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Dear Dermot

Re: RIIO-2 Framework Consultation

Electricity North West (ENWL) appreciates the opportunity to respond to this important consultation on the proposed RIIO-2 Framework. The period of time which the RIIO-2 price controls will cover will undoubtedly see significant change within the industry. It is prudent to review the RIIO Framework to confirm that it continues to work well for current and future customers and all stakeholders - as it currently does for Electricity Distribution - and remains fit for purpose for the period ahead.

This consultation constitutes a very wide ranging and open review. The breadth of the consultation and the limited information provided on many of the proposed options means it is difficult to assess their impact upon customers and how they interact with each other. Ofgem should take the time to develop options further and complete an Impact Assessment of any framework proposals. This will ensure that the Framework is attractive to the patient capital needed to deliver future investment. Further consultation on the detail of the preferred option/s is required before progressing to Sector Specific work.

RIIO-ED1 is delivering for customers. The perceived weaknesses associated with the early RIIO-1 controls are not evident in RIIO-ED1, particularly for the slow-tracked companies. Ofgem should not develop remedies to perceived issues in specific subsectors and then apply these to electricity distribution as they are unlikely to be relevant. Such changes will almost certainly increase risk, ultimately increasing costs for customers or introducing policy delivery risk (such as the Electric Vehicle rollout or Low Carbon Agenda).

In developing the RIIO-2 framework, there are six aspects, in particular, that Ofgem needs to be especially mindful of, namely:

- Ensuring legitimacy in eyes of customers and investors;
- Transparent reporting of performance;
- Ensuring the stated intent of lowering risk is realised;
- Being clear on the desired behaviours;
- Considering sector and company specific factors; and
- A robust process.

These are discussed further over.

Ensuring legitimacy in eyes of customers and investors – It is important that the RIIO-2 Framework addresses concerns regarding the legitimacy of the role of energy networks and the importance of ensuring fair returns for long term investors and affordable network costs for current and future customers. Network companies should not make windfall gains as a consequence of luck nor should be exposed to financeability issues due to circumstances outside of their control. **The current treatment of cost of debt funding illustrates where there is scope for such windfall gains/losses.**

Transparent reporting of performance – Closely associated with legitimacy is fair, full and transparent reporting of performance. To increase customer and stakeholder trust, the Framework must promote open and accurate reporting of all elements of performance, including network cost per customer. **At present, Ofgem’s assessment of Return on Regulatory Equity (RoRE) is incomplete.** Persisting with an incomplete assessment approach to RoRE could compound the issues associated with legitimacy and lead to errors in policy application. For ENWL, our returns are improved over the allowed return because we are delivering great service, reducing power cuts through additional unfunded investments, although this is offset by the underfunding of our debt costs.

Ensuring the stated intent of lowering risk is realised – Ofgem has stated a desire for the RIIO-2 Framework to be low risk with lower returns; it being perceived to be in customers’ interests to decrease risk in order to reduce equity returns. However, many of the options contained within the consultation are likely to increase risk, particularly where options might be combined together, resulting in increased costs to customers. Ofgem needs to look at the overall risk faced by network companies, including regulatory and political risk, as part of assessing the impact on companies and customers. **A safety net mechanism is not necessary where the RIIO Framework is effectively implemented. Introducing a safety net mechanism will increase risk and deter investment.**

Being clear on the desired behaviours – RIIO is internationally recognised as a leading example of incentive-based, rather than rate of return, regulation. Incentive based regulation has driven significant RIIO-1 consumer benefit and will deliver more in RIIO-2. It is well understood by company owners holding illiquid investments on the basis of this regulatory structure. **It is vital the effectiveness of incentive mechanisms is preserved in RIIO-2.** ENWL also supports continued development of competitive approaches in RIIO-2, where it is demonstrated to be in the interests of current and future customers, having considered any resultant potential reduction in collaboration.

Considering sector and company specific factors – The development of the RIIO-2 Framework should be clearly distinguished from the Sector Specific work. Ofgem should be clear that developments in the T2 and GD2 price controls are not precedent setting for electricity distribution. The specific licensee characteristics of ED and, in particular, ENWL customers, stakeholders and company characteristics should be fully considered. The specific challenges facing network companies must be recognised. **Regional customer choices and company debt costs should be addressed on a licensee basis and not be averaged across networks.**

A robust process – It is important to ensure that ambition is matched by deliverability, consideration of evidence and that due process is maintained. Proposals need to be thoroughly thought through, with Impact Assessments consulted upon prior to finalisation. Similarly, in order to keep risk low and therefore lower equity returns, licence conditions, including closeout mechanisms, need to be finalised before the start of the periods so investors can manage the risk. The backdrop to setting this price control differs to RIIO-1. For ED1, ENWL had concerns with the cost of debt treatment but considered the settlement fair ‘in the round’. Subsequent CMA findings show that stakeholders and network companies will not be able to take this “in the round” stance for RIIO-2 so it is necessary to get all the price control elements correct, especially with the decrease in equity returns giving less room to absorb any mistakes, omissions, market changes, incomplete mechanisms or other shocks to the settlement. **Impact Assessments should be comprehensive and consulted upon as part of setting price control elements correctly that don’t rely upon an “in the round” approach.**

ENWL is seeking to continue active dialogue with Ofgem on the development of RIIO-2 through the coming months. This response provides comprehensive input to the development of the RIIO-2 Framework.

This letter is supported by four appendices. These consist of:

- Appendix 1: how the RIIO Framework is supporting ENWL to deliver for customers in ED1;
- Appendix 2: what does RIIO-2 need to deliver;
- Appendix 3: ENWL response to detailed questions;
- Appendix 4: CLASS case study: investing for the long term.

If you have questions on any element of the response, please do not hesitate to contact me or Paul Bircham (paul.bircham@enwl.co.uk).

Yours sincerely

A handwritten signature in black ink, appearing to read 'P. Emery', written in a cursive style.

Peter Emery
Chief Executive Officer

cc. RIIO2@ofgem.gov.uk

Appendix 1 – How the RIIO framework is supporting ENWL to deliver for customers in ED1

ENWL is the DNO covering the north west of England. We serve 5 million domestic customers in 2.4 million premises, across a diverse range of locations, from the very urban Greater Manchester to very rural parts of Cumbria, Lancashire and Cheshire.

Our shareholders are a group of infrastructure funds. Many of the investors in those funds are local authority and public sector pension funds. These funds and authorities in turn represent millions of families and retirees, and to deliver on their promises and obligations, they rely on long-term stable returns and value the RPI-linked basis of returns which aligns with their pension liabilities (often RPI-linked).

ENWL's performance across the board is good, meeting all targets and performing at the upper quartile for interruptions and connections time to quote and connect, with improving customer service and a low cost per customer.

We have recently reviewed our Purpose and Principles to better articulate the vital role we play for the region during this period of radical change in the industry. Our new Purpose: "Together we have the energy to transform our communities", clearly demonstrates ENWL's commitment to its customers and stakeholders and its forward looking approach to the role played by energy networks.

