset lives. Many companies also have restrictions on how much debt can mature in a single price control period and extending these now to eight years means that it is impractical to refinance the debt every ten years. Overall longer maturities ensure that customers are not subjected to short term cost volatility when interest rates fluctuate. Imposing a mechanism which fails to capture this behaviour will incentivise short term financing arrangements at a time when Ofgem is encouraging companies to think long term. Such behaviour would increase the overall cost of capital paid by customers.

We recognise that there are no established debt indices that reflect these very long term profiles and agree that constructing a bespoke index is not practical. Nor is there readily available data on corporate bond yields through any established index going back longer than about 18-years so suggesting a trailing average at this stage of more than 15-years is not practical as it will not produce any meaningful data.

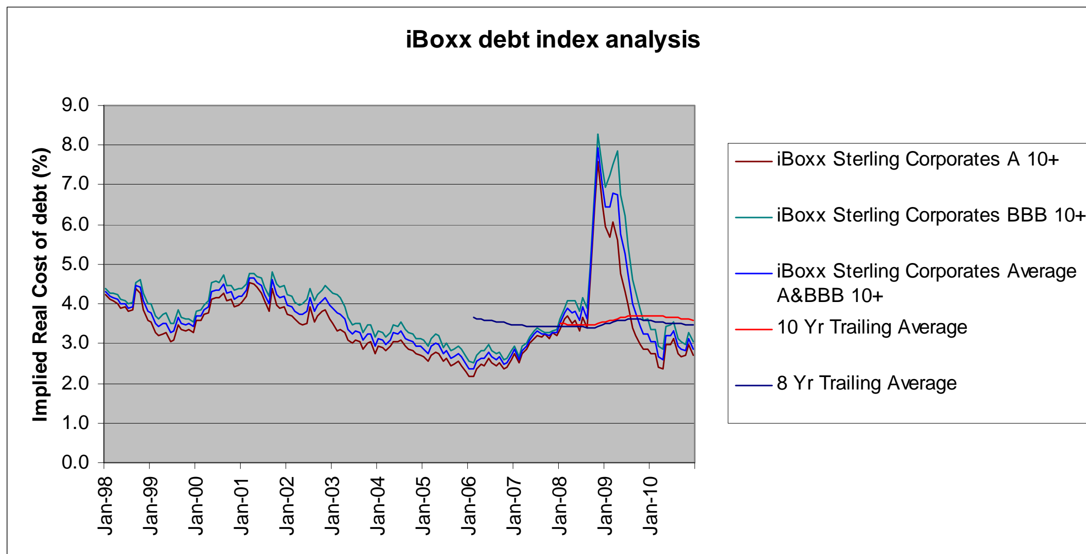
However, we consider that these issues need to be considered as part of the make-up of the “baseline cost of debt” and in the longer term Ofgem should revisit the term of the trailing average as available data extends into the future.

To illustrate the point about the selection of data having a potential significant impact we refer to section 3.33 of Ofgem’s consultation where Ofgem lists the four options of 10-year trailing average indices that could be used. Ofgem has opted to analyse only the 10-year Bloomberg indices, of both A and BBB rated corporate debt looking at both 8-year and 10- year trailing averages. Ofgem concludes with a preference for the 10-year trailing average of the average of the A and BBB indices.

We have carried out similar analysis of the other option of using the iBoxx 10+ years indices that have the advantage of including bonds with a longer maturity and so represent a better proxy for network companies’ debt profiles. We are happy to share our findings and develop this area further.

The comparable analysis is set out below:

Figure 1 – iBoxx Debt Index Analysis



Source: iBoxx Indices from Barclays Capital. 10 year implied inflation deducted from nominal rates, source Bank of England. Full data set available upon request.

Figure 2 – Comparison of Bond Yields from Bloomberg and iBoxx

Average of BBB and A Bond Yields		
Percentage	Bloomberg 10-year	iBoxx 10+ years
8-Year average	2.92%	3.50%
10-year average	3.10%	3.63%