We continue to invest to ensure sustained improvements in reliability. Our Customer Satisfaction performance is improving and we are challenging ourselves to maintain this trajectory. To assist this, we are members of the Institute of Customer Service (ICS) and use this to track our performance and challenge our thinking against a wide range of organisations. Our most recent score from the ICS was 85.4, which compares to Amazon, highest ranked at 86.6; First Direct, second at 86.1; and John Lewis, fifth at 85.0¹. The highest ranked utility company was OVO Energy at 81.5. We recognise that there is scope for continued improvement in this area to ensure we are able to meet our customers' expectations. As research by the ICS has demonstrated the strong link between an organisation's climate and its ability to deliver high quality customer service, we see investing in our team as an important part of this improvement. We were therefore delighted to win the ICS 2018 Employee Engagement Strategy Award² and see this as an important step in our drive for improvement.

We distribute electricity to some of the most socially and economically deprived communities in the UK. It is a key part of our Purpose to support the North West community and in particular those customers who become vulnerable as a result of the operation of our network. In 2017/18, we invested £115k in developing services to support fuel poor customers, facing a range of different circumstances, through partnerships with other agencies in our region. Investment is being targeted to areas of higher levels of deprivation, recognising that the options available to these customers in the event of an interruption are significantly reduced compared to those customers who may be able to take the family out for tea, for example, if their power is interrupted.

¹ Institute of Customer Service, 'Customer Service Satisfaction Index: January 2018', <https://www.instituteofcustomerservice.com/media/pdf/ukcsi-january-2018-state-of-the-nation-report-final-2308.pdf>

² <https://www.instituteofcustomerservice.com/events/uk-customer-satisfaction-awards-1>

In partnership with our Sustainability Advisory Panel, we've improved our operational environmental performance and continue to identify future opportunities. In the RIIO-ED1 plan, we targeted a 10% reduction in carbon footprint by 2023. By 2016/17, a 13.9% reduction in our carbon emissions was achieved compared to the 2014/15 baseline, delivering our business plan commitment early. Outperformance is due to energy reduction in buildings and less vehicle fuel being used. Oil-filled cables have been replaced with environmentally friendly oil-free alternatives, with 10km being replaced in 2017/18, and we responded quickly to leaks on legacy circuits. We are working with our Sustainability Advisory Panel and other stakeholders to explore how we can prioritise further improvements.

Looking to the future, ENWL is increasingly operating in a dynamic, rapidly changing environment. Customers in the North West rely on us now more than ever before. It is no longer appropriate to say we just 'keep the lights on'. We keep customers connected with friends, family and the wider world; keep their electric cars running; ensure their house is warm and enable them to work smarter and more flexibly and fully participate in the decarbonisation and innovation in the electricity market. We are actively preparing and have started the transition from being a DNO to becoming a Distribution System Operator (DSO) which will be key to ensuring the changing needs of customers are met whilst ensuring this remains affordable.

Stakeholders have said that the changing energy landscape requires a skilled workforce. We are seeking to address this through an education outreach programme and our apprenticeship and graduate programmes. Our outreach Bright Sparks programme, delivered 140 workshops to 4,000 primary school pupils across the region in 2017/18. 32 new apprentices joined in May 2017, bringing the total number trained to more than 200. Four graduates have also been recruited onto a two year programme benefiting from training and on-the-job experience throughout the organisation, providing a pipeline of talent.

ENWL supports the use of competition within the energy networks where it can be demonstrated to be in the interests of customers, current and future. During the DPCR5 period, ENWL successfully passed the competition test in seven out of the nine segments for delivering connections to its network, demonstrating to Ofgem's satisfaction that competition is viable in these segments. This year we have published four work plans to set out the steps we are taking to improve the services we offer to connecting customers and to support competition in this activity³. Three of these are required under the Incentive for Connections Engagement (ICE). The fourth covers our voluntary commitments for Distributed Generation High Voltage / Extra High Voltage stakeholders and is not subject to ICE. We hope that this fourth plan will make the process clearer for these customers and stakeholders.

We see an increased role for DNOs to facilitate competition as we move forward and have recently launched our Expression of Interest⁴, seeking to use commercial arrangements with providers of flexibility services as an alternative response to specific challenges on our network.

The RIIO-ED1 incentive framework (including Information Quality Incentive (IQI)) encourages us to both invest and search for innovative ways to continuously improve our business throughout the price control period resulting in an improving customer experience. It does this by ensuring both shareholders and customers financially benefit from the improvements secured over ED1. This has resulted in ENWL making additional investments in the business to deliver the first active network management system capable of true merit

³ <https://www.enwl.co.uk/get-connected/incentive-on-connections-engagement/ice-2/>

⁴ <https://www.enwl.co.uk/innovation/our-approach/flexible-services/>

order pricing; new roles to support the development of Community Energy and the DSO transition; discretionary quality of supply improvements; extensive flood resilience works; increased network capacity (through both traditional and alternative arrangements; and the implementation of our CLASS project (discussed further in Appendix 4). These investments are justified on the basis of improved returns during the ED1 period.

The RIIO-ED1 Framework provides a robust foundation for ensuring the ENWL network delivers for customers and stakeholders. In Ofgem's 2016-17 annual report, recognition is given to our investments to deliver network performance; reduction in both number of customer interruptions and duration of these interruptions; improvements in customer service; as well as environmental improvements and consistent adherence to all relevant HSE standards. We therefore believe it is essential that the developments in the application of the RIIO Framework that were capitalised upon in setting the ED1 slow track price control are taken into account as part of establishing the arrangements for the RIIO-2 reviews.

Appendix 2 – What does RIIO-2 need to deliver?

Summary

As illustrated in Appendix 1, ENWL believes the RIIO framework is working for consumers in RIIO-ED1 in the form implemented for slow track electricity distribution networks with only a small number of areas where change is necessary, such as the cost of debt treatment. This shows the RIIO Framework itself is a sound basis for further development, with the risk being that substantial changes are made across a broad spectrum of issues when this is not merited. We believe the higher returns that are currently concerning for many stakeholders and challenge the legitimacy of the regime have arisen from how RIIO was implemented in the earlier price controls, in specific sub-sectors of the energy networks industry, and do not stem from the structure of the regime itself.

For example, hindsight now suggests that some investments by companies that were in baseline allowances were actually uncertain and should have been incorporated in an uncertainty mechanism with clear parameters as to what would happen to the allowance in the event that the associated output/s ceased to be required. These challenges can be addressed for RIIO-2 with the existing toolbox through the diligent application of current price control mechanisms. Much can be addressed through improved decision making regarding how risks are shared and funded and the assessment of what is in baselines, volume drivers or other types of uncertainty mechanisms. This can be done whilst ensuring incentives continue to be effective for companies to innovate and find ever more efficient ways of delivering. Incentives have been a highly successful feature of RIIO-ED1 driving better outcomes for customers such as reductions in power cuts and improvements in customer service and should be retained for RIIO-2.

Background

It is widely recognised that the energy sector is going through a period of significant change and electricity in particular is increasingly a central need for our customers to be able to run their lives. A report by the Royal Academy of Engineering looked at the very real implications of customers being without power in its report 'Living without electricity'⁵. This used the floods experienced in Lancaster during 2015 to provide a case study of the wide ranging impacts that power loss causes, from obvious loss of lighting, heating and cooking facilities to impact on communication networks, payment mechanisms and transport. As the contribution of electricity to people's lives increases then so do the ramifications of extreme events like the severe flooding and its consequential impacts.

In order to be able to continue to provide the reliable energy networks that customers have funded and companies have delivered in Great Britain (GB), continued investment into the sector is essential. Since privatisation of the gas and electricity networks, stable, low-risk, long-term, 'patient capital' has been successfully attracted into the United Kingdom (UK), with the stable regulatory environment often cited as a contributing factor to attracting this. Incremental evolution of the regulatory environment has allowed network operators to meet changing needs without causing concern to investors, resulting in significant benefits to customers in terms of cost reductions and a shift in the quality of service, in broad terms including much lower fault rates and higher customer satisfaction.

⁵ <https://www.raeng.org.uk/publications/reports/living-without-electricity>

RIO is the current and most innovative development in this regulatory regime after a stable period of RPI-X regulation. RIO has been replicated to differing extents in other regimes as best practice for network regulation. Under the RIO incentive regime, allowance has been made for all networks to succeed if they meet or exceed performance targets. This is powerful and effective as networks are not directly competing against each other, but largely to beat their own targets. This encourages collaboration which in turn is a driver for improvement, innovation and change that benefits customers across GB. Even within RIO-1, there has been evolution so ED1 is quite different in its approach to T1 and GD1, taking the learning from these earlier cycles and demonstrating an increased maturity in its approach.

Given the change anticipated over the next decade, it seems appropriate that RIO continues to evolve to reflect the environment it serves. In addition, increased political pressure is being brought to bear on the regulatory regime, reflecting the challenging economic conditions that continue to face the country. However, when considering a response to both these changes and the wider political environment, it is appropriate to ensure that the learning that has been captured in the ED1 arrangements is not overlooked and to distinguish between the different RIO-1 arrangements when assessing how they are working.

DNOs are already at the forefront of the energy transition. The next years of accelerated change will be dominated by customer choice. Residential, Small and medium-sized enterprises (SMEs), Commercial and Industrial, Distributed Generation (DG), Storage, and new customers who have not yet emerged will all need to be served. The RIO framework of Innovation, Incentives and Outputs provides a great basis for efficient and timely delivery without increasing costs or system risk. Ofgem should ensure that RIO-2 maintains a level playing field for all current and future stakeholders.

Further investment will continue to be required and it seems most likely that this will continue to take the form of further 'patient capital' as there are limited sources of capital prepared to be committed for such long periods of time with relatively modest levels of return. Increasingly, the market for such capital is global in nature and it is essential that the UK remains attractive to invest in, particularly when set against the wider political risks investors consider which have significantly heightened including, Brexit uncertainty, currency risk and potential nationalisation of network companies.

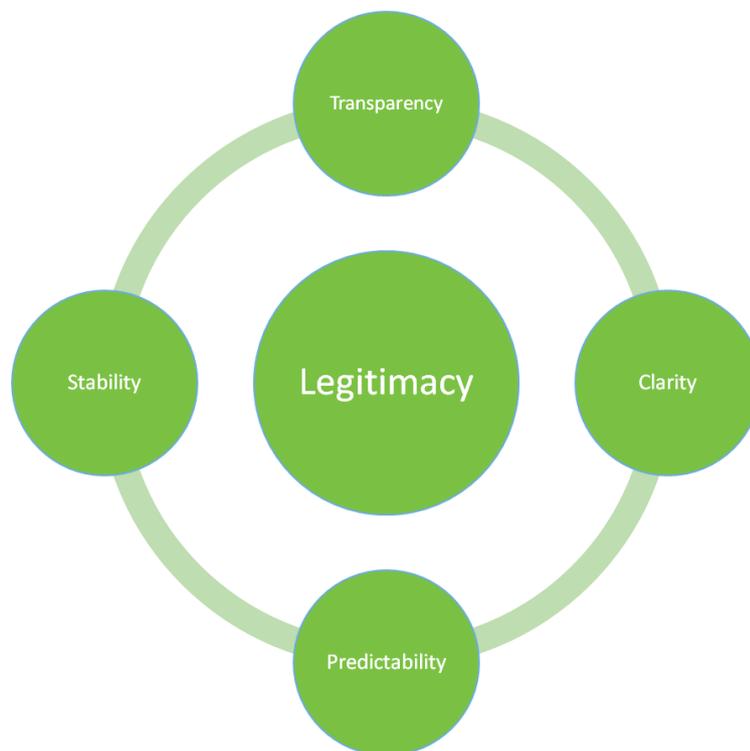
Regulatory stability matters at a time of increasing uncertainty in the UK market, now more than ever, to ensure networks continue to receive the required investment provided by pension funds attracted to the sector by the liability matching and stability that it delivers. The well established investor confidence within the energy networks is based upon such continuity and stability and has been built over decades. Investors are comfortable with the evolution between price controls that 'reset' the baseline at the start of each price control period without undermining what shareholders believe they have invested in. Fundamental or wholesale changes to the Framework have the potential to raise investors' perception of risk and therefore must be very carefully considered to show how such shocks can be handled. Any significant change to the balance of risk between customers and companies, for example, has the potential to increase costs to customers if it increases the returns that investors like pension funds require. Short-term versus long-term economic pressures also need to be appropriately factored in as patient capital is by its very nature looking at a long time horizon, with a desire for stability.

It is also important to note that price controls can no longer look at averages or settlements 'in the round' since the introduction of the rules regarding any referral to the Competition and Markets Authority. If a settlement is challenged (and this is probably more likely since the

ED1 precedent and range of parties that now can refer), then the CMA is likely to review individual components of the price control and on an individual licensee basis. Accordingly, price controls need to be considered on a component by component basis, looking at the specific circumstances of individual network companies. And, as customer groups are given an enhanced voice to influence and shape the arrangements for their locality, it also becomes essential that this is not undermined by a regulatory regime that imposes a centralised view or approach to a local issue.

What does RIIO-2 need to provide?

RIIO-2 should therefore mark a natural evolution of the regulatory regime, as observed in the slow-track ED2 arrangements, rather than a step change revolution. As set out in the ENWL response to the July 2017 Open Letter on the RIIO-2 Framework ENWL believes there are five key principles that the RIIO-2 Framework needs to address, namely Legitimacy, Transparency, Clarity, Predictability and Stability. These are shown in the following diagram and discussed further below.