Source: Bloomberg results from Ofgem document p 32. As at 30 September 2010

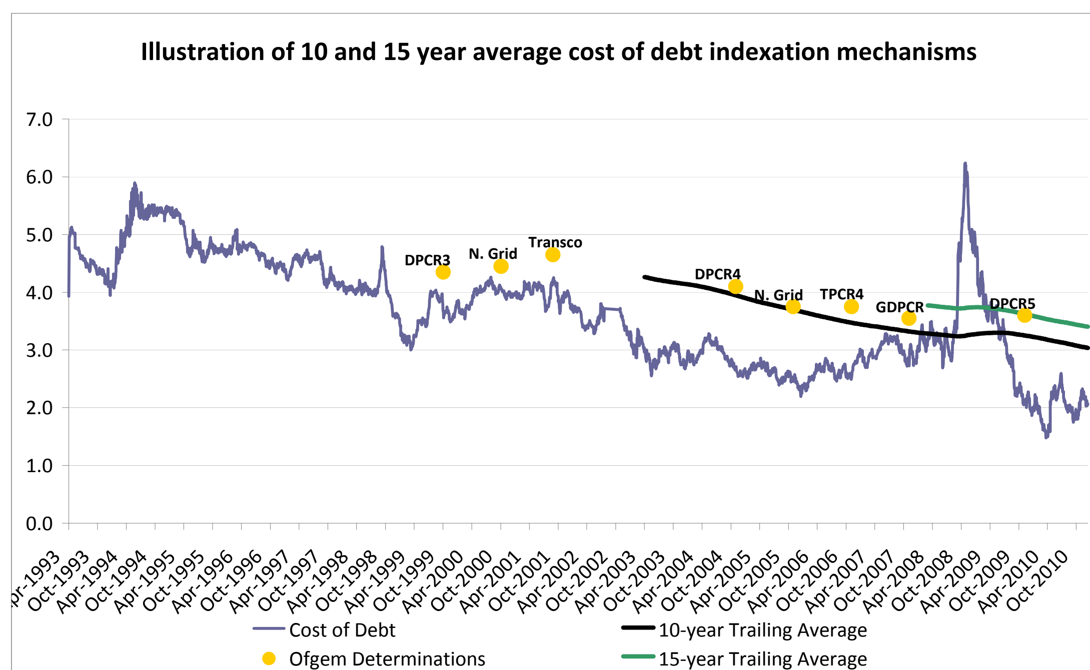
As can be seen the use of the alternative index, albeit on a similar basis to Ofgem’s preferred 10-year trailing average and average of A and BBB, produces a figure of 3.63% compared to Ofgem’s proposed 3.10%.

Similarly, we have also used the data distributed by Ofgem following the workshop on the 12 January 2011, containing source data from Bloomberg for the period from 1993, to illustrate the difference between the proposed 10-year trailing average and a 15-year trailing average.

As can be seen from Figure 3, the 15-year trailing average, which again is a better proxy for the average term of network company debt, gives a higher figure for the potential index. The variance is around 50 bps higher than the Bloomberg 10-year trailing average, although clearly this gap will narrow over time given the impact of the mathematical averaging process.

The comparative figure as at 30 September 2010 was 3.45%.

Figure 3 – Comparison of choice of debt indexation timescales



We are pleased that Ofgem recognises that transaction costs associated with the raising of debt should be included in any index. The suggested method by which these costs are to be reimbursed appears to be by accident rather than design in the Ofgem proposal. A more formal approach to the inclusion of transaction costs within the cost of debt index should be formulated. An approach to the calculation of transaction costs was contained in the analysis conducted by NERA on behalf of the Electricity Distribution Network Operators in its report "Distribution Network Operators' Cost of Capital for DPCR5" (July 2009 - section 6.4). We would recommend that Ofgem adopts a similar approach to the calculation of transaction costs associated with the raising of debt in respect of issue costs and costs of carry to maintain essential liquidity.

However, the proposed use of the trailing average of bond indices requires a further upward adjustment, for the "new issue premium". This is the premium required by bond investors for participating in a new bond issue and is expressed as a spread over the level where the issuing company's existing bonds, of a similar tenor, are trading. The price of the new bonds once issued, very quickly converges with the underlying "fair price" for the credit and thus will disappear from any index of bond spreads in a matter of days. However it represents a real ongoing cash cost to the

business as it has been embedded in the coupon payable on the bond for its duration.

New issue premiums vary according to market conditions but a range suggested by a leading investment bank is 10-20 basis points in normal market conditions rising as high as 50 basis points in very adverse conditions. The precise figure for any individual company is subjective as there will always be some judgment as to where the existing bonds are trading in the secondary market and so what is the “fair price”. However they are a recognised aspect of debt capital markets pricing and needs an appropriate upward adjustment to any baseline cost of debt based solely on bond indices.