Given the political pressure and scrutiny that is on the energy sector, it is essential that the RIIO-2 framework addresses the concerns about the **legitimacy** of the role networks play and the level of returns that it is appropriate for these organisations to make. Some of the legitimacy concerns can be addressed by moving to a basis of calculating returns that is realistic, taking actual company specific circumstances into account rather than basing calculated returns on unrepresentative assumptions. Some voices would like to push returns to an unsustainable low, but it is essential that Ofgem balances these voices against the level of risk that networks are being asked to bear, the investment required over the next decade, and the ramifications in the event that networks are unable to perform their essential role.

In considering this point, it is important to recognise that ED1 marked an evolution from the prior RII0-1 controls and the additional checks and balances Ofgem included within this, particularly the slow-track settlements, delivered a more effective set of proposals. That the ED1 settlement was challenged by parties arguing it was both too generous and too tough illustrates that it was, at the time of the final determination, a finely balanced outcome which was then held up almost entirely by the CMA. Companies being able to drive out further efficiency does not mean that the settlement was wrong and actually shows how established the drive for efficiency and innovation within the sector has become, leading to long-term benefits for customers. Where further evolution is appropriate to reflect learning since the final determinations, this should be undertaken in a measured way to ensure that it does not result in an over-correction that might destabilise the regime.

The legitimacy of network returns would be further served by ensuring that all reporting is accurate. In particular, there are certain challenges associated with the calculation and reporting of Return on Regulatory Equity (RoRE) that have the potential to mislead. This is discussed further in response to Q45 and Q46 in Appendix 3. Prompt resolution of these challenges is essential.

It should also be noted that legitimacy is not the same as lower costs. It is about all parties being clear what the role and responsibilities of network companies are; that the returns companies are able to make are fair; and that the costs reflect what customers are willing to pay for. For example, as part of our work on ED1, we asked customers whether there were prepared to cover the costs to improve network investment for vulnerable customers at a small increase to their own charge. Our customers were clear that they saw this investment as being important and Ofgem agreed with this in finalising our allowances. Ensuring that feedback like this is acted upon is also important in increasing the legitimacy of network companies.

The importance of regulatory **stability** and certainty needs to inform the evolution. As described above, investors (predominantly funds looking for stable and long-term investments on behalf of pension funds and similar long-term savers) have looked to the UK's utilities as long-term and stable investments. Where change is needed, it needs to be tested against this to ensure that the proposals do not result in capital flight as it is unclear where alternative investment would ultimately come from.

Linked to stability is the need for **predictability**. Given the long-term nature of these investments and their role in funding liabilities like pensions, companies and investors need to be able to predict the impact of their performance on their allowed returns. Similarly, users of energy networks need to be able to predict the charges that they will face to inform their decision-making. Mechanisms that add uncertainty to the forecasting capability of networks should be used with caution as there may lead to unintended behavioural consequences.

To assist in the legitimacy debate, increased **transparency** around the essential role that networks play and how effectively this role is performed is a vital element of demonstrating how regulation is serving the customer. Ofgem and companies need to work with customers and stakeholders to understand how this message can be conveyed in a meaningful way and the current approach Ofgem uses to calculating company returns (RoRE) needs urgently revising so stakeholder views are informed by a more accurate and representative view of company performance.

Finally, the framework needs to promote **clarity**. This starts from the beginning with all stakeholders being clear about the process and their opportunities to feed into this, and goes all the way to the closeout of the price controls with clarity about exactly what networks are

required to deliver. Mechanisms need to be finalised before the control periods start so real performance against outputs can be assessed across the whole period and companies are able to report transparently on their actual and anticipated performance, in terms of both costs and delivery.

Where is further thought needed?

Ofgem has clearly given thought to seeking to ensure the process is correct and is making a substantial effort to effectively engage with stakeholders. ENWL welcomes this. Overall work planning might need to be developed in more detail sooner as we are mindful of the available time and some tension as to what can be delivered in the respective stages of the RIIO-2 development as any proposals will need to be robustly evidenced. Indeed, it is essential that ambition for change is balanced against what can realistically be delivered in the timeframe to ensure that due process is not unintentionally sacrificed.

It is our view that the RIIO framework generally contains the correct measures and incentives and it is the calibration of these measures that requires improvement to award efficient performing companies, whilst also incentivising ongoing improvements and innovation.

A wide range of stakeholders have views on the future regulation of energy networks that need to be incorporated into this process. We already work with a wide range of customers, including householders, community energy schemes, academia, local authorities, housing associations, DG developers, storage developers, commercial entities, transport providers, and multi-national manufacturing companies, and expect this to increase as new entrants seek to engage with the existing and emerging opportunities in the energy sector.

In assessing and balancing the multitude of views, Ofgem need to be mindful that it does not inadvertently react to those stakeholders with the loudest voice. Destabilising the regulatory regime for relatively small short-term gains may seem attractive but the long-term ramifications of such an approach need to be fully understood and factored into the decision making process. In particular, Ofgem needs to be mindful that it does not inadvertently cause a dislocation in the fundamentals of utility regulation that diminish the attractiveness of investment in the sector for patient capital, particularly in electricity distribution that has not had the same levels of rewards seen in other sectors during the RIIO-1 controls and where returns vary between the ED1 settlements. An important factor in this will be robust Impact Assessments for the ranges of strategy and policy options being contemplated.

Ofgem also needs to be alert to the wider uncertainties that will influence the attractiveness (or otherwise) of investment into GB energy networks. Beyond any network specific industry uncertainties which we have addressed, there is the impact of Brexit driven changes to the UK economy which have arguably increased the risk of investing in the UK. This has increased political uncertainty (and therefore regulatory uncertainty) and it has increased the volatility of the UK economy with potential impact on inflation, exchange rate and tax rates. Whilst such matters are not under Ofgem's control, they will impact on the appetite of investors (both UK and foreign based) to invest in patient capital, seeking steady but low returns. Ultimately, these uncertainties could significantly reduce returns or wipe them out altogether. These factors will change, probably over the next 10 years, as the economy responds to the transition period and then. To ensure investments in energy networks remains attractive, consideration needs to be given as to how the RIIO-2 Framework will respond to this macro-level uncertainty.

The stated desire to make the regime low risk and low return could work for many patient capital investors. However, Ofgem needs to consider the cumulative impact of its proposed changes and whether the overall picture has genuinely resulted in a lower level of risk for investors such as pension funds or whether the extent of the proposed changes is in reality quite a fundamental shift in utility regulation.

Much of the Framework is still focussed on regulating capital intensive activities. We anticipate that as we move forward, focus will increasingly shift to using existing assets more effectively to respond to changing customer needs and behaviours. It is essential that the Framework reflects and facilitates this.

Ultimately, it is in customers' interests to have a robust and well regarded regulatory regime as it provides the stable foundation for investment, attracts the best talent to spearhead the innovation needed to deliver the scale of change anticipated and ensures high levels of network reliability and customer service are maintained. ENWL looks forward to working with Ofgem as it develops its thinking and to contribute to the debate about how networks are effectively and efficiently regulated over the next decade.

Appendix 3 – ENWL response to detailed questions

Chapter 3 - Giving consumers a stronger voice

In ENWL's response to Ofgem's Open Letter on the RIIO Framework, published in July 2017,⁶ we stated that the best representative of customers perspective will always be the customers themselves and therefore Ofgem's proposals to strengthen the voice of the customer throughout the RIIO-2 price control review process are welcome.

It is essential that the engagement companies undertake enhances the legitimacy of both the process and the outcomes, and the proposed models for RIIO-2 look to deliver against this aim.

Within Electricity North West, consultation with customers and stakeholders underpinned the Well Justified Business Plan submitted in preparation for ED1. RIIO's focus on Outputs and engagement with customers resulted in an enhanced approach to stakeholder and customer engagement activities to support developing our Business Plan that we have continued to evolve on a continuing basis during ED1. We have therefore built upon the stakeholder engagement undertaken for the ED1 business plan and adapted it to ensure that it remains relevant to our company and to our stakeholders.

We have recently established an annual Strategic Stakeholder Advisory panel, led by our Chief Executive, alongside four specific stakeholder advisory panels⁷. These panels focus on four themes at the heart of our business: reliability; affordability; sustainability; and excellent customer service, ensuring we cater for the needs of vulnerable customers. Each panel is led by an ENWL director and senior manager, and meet three times a year.

Across the panels, over 25 different organisations are represented, with membership of each group being varied, allowing us to draw upon specialist knowledge and ensure a range of opinions are heard. Examples of the organisations involved include Citizens Advice Bureau, Energy Saving Trust, local authorities, British Red Cross, National Farmers Union, local universities, and equipment manufacturers. These organisations represent the broad range of interests of our customers and stakeholders. Having these existing relationships in place provides us with a strong foundation to undertake effective customer and stakeholder engagement as part of the price review process.

These advisory panels have helped shape and develop some key initiatives which best serve our customers. For example, the Affordability Advisory panel recommended developing an understanding of fuel poverty and how we could help fuel poor households. This has led to collaboration with Energy Saving Trust to investigate the ways in which a DNO can help tackle fuel poverty in the region.

We also run specific stakeholder engagement events, such as our recent event on the role of DSOs⁸ and our recent consultation on Community Energy⁹.

In addition we regularly meet stakeholders from diverse backgrounds to understand their needs. Examples include local and national government, customer groups, developers and

⁶ <https://www.ofgem.gov.uk/publications-and-updates/open-letter-riio-2-framework>

⁷ We also run a number of dedicated Connections groups.

⁸ <https://www.enwl.co.uk/dso>

⁹ <https://www.enwl.co.uk/globalassets/stakeholder-engagement/documents/engagement-publications/community-and-local-energy/enwl-community-and-local-energy-consultation.pdf>

others. We have a structured process to gather feedback from customer representative groups and stakeholder meetings that are collated centrally for action. Further information on the breadth and depth of our approach to engagement is available in our recently submitted Stakeholder Engagement and Consumer Vulnerability (SECV) documentation.

Finally, we have been giving some thought to what our role is in delivering the Public Interest, recognising that this is not always the same as what our customers and stakeholders may prioritise. Public Interest can be defined as “*the aggregate well-being of the general public, both short and long-term, comprising the combined interests of consumers, citizens, the environment and investors for both today and tomorrow.*”¹⁰ This broad definition means that few of our customers and stakeholders will fully encompass this when considering their preferences.

From 2015 to 2018, we have sponsored and participated in Sustainability First’s New Energy and Water Public Interest Network (New Pin)¹¹, using this as a forum to challenge our thinking as to what constitutes public interest and what our role should be in delivering this. Our thinking continues to evolve in this area but we identified relatively early in this process the potential role for energy networks to promote and facilitate energy efficiency. Our thoughts on this are discussed further below in response to chapter 4 and question 10.

Q1. How can we enhance these models and strengthen the role of stakeholders in providing input and challenge to company plans?

The proposed model has three key principles that ENWL is supportive of:

- The plan should be owned by the Company.
- Stakeholders and customers should provide oversight, scrutiny and challenge to the development of the plan.
- Ofgem should determine the plan including outputs, incentives and funding.

The following points set out our thinking on some of the more detailed aspects of the proposed approach.

Customer Engagement Group – Distribution Companies

ENWL supports and expects all distribution networks to be open to improving their business plans through increased engagement in RIIO because of the benefits customer and stakeholder insights provide. This is in line with customer expectations and is crucial to building legitimacy and trust in the networks sector.

We speak regularly to a broad range of customers and stakeholders. During 2017/18, we had almost 900 interactions with a diverse range of individuals and organisations, including local authorities, MPs, highways authorities, community energy groups, football clubs, theatre groups, running clubs, membership bodies, transport providers, universities, national parks and multi-national manufacturing organisations. These sessions provide invaluable insight and we are already giving thought as to how we can engage with these representatives to develop and challenge our thinking on our approach to ED2.

¹⁰ Sustainability First, Looking to the long term: hearing the public interest voice in energy and water’, February 2018, available at <http://www.sustainabilityfirst.org.uk/images/publications/new-pin/New-Pin%20Looking%20to%20the%20long%20term%20FINAL%20report.pdf>

¹¹ <http://www.sustainabilityfirst.org.uk/new-pin>

We see the creation of a specific Customer Engagement Group as a positive move for RIIO-2 and complementary to our existing activities. We support having an adequately resourced and knowledgeable customer challenge body who can act as an advocate for our customers. This will help us reflect customer views where the technical complexity of the industry and individual customer's daily priorities might mean individuals do not choose to get involved.

During our ED1 stakeholder engagement, we saw that there was a high degree of consistency between our North West panel responses with national surveys. However, there were a number of issues where we found customers within our region holding a different view from the rest of the GB sample at a statistically significant level. For example the propensity for North West customers to want to invest to support vulnerable customers led us to develop our business plan commitment to strengthen the network serving large groups of such customers. These findings highlight the importance of carrying out customer surveys in each licence area and also the potential risk of cost assessment approaches that revert to a vanilla regression-based method, ignoring differing regional preferences.

ENWL's engagement captures local, regional and national views and this ensures that its activity is cognisant of these different needs and expectations. This is an essential element and a key benefit of stakeholder engagement. We believe that our plan should be tailored to the needs of the communities we serve and these needs will vary from other network company operating areas. We are therefore pleased that Ofgem have recognised the importance of these differing regional needs and preferences. Our ongoing stakeholder engagement clearly shows that support for vulnerable customers continues to be a key priority and will be an area of specific focus for the remainder of ED1 and for ED2. The following diagram illustrates how we are thinking about the different tiers of customer and stakeholder wants and needs that our plan will need to be able to respond to.



In order to ensure the legitimacy of the RIIO-2 controls and the role of customers and stakeholders in shaping these, it is essential that due regard is given to these regional sensitivities. Ofgem can aid the stakeholder engagement process and support legitimacy of outcomes by providing some clarity on their expectations of what are national, regional or individual customer considerations and what evidence Ofgem expects to see to deviate from these.