Inflation

Ofgem has not expressed a position on the appropriate adjustment for inflation required to convert an observed yield on a nominal corporate bond index yield into a real yield that can be applied to regulated utilities. The nominal to real translation mechanism needs to be given careful consideration to ensure that it does not introduce more risk in terms of causing the index to diverge from the actual cost of debt.

For example, we question the logic of using historical long-term expectations of inflation to arrive at an index of implied real yields. What is more relevant to the actual cost of debt of a network company is an index of nominal yields adjusted for actual inflation during the price control period. Otherwise Ofgem is assuming that the company has no inflation risk in its debt portfolio. To achieve this, the company would have to, for example, issue only index-linked debt or put in place synthetic index-linked swap overlays for nominal debt. Either example involves a wide range of practical issues and potential costs that represent very real barriers to this assumption. We would be happy to discuss these issues in more detail with Ofgem.

If Ofgem cannot identify a mechanism to correctly adjust for this, Ofgem’s proposals will need to include an allowance for an inflation risk premium over and above the derived real cost of debt index to compensate network companies for this risk.

Summary view on debt indexation

Currently, Licensees assess the overall Final Proposals “in the round” – including a comparison of existing and expected future cost of debt with cost of debt allowance in Price Control Period. The use of a debt index means that this assessment cannot be done with precision, which changes the balance of risk to equity and consequently increases the cost of equity.

The Europe Economics recommended approach to debt indexation appears to have been rejected by Ofgem. The adoption of a cost of debt on a more traditional detailed analysis followed by a variation to this against a movement in a pre-determined index is an option that should be give further consideration by Ofgem.

Clarification is required as to how variations in any proposed index would ultimately roll through to revenues. We would welcome further details on how this aspect of the cost of debt mechanism will operate in practice.

We recognise that Ofgem has changed its position through the RIIO review and now disregards its previously stated concerns in favour of the apparent benefits of a mechanistic process to adjust allowances. We encourage Ofgem to consider the

impacts of its principle on the ability of companies to pay efficiently incurred debt costs and the potential to depress the cost of equity to investors through an inappropriate mechanism.

Cost of Equity

We note that the Ofgem view, under the RIIO model, is to maintain the approach of placing more emphasis on the long run "time series" approach to the overall cost of capital via the use of the CAPM methodology. However, we also note that Ofgem recognises that the results of this approach need to be sense-checked against other approaches where appropriate. We would recommend the use of the Dividend Growth Model (DGM) as an appropriate methodology to cross check the results generated by the CAPM approach. Work carried out by Oxera on behalf of the ENA ("What is the cost of equity for RIIO-T1 and RIIO-GD1?" Estimated initial range February 4 2011) indicates a CAPM cost of equity estimate in the range of 5.1% to 7.5%. However, the cross check of the CAPM range against the dividend growth model estimates suggests that, even assuming no long-run dividend growth, the cost of equity for regulated energy networks is above the mid-point of the CAPM range. In addition, as the equity risk component of the lower end of the range constitutes effectively no premium over the cost of debt, the lower end of the CAPM range does not appear to be realistic.

Oxera has also presented in its paper the wide body of theoretical and empirical evidence that demonstrates that there are strong grounds to believe that increases in cashflow duration will increase the returns required by investors.

Taking into account both the cross-check and duration arguments we believe that it is appropriate to consider estimates of the cost of equity from the top end of the Oxera range.

Impact of duration of cashflows on the cost of equity

Ofgem's proposal to move away from accelerated depreciation for electricity distribution companies would result in investment being remunerated, through the depreciation charge, over a longer period. We are pleased that Ofgem remains open to arguments that increased duration of cash flows will increase perceptions of risk (and, therefore, the cost) of investing in energy networks. However, it also quotes Europe Economics' suggestion that the fact that the betas for the owners of electricity distribution networks did not react to the shortening of regulatory asset lives in DPCR3 suggests that there should not be any significant effect from the proposed lengthening.

Drawing this conclusion from the DPCR3 experience suggests a degree of misunderstanding of the historical context in which regulatory asset lives were shortened – and this applies to both the change for electricity distribution in DPCR3 and to the similar later change for electricity transmission. In both cases, Ofgem's earlier decision to apply a rectangular depreciation profile for pre-privatisation assets meant that the end of this profile implied a very substantial and sudden reduction in the cash flows to the businesses – cash flows which had been assumed in the setting of previous price controls.

As a result, there was a general expectation that Ofgem would act to mitigate the impact of the ending of depreciation revenue in respect of pre-privatisation assets, ie a general expectation that Ofgem would, in effect, act to maintain the status quo in terms of expected cash flows. This was indeed what Ofgem did and the lack of

market reaction was exactly what would have been expected as a result of the status quo being maintained. Indeed, one might have expected rather significant negative share price reactions if Ofgem had failed to act in the way that it did.

Another factor relating to these share price movements is overlooked by the analysis in section 8 of the Europe Economics report that purports to show that the change in Electricity Distribution asset lives in late 1999 to April 2000 did not have an impact on the 3 sample companies' share price beta. All three of the companies, United Utilities, Scottish & Southern and Scottish Power had very significant other businesses as part of their listed groups and were not regarded as primarily "electricity distribution stocks". In the case of United Utilities and Scottish Power their more dominant regulated water businesses were also subject to final price review announcements by Ofwat over the same period and we consider it is therefore impossible to attempt to disaggregate the potential impact of the announcement about distribution asset lives.

Work carried out on behalf of the ENA by Oxera demonstrated that there is a positive relationship between the duration of cashflows and the cost of capital. It is therefore hard to believe that investors would be comfortable with these extra risks without adequate compensation through a WACC uplift. We support this argument and as a result believe that the calculation of the cost of equity must recognise that return of expenditure to equity investors over a longer duration requires a cost of equity increase.

Additionally and importantly, the increased duration of cashflows heightens regulatory risk that changes to the price review framework in future periods could result in the cashflows owed to investors on past investment not being ultimately realised. Investors perceive a very real risk that future regulators will not honour decisions made in RIIO price controls and hence a risk that they will not be appropriately compensated for their investments.

Risk Free Rate (RFR)

Ofgem's basic approach appears to be the use of Index Linked Gilts to measure the RFR. However, due to the distorting effect of the Bank of England quantitative easing programme and its decision to hold the official Bank rate at a record low level it is important that cross checks are built in to the determination of the range. We would suggest that both the swap rate and nominal gilt approaches to determining the RFR should be factored into the process.

Equity Risk Premium (ERP)

The Europe Economics methodology in estimating the ERP is predominantly based on long term historical averages of equity market returns. An implicit assumption of using long-term historic data is that past expectations are an unbiased estimate for future expectations. This assumption, however, is questionable at the current time of continued market uncertainties.

For the purpose of selecting historic estimates of the ERP it is not appropriate to place substantial weight on geometric averages and hence to set the lower end of the range at 4.0%. A more appropriate approach would be to look at both a historic cost of equity based on the CAPM model arithmetic averages and to also look at a current estimate of the cost of equity that combines both the CAPM and Dividend Growth Model (DGM) approaches. This would have the impact of narrowing the ERP range and increasing the lower end.

Equity Beta

We note that in the Europe Economics report, the listed energy companies and comparators chosen for the gearing and equity beta analysis all pay regular cash dividends to investors and their respective dividend yields and dividend growth figures reflect this. The assessed level of equity beta would be higher if a portfolio of companies paying irregular cash returns were chosen.

Equity issuance costs

Ofgem has suggested that equity will play an increasingly important role in the short and long term financeability of networks. We recommend that the TPCR4 policy of allowing companies to recover the cost of issuing new equity should be extended into the RIIO price controls. We recommend that the 5% allowance should be reviewed to reflect the actual cost of issuance as the recent recession may have had a significant impact on the costs of raising finance. Companies should be able to include this cost of issuance as part of their well justified business plan.

We recognise that the allowance should be subject to an efficiency sharing factor so that if the cost of issuance or volume of finance raised materially differs from the assumptions contained within the well justified business plan a mechanism is in place to protect both customers and companies. We recommend that any adjustment should be conducted at price controls rather than at the mid period review as this could introduce perverse incentives to issue equity ahead of the mid point review rather than at the most efficient point in time.

Range for the Cost of Equity

The ranges proposed by both Ofgem and Europe Economics fail to appropriately recognise the impact of deferred cash-flows and the associated increase in regulatory risk or the introduction of mechanisms to smooth revenue which create additional short term risks for equity investors. The upper end of the cost of equity range must be considerably higher to reflect this material increase in risk. The overall Ofgem range of 4.0% to 7.2% for the post-tax cost of equity is wide. The ERP range of 4.0 to 5.5% is driving a large part of the range and is based on the Europe Economics Capital Asset Pricing Model (CAPM) approach. A more appropriate approach would be to look at both a historic cost of equity based on the CAPM model and to also look at a current estimate of the cost of equity that combines both the CAPM and Dividend Growth Model (DGM) approaches.