User Group – Transmission Companies

It is important that the voice of networks is represented on this Group, and we agree that Users, including DNOs, are well placed to shape and challenge business plans. In order to ensure that DNOs are able to be as effective as possible in these discussions, appropriate consideration needs to be given to the funding of this activity.

RIO-2 Challenge Group

Whilst it is important to ensure there is a platform for independent challenge, consideration needs to be given to the membership of this group. For example, it is not clear that energy supply businesses have the long-term perspective and considerations that would make them appropriate customer representatives. The outcome of the referral to the ED1 settlement to the CMA highlighted that energy suppliers such as British Gas may not be best placed to represent the balance between current and future customers.

Finally, one aspect to consider is the need for consistency across all three network price controls when forming this Challenge Group. Whilst the gas distribution and transmission price controls are undertaken at the same time, electricity distribution is two years later. In coming to its views, the RIO-2 Challenge Group needs to be mindful of the electricity distribution impacts of its thinking, whilst recognising that it may not always be appropriate for the transmission and gas distribution controls to set precedent that is binding on the electricity distribution review. This Group should also be required to give appropriate consideration to regional priorities, especially where these differ from the GB-wide perspective.

➤ *What are your views on the proposal to have Open Hearings on areas of contention that have been identified by the groups?*

We are supportive of the principle of Open Hearings, however we feel there is insufficient detail within the consultation to allow us to comment more fully. We can see that such events could provide a dynamic platform for questions, answers and explanation (by Ofgem and the network companies). However, it is unclear to us how these will be incorporated into final decisions and how the views of parties that are able to participate in these events are balanced against those of other customers and stakeholders who are unable to attend or who believe the plans as submitted represent their views.

We are also mindful of the timescales involved, so this would need to be carefully planned to ensure there can be meaningful discussion and opportunity to present any new supporting evidence and for parties to review and understand it prior to any open hearing taking place.

As Ofgem quite rightly states in the consultation, it is not appropriate to devolve decision-making powers to a third party and therefore all participants in such Open Hearings must be clear that the final decision lies with Ofgem. In weighing the contributions of different stakeholders to the price control process, Ofgem must demand the same evidential standards from all who wish to contribute to the price control process whether they represent customers, companies or third party views. Whilst today's customers can be consulted for their current views, it may be that Ofgem is the best representative of future customers and therefore needs to determine the long-term customer interest, particularly given the degree of change expected in the industry. Ofgem has recognised in its own work that customers' needs are changing and the current supplier hub model may no longer be the most appropriate model. With the introduction of peer-to-peer trading, decarbonisation of heat and transport and the increased use of smart technologies in homes and on the network, we anticipate that tomorrow's customers will interact quite differently with the networks and this needs to be appropriately factored into the process.

Chapter 4 - Responding to how networks are used

We recognise that the RIIO-2 period is likely to see a significant evolution in how energy networks are used in GB. To help us understand what this might mean for our customers, stakeholders and our network itself, we are undertaking a number of pieces of work. These have been both supported and informed by our customer and stakeholder engagement and, whilst some remain work in progress at the current time, we are already increasing our understanding of what might be relevant to developing our business plan for the ED2 period.

By way of an example, our Value of Lost Load (VoLL) project¹² has demonstrated that it is possible to determine a new value of VoLL reflective of customers changing needs; such as the adoption of Electric Vehicles (EVs) or indeed priority service status. The models developed take forward all aspects of DNO investment and help ensure that decisions are tailored to customers' specific needs as opposed to the generic techniques adopted traditionally.

Through the ATLAS Network project¹³, ENWL has developed a long term forecasting model that identifies, 'true demand' on our network by taking account of the connected generation by using profiles of the generation connected to our network and also takes account of other Low Carbon Technologies, like heat pumps and electric vehicles. It uses four scenarios to undertake sensitivity testing around a central outlook.

Our work on the management of uncertainty for our future Options Model demonstrates how customers' interests can be better represented in key infrastructure decisions. By taking the investment profile for an asset based solution, including the impact of losses, and comparing to potential flexibility options, it can consider a range of viable outcomes and models the potential costs (including set up costs) of these different solutions.

Finally, ENWL's work on reactive power forecasting techniques has developed the first robust forecasting tool to allow the impact of Distributed Generation (DG) and storage to be forecast for reactive power flows. As the dominant cost drivers in the connection of the additional DG, this provides a unique understanding of these flows and their potential impact. This tool enables us to identify what the reactive power needs are on the network, by considering the impact at different distribution voltages, and can also be used to identify potential transmission solutions. Whilst we are undertaking the modelling for our own investment requirements, we are also sharing the outputs with the NGSO to assist their work.

This work shows that a number of key challenges can be overcome in time for ED2 allowance setting. Much of this may potentially be available for the T2 setting but, failing that a reopener mechanism may be appropriate to ensure the optimal behaviours are incentivised across the sector.

¹² <https://www.enwl.co.uk/innovation/smaller-projects/network-innovation-allowance-projects/enwl010--value-of-lost-load-to-customers/>

¹³ <https://www.enwl.co.uk/innovation/smaller-projects/network-innovation-allowance-projects/enwl008--architecture-of-tools-for-load-scenarios-atlas/>

Length of price control

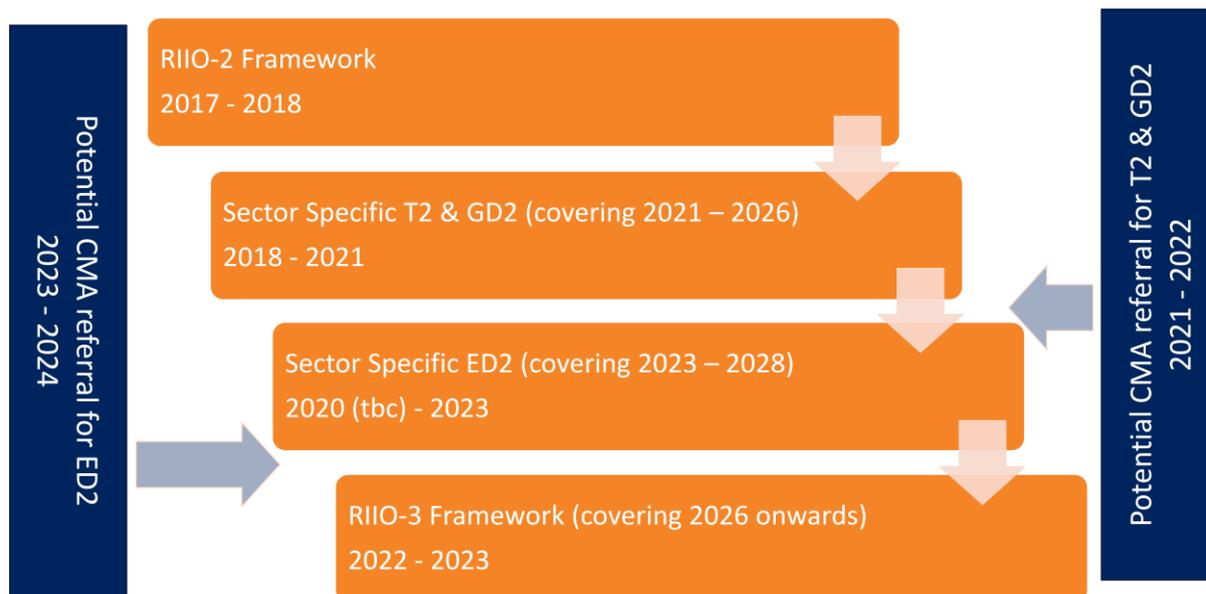
ENWL agrees with the importance of networks looking at the long-term. We are delivering some benefits as a result of having a longer (8 year) price control during RIIO-ED1. Our Appendix 4 provides an example. However, the potential benefits of longer price controls enabling additional change have to balance against the costs that might be incurred as a result of challenges for setting funding over a long time horizon, particularly in a period of change. In particular, there are certain cost categories, such as load-related investment, that are inherently more uncertain than others, especially for a sector going through unprecedented change. Forecasting for these categories across a longer timeframe presents different challenges and risks for network companies, and therefore their customers, than categories like asset replacement expenditure which is becoming more accurately forecastable.