7.4. Assessing Financeability

Financeability Ratios

It is essential that Ofgem utilises the most appropriate financeability tools to ensure that the overall price control package is financeable. If the package is not attractive to investors, companies will be unable to fund critical investment. Financeability tests and the thresholds must be consistent with Credit Rating Agencies' views.

Rating agencies and other regulators use a broad range of financial ratios to assess the financeability of utility companies. We are encouraged that the post maintenance interest cover ratio (PMICR) has been highlighted as a key credit rating metric. However, the definition of the PMICR needs to be aligned to the work on transitional arrangements to ensure that transition arrangements are not rendered impotent by the definition of PMICR. Any changes to the definition of PMICR must be agreed with the Credit Rating Agencies.

Equity metrics must also consider the importance of the stability of returns. Equity investors in listed utility companies see the investments as proxy bonds with comparatively high expected yields to compensate for low growth prospects. Similarly, long term infrastructure investment funds require steady returns throughout a price control period and across multiple periods to discharge their responsibilities and continue to attract investors to this asset class.

Whilst Ofgem's principles acknowledge that predictability and transparency of returns are important to long term investors, its two proposed equity metrics of Notional RAV / EBITDA and Regulated Equity / Regulated Earnings do not deal with this issue as they do not assess cash distributions to equity. Therefore, the long-term consistency of returns, the profile of returns across the period as well as the total returns should be recognised in Ofgem's financeability tests.

We acknowledge that the standard equity ratios of earnings per share, price:earnings ratio are not easily used for regulated companies; where many are privately owned. We accept, therefore, that the RAV figure is the appropriate basis to measure returns against. We suggest that Ofgem additionally sets target ratios regarding the level of cash distributions as part of the overall return on equity; as indeed it did in DPCR4. We propose an assumption of a range for cash yield with a minimum 50% of cash distributions of annual equity returns on the equity portion of the RAV; with the balance held as retained earnings. This additional financeability test would therefore measure a company's ability to make such annual cash distributions. Equity investors would not take the same view as looking at an average ratio over say 3 years, as the credit rating agencies will do for debt ratios. Missing 1 or 2 years of dividends or being unable to offer stable returns would cause network equity investors to completely review the attractiveness of their investments.

Financeability Adjustments

A number of tools are available to address financeability issues that are exposed via assessment against financeability ratios. We strongly believe that, wherever possible, financeability adjustments should be Net Present Value (NPV) neutral in order that customers do not pay more than they need to. Ofgem should only use NPV positive adjustments once the neutral mechanisms are exhausted. Depreciation transition and capitalisation should therefore be first choice. Equity injections are not the most efficient way of addressing financeability issues

Ofgem must recognise that the financeability adjustments required to achieve acceptable packages may be very material in the first RIIO price controls, given the very significant changes to some of Ofgem's economically pure financing starting positions (particularly depreciation lives).

Return on Regulatory Equity (RORE) analysis

Whilst we agree that Return on Regulated Equity (RORE) is one way of looking at overall performance we do not believe it is measured correctly. RORE has an inherently short-term focus, traditionally over a single price control period. It is imperative that performance for customers over the longer-term is taken into consideration which is missed by the time frame over which RORE returns have to date been assessed. We would be happy to discuss this further with Ofgem.

7.5. Taxation

We are in broad agreement with the tax proposals as these are in line with the principles laid out and agreed in the DPCR5 settlement

7.6. Pensions

Deficits

We recognise that Ofgem will wish to test the "efficiency" of any deficit cost that customers are asked to bear. However, Ofgem must be very careful when doing this to avoid making inappropriate judgements based on short term data. Pension deficits will vary given a myriad of legitimate factors, a proportion of which will be scheme specific. Ofgem should share with DNOs details of how efficiency will be judged and over what time period to ensure that regulatory assessment is not characterised by opportunistic short-termism leading to volatility and inefficiency.

We have reviewed Ernst & Young's (E&Y) proposed methodology for calculating the Established and Incremental deficits and have significant concerns about the reporting burden that this would create. We are currently participating in a working party of ENA members that has commissioned AonHewitt to consider the E&Y proposal. This report is, at the time of writing, well advanced. AonHewitt believe that there are ways to allocate the deficit that are simpler but more accurate than the E&Y proposal. The working party has also focussed on the costs (actuarial, administration and IT programming) of different methodologies to seek to ensure that any calculations are done as cost effectively, for the accuracy required, as possible. Finally, a key principle agreed by the working party is that wherever possible complex calculations should only be carried out at the same time as the triennial valuations - these can then be rolled forward in other years. This three year calculation cycle is a principle we strongly support for all pension figures.

The Pension Regulator does not automatically make exceptions for regulated businesses in respect of deficit repair periods, and has stated it will give "particular scrutiny" to repair periods exceeding 10 years. This inevitably makes negotiating periods greater than 10 years with trustees difficult and if achieved, almost certainly requires the Company to compromise in other parts of the funding negotiation. We ask that Ofgem discusses the 15 year repair period again with the Pension Regulator with a view to the Pension Regulator accepting that longer repair periods, given the company covenant, are acceptable for regulated businesses and issuing such guidance to Trustees. Our Trustee would welcome such guidance.

Ofgem has presented a number of options for the most appropriate period of time over which pension deficit true up adjustments are applied. It will be important to balance the desire to minimise revenue volatility against the financeability pressures created by the proposed depreciation profiles. For true up adjustments for existing price controls we agree that option c, the period of a RIIO price control, is most appropriate. For deficit funding allowance resetting during a RIIO price control period, revenue adjustments should be made at the same time as the mid point review, and at the conclusion of each price control based on rolled up actuarial valuation results; in this way prices are adjusted at a time that Suppliers are expecting changes and companies need wait no longer than 4 years for revenue adjustments.

In respect of valuation dates for fast-tracked and non fast-tracked companies, given that under-funding and over-funding of pension schemes is difficult to predict and dependent on many variables we favour a common date in time for final proposals on this aspect of controls for all companies. This would mean that fast-track companies would need the option of some form of re-opener so as not to be disadvantaged by movements in the valuations used for fast-track purposes versus the formal valuation determined in accordance with the final proposals timetable. This would need to be a symmetrical reopener allowing Ofgem to reopen to avoid companies materially benefitting.

Pension Protection Fund (PPF) levies

We agree with other network companies that in large part, the PPF levy is a non-controllable cost. Actions that can mitigate levy increases or reduce the amount of the levy often have detrimental knock-on effects elsewhere within the business. For example, changing the invested assets to a less risky basis might reduce the levy, but clearly such a change has huge implications for future cash funding costs for customers. We do not support benchmarking levies and believe levies should be funded on a pass through basis. Any subsequent efficiency test should recognise the dependent effects noted above and should not look at the levy calculation in isolation.

Efficiency Review

We believe that any benchmarking of pension scheme funding needs to be considered very carefully for a number of reasons - many of which Ofgem recognises as issues. We would welcome more clarity regarding the tests that the Government Actuary's Department (GAD) will apply in any efficiency reviews.

In particular, there are difficulties in benchmarking disparate pension schemes with very different regulated and non regulated elements, liability profiles, investment strategies and actuarial assumptions. There is a very real risk that network companies are dissuaded from undertaking innovative approaches to managing their

pension investments for fear that over-simplistic modelling (done with the benefit of hindsight) may deem their approach inefficient. We believe that there is currently a risk that the businesses regulated by Ofgem become inclined to "herd" for fear of funding figures falling outside "expected ranges" across a short term period.

For example, in September 2008 many private sector scheme trustees took the view that corporate bonds were likely to give attractive credit spreads in the short to medium term. Our Trustee could have been switched from index linked gilts to maintain the broad equity/bond split and because our revenues are linked to inflation the pension schemes have a natural "hedge" already thus mirroring the perceived "efficient" mix at the time. Had our Trustee switched 20% of our index linked gilts to corporate bonds at that time, this would have resulted in the deficit at September 2010 being higher by £35m. This simple but real example illustrates the dangers of making short term assessments of long term investments.

Ofgem must also recognise that, in addition to the difficulties involved in comparing the pension schemes of different regulated companies, any benchmarking that compares network company schemes to private sector schemes is fraught with difficulty. For example:

- Many electricity network company employees have legal protection of their pension rights; protection which does not exist for private companies; and
- Many private sector companies are hoping to reduce their deficits through equity market gains. It is difficult for a regulated business with a mature pension scheme like ours to make such decisions.