We therefore proposed Ofgem considered a potential for a multi track approach to the time period in our response to the July 2017 Open Letter and are pleased that Ofgem is considering this approach. We note Ofgem is minded to move back to 5 year price controls to manage forecasting risk whilst companies may have the ability to bring forward specific investment cases over a longer time horizon. This still ensures companies can identify changes that would not be viable in 5 years and seek a specific funding package for those over a different timescale which could enable additional customer benefits to be delivered.

ENWL does not support a longer duration price control with enhanced Mid Period Review (MPR) as we think this approach will result in increased regulatory burden for licensees, increased regulatory uncertainty and ultimately result in weaker outcomes for customers. As set out in the ENWL response to the December 2017 consultation on a potential ED1 MPR¹⁴, we support the use of a longer term price control period with a MPR where there is a clearly defined scope for that MPR. However, we have observed in the debate surrounding whether or not a MPR is required for ED1, that even if the scope is sufficiently clear, there can be pressure for other factors, not envisaged at the time of the settlement, to be considered. Ofgem has found itself under pressure to 're-set' the scope in order to be able to be seen to have recognised these factors. We welcome Ofgem's decision to stick with the predefined scope. Any alternative approach would have increased regulatory risk. By considering straying from its clearly specified approach, Ofgem risked increasing regulatory uncertainty with consequential impacts on financeability and potentially also increasing costs to customers. It is important that such potential shocks to regulatory stability are avoided.

ENWL does have some concerns about a shorter, five year duration. To make this workable Ofgem will need to address areas of risk. We believe that the potential for cross-pollination between the overarching Framework for a price control cycle and the Sector Specific work is great. For example, as a DNO, we will be working on the details of our ED2 price control from now (2018) through to its commencement in April 2023 (and potentially beyond if a party refers any element of it to the CMA) as shown in the diagram below. This diagram illustrates the continual price control workload for many stakeholders including DNOs.

¹⁴ <https://www.ofgem.gov.uk/publications-and-updates/consultation-potential-riio-ed1-mid-period-review>



Shortening the cycle to four years or less means that we will have not started the ED2 period before work needs to commence on the RIIO-3 Framework which is not appropriate. As it is, moving back to a five year cycle will mean that Ofgem has no performance data from ED2 before it needs to finalise its thinking on the RIIO-3 Framework.

To manage the risk arising from the shorter review cycle, it is essential that Ofgem put in place all necessary mechanisms for within period determinations (reopeners) and for closing any uncertainty mechanisms out at the end of the price control period (closeout) as a vital part of the price control determination. In fact, this is a good discipline, irrespective of the length of the period adopted. We are now in year four of the ED1 period and do not have any certainty as to how the closeout mechanisms in the ED1 settlement will be assessed. We also note that the gas distribution and transmission sectors are now in year 6 of their controls without having even re-based their RIIO-1 Network Output Measures (NOMs) targets. This uncertainty is detrimental to customers as it hampers network companies' ability to make informed investment decisions and increases the risk associated with the settlement.

Q2. Do you agree with our preferred position to set the price control for a five-year period, but with the flexibility to set some allowances over a longer period, if companies can present a compelling justification, such as on innovation or efficiency grounds?

Yes, as described above, we think there is considerable merit in exploring this option further to have a five year period but with some cost categories set over a longer period.

If this approach is adopted, it is essential that the rules are defined early so companies are able to effectively engage with their customers and stakeholders as to which cost categories for a given region can be deemed to be more appropriate for this treatment. It would not be appropriate for categories like this to be subject to an unwritten mechanism, like the ED1 closeout arrangements, as this will not drive the intended behaviours due to network companies being unable to make informed decisions in their business planning activities.

Whilst the discussion within the consultation document focuses on the timescales for setting allowances, we also consider there may be merit in setting incentives on a longer or rolling period. This could give companies more scope to invest in delivering incentivised improvements for customers that span price control periods and should be further investigated, potentially as Sector Specific work.

It is important to ensure that the approach is transparent, particularly how efficiencies will be reviewed and rewarded, so that it is possible for customers and stakeholders to understand how network companies are truly performing against any such allowances.

It may also be appropriate to identify some cost categories where a five year forecast is too long and too uncertain to be valuable. In determining this fact it is important to recognise that a Business Plan Submission may be made up to two years before a price control period commences making the forecast seven years. The pace of change in the low carbon transition may mean some aspects of load related expenditure cannot be accurately forecast over a seven year period and therefore a different mechanism may be required to deal with this uncertainty.

➤ ***What type of cost categories should be set over a longer period?***

- The types of cost categories may vary between sectors, however we propose that these should meet a number of tests to determine their suitability. These should include:
 - possible for network companies to demonstrate higher levels of forecasting accuracy;
 - a volume driver mechanism is identified;
 - possible to specify clear outputs, with appropriate 'transfer' mechanism to reflect where change does occur;
 - possible to identify suitable cost indexing tools so allowances can be automatically and transparently adjusted for movements in raw material costs;
 - clearly identifiable and separable cost category/ies; and
 - once need has been determined then it is unlikely to need to be revisited.
- A clear distinction should be drawn in automatic adjustments to reflect changes in inputs compared to outperformance being delivered by network companies who are able to use a longer term framework to drive outperformance through the supply chain or developing more innovative approaches to delivering the specified outputs.
- Ofgem and networks should be able to monitor performance in these categories across the period with no major surprises for either party or requirement for resource intensive ex-post assessments.
- Repex in gas distribution is an example of a category that may be suitable for this treatment. The need for the work is debated and agreed once, with the volume and costs only being subject to review at subsequent price controls.
- Licensees should also be able to propose cost categories that can run over a longer period where a longer window is required to provide sufficient certainty to enable companies to invest in new innovative approaches. The rollout of our CLASS technology, for example, is unlikely to have been viable in a shorter price control period as there would not be sufficient payback time for the risk we are bearing. This is illustrated further in our case study provided in Appendix 4. Such examples are likely to need to be considered on a case by case basis in the first instance, although clarity on the approach that Ofgem will take to assess their suitability will assist licensees in making such proposals.