We welcome Ofgem's comment in Appendix 5 that buy outs and buy ins will be discussed on a case by case basis. However, in the absence of further details as to how Ofgem would consider this strategy within efficiency reviews (how the comparison would be undertaken and over what period), companies considering such a move will need to factor into any decision the risk that Ofgem may inappropriately disallow future costs because the strategy is not correctly compared to those of other network companies. This may mean that regulated businesses fail to take full advantage of the current innovations taking place in private sector pension funding leading to customers paying more than they need for pension liabilities. In this vein, whilst we welcome further guidance on the pension principles we believe more clarity is needed on how you will address these issues of herding and potential reluctance to innovate.

Overall, we suggest that Ofgem considers moving away from mechanistic benchmarking of pensions, where companies are compared on individual assumptions against specific criteria to a more holistic review of funding strategies over a long period of time. This would require regulated businesses to present and explain their funding strategies to Ofgem, providing greater insight into the drivers of investment decisions.

7.7. Regulatory Capitalisation

We support the underlying principles of equalising incentives across the entire cost base and agree to the removal of the DPCR5 anomaly of excluding business support costs and non-operational capex from this treatment. This will remove the current perverse incentive on DNOs to avoid investment in, for example, innovative network policies or IT-enabled efficient processes because of differences in cost treatment.

We believe that regulatory capitalisation has the potential to provide a strong NPV-neutral financeability mechanism. Whilst we accept that in the long term Ofgem will seek to move towards a capitalisation rate that is broadly consistent with the proportion of longer term assets within expenditure, in the short term Ofgem should consider the use of regulatory capitalisation percentages as a key tool to manage short and medium term financeability issues

8. Next steps

The overall objective for the RIIO price control strategy paper is to allow companies to produce robust, high quality business plans and to mitigate some of the current concerns by increasing regulatory certainty. Ofgem's responsibility, as outlined in the RPI – X @ 20 decision document, was to set out the underlying principles for the price control including WACC, indexation, uncertainty mechanisms and incentive package to allow robust business plans to be submitted which could be used by companies and investors to understand how an acceptable package would fit together for each price control. The strategy document must therefore develop the overarching principles into deliverable policy. We are concerned that in a number of areas, Ofgem has provided very little guidance in the initial paper and has passed these responsibilities back to companies to be dealt with as part of the well justified business plans. Unless the final strategy document provides a significant amount of detail to fit around the principle-based recommendations, all other elements of the RIIO price controls will not be effective. In particular, a number of Ofgem's assertions on financeability are based on the belief that regulatory uncertainty will be minimised by making this long term commitment. Clearly the publication of a comprehensive strategy document is the first milestone in discharging this responsibility.

In previous price control processes, Ofgem encountered a number of complications and delays which impacted on the ability of all parties to consider each other's position on a number of key areas. The most significant example in the most recent price control where errors in Ofgem's analysis resulted in the reworking and republishing of much of the comparative efficiency analysis published in both the May 2009 document and the Initial Proposals. We have previously noted in our response to the gas distribution and transmission open letters (September 2010) that it is important for both reviews to take account of the interdependency between both sets of plans. Therefore, the timetable needs more contingency for such issues to built into it and a clear set of options for how to deal with such issues should they arise again.

We note that the fast-track process for the Gas Distribution Networks is dependent upon the review of the iron mains replacement programme by the Health and Safety Executive (HSE). Whilst we acknowledge that the size of the repex programme represents a significant portion of the programme, we suggest that Ofgem's intention to provide fast-track reviews should be preserved regardless of the status of discussions with the HSE. Ofgem should instead investigate the possibility of amending the timetable if it understands that significant changes will be proposed by the HSE.

We have noted a number of issues in the published timetable that should be addressed:

- Ofgem has not allowed any time for the third party challenge process;
- The outline timetable gives no indication of timing of licence drafting and reporting requirements. These are important and time consuming tasks that merit visibility in high level plans; and
- Running two price controls in tandem with joint resources is likely to be a difficult process. Ofgem must satisfy itself that it has enough resources to deliver both controls in the allotted timescales. It is better to address this issue early than attempt to catch up.

Electricity North West will be committing significant resources to the gas distribution and transmission price control reviews and will work with Ofgem to develop appropriate price controls to ensure the delivery of the low carbon networks.