- ***How could we mitigate the potential disruption this might cause to the rest of the framework?***
 - This approach does not necessarily need to be considered disruptive. By establishing a clear framework for the majority of these cost categories, Ofgem could reduce the amount of time it spends scrutinising those areas of activity with high levels of certainty and stable costs to focus on the areas of greater uncertainty.
- ***What additional measures might be required to support longer-term thinking among network companies?***
 - We are not convinced that additional measures are definitely needed. At ENWL, longer-term thinking is embedded within our organisation. The investment profile is regularly assessed over 5, 10, 20 and 30 year windows to ensure that we are focussing on the priorities for our customers today and tomorrow and to ensure that we are able to provide adequate network capacity, without undue risk of stranded assets. We also talk to our customers and stakeholders as part of our ongoing engagement activities on a long-term horizon and regularly consult through our Strategic Development Statement. In developing our innovation priorities, we are looking for the solutions to problems that we may encounter in the long term, recognising that most solutions require time to become business ready and looking for solutions when an issue has become mission critical is unlikely to result in efficient or effective outcomes.
 - If Ofgem feel that more is required in this area, consideration could be given to setting incentives over a longer period; ensuring that cost assessment methods are not primarily backwards-looking/trend-driven; and using an explicit reward for demonstrating longer-term thinking in plans e.g. criteria in IQI (or equivalent) assessment.
- ***Do you instead support the option of retaining eight-year price controls with a more extensive Mid-Period Review (MPR)?***
 - No. We do not support a longer term price control with enhanced Mid Period Review (MPR) as we think this approach will result in increased regulatory burden for licensees, increased regulatory uncertainty and ultimately result in weaker outcomes for customers. As set out in our response to the December 2017 consultation on a potential ED1 MPR, we support Ofgem continuing to apply the regulatory framework as it developed for RIIO-ED1 with the clearly defined MPR scope. However, we have observed in the debate surrounding whether or not a MPR is required for ED1, that even if the scope is sufficiently clear, other factors that were not envisaged at the time of the ED1 settlement to be included in a MPR have been raised. Ofgem has therefore found itself under pressure to 're-set' the scope. This approach is increasing regulatory risk. Even by contemplating straying from its clearly specified approach, Ofgem destabilised regulatory certainty with consequential impacts on financeability and potentially also increasing costs to customers. We anticipate that Ofgem will continue to face pressure over the coming years and therefore do not think it is appropriate that this has the potential to undermine the interests of customers in this way.
- ***What impact might the alternative option of an eight-year price control with a more extensive MPR have on how network companies plan and operate their businesses?***
 - In our opinion, the debate around whether or not MPRs were required for the RIIO-1 reviews has been an unhelpful distraction for all involved. We therefore consider a more extensive MPR, where Ofgem may or may not deviate from its stated scope, has the potential to significantly increase the regulatory risk for network companies and to distract management attention

from delivering for our customers. We do not believe this is in the interests of our customers. A more extensive MPR also represents an asymmetric risk for companies as an open scope might lead to focus on areas where companies are making savings whilst inadequately reviewing performance headwind areas.

Whole system outcomes

We believe that it is essential that whole systems outcomes are, as a minimum, not precluded by regulatory arrangements and, where appropriate, should be strongly incentivised to ensure that all network companies are focussed on delivering the most optimal outcome for all relevant customers. Our response to the joint Ofgem/BEIS Call for Evidence on Smart, Flexible Energy System¹⁵ provides some of our thinking, particularly in relation to the interface between electricity transmission and distribution. Whilst the interaction between gas and electricity is perhaps less imminent, it is equally important that this is considered to ensure no inadvertent barriers as we move forward.

In our experience to date, challenges have arisen where the rules don't expressly make provision for particular circumstances. One example that has been regularly debated is the extent to which the NGSO is or is not able to make payments to other licensees for providing services or different arrangements as an alternative to large capital reinforcements. We believe this is not prohibited by the existing arrangements and should certainly be considered. However, we recognise that other parties look for a more express permission from Ofgem before being willing to enter into such arrangements.

It is also important to consider any potential barriers that exist beyond the price controls themselves. As electricity and gas are covered by different Acts of Parliament, there may be legal limitations on the extent to which parties can interact. This is not an area where we have encountered direct challenges, but suggest it may be an area that should be appropriately examined to ensure this does not cause unintentional barriers.

The RIIO-2 Framework must make provision for such arrangements to ensure that investment is targeted where it can be most effective and to recognise the role licensees are likely to have in providing new and innovative solutions to meet the challenges we face.

The roles of the NGSO and DSOs will be fundamental to ensuring that whole system outcomes are effectively considered and implemented. We firmly believe that DSOs will need to play a much greater role with regard to the allocation of capacity on the distribution system going forward, which differs from the role of the NGSO in the balancing of energy (currently measured in terms of system frequency). It is critical that this distinction is properly understood and that there is clarity on how the NGSO and DSO request and remunerate support and services from each other to ensure that the most optimal solution for customers is utilised. Whilst work on the Open Networks project is still progressing, it is already clear that clarity around this distinction is essential.

¹⁵ <https://www.ofgem.gov.uk/publications-and-updates/smart-flexible-energy-system-call-evidence>

Q3. In what ways can the price control framework be an effective enabler or barrier to the delivery of whole system outcomes?

The price control framework can be an effective enabler where parties are equally incentivised to considered whole system outcomes. Where the arrangements in place can become a barrier is where there is a mis-match in arrangements, timing delays, inconsistencies or lack of clarity regarding roles and responsibilities. The most notable barrier in the RIIO-1 period has been concerns regarding to what extent payments are permissible between licensees. It is therefore essential that obligations and allowances align and Ofgem is alert to the situations that may arise where regulatory clarity can be enhanced to enable all parties involved to deliver the optimal outcome.

The non-alignment of transmission and distribution price controls, discussed further in response to question 4, also has the potential to become a barrier to whole system outcomes. In RIIO-1, the price controls overlapped for 75% of the period. However, the proposed reduction to five year periods means that this will reduce to 60%.

- ***If there are barriers, how do you think these can be removed?***
 - The greatest barrier to date has been in relation to remuneration between parties. This could be addressed by making an express provision within all parties' licences to permit the payment and receipt between parties where a whole system solution has been identified, and appropriate consideration given as to how this should be treated from a totex and reporting perspective.
 - We also consider it essential to formulate a whole system Cost Benefit Analysis (CBA) model – this under pins a whole system approach and we are working with the Future Power System Architecture project (FPSA)¹⁶ to develop such an approach. We believe CBA thinking is core to ensuring optimum value for customers.
- ***What elements of the price control should we prioritise to enable whole system outcomes?***
 - In developing the sector-specific strategy, it is important that Ofgem articulates the whole system outcomes it is looking to achieve as the arrangements can then be tested against these.
 - A firm understanding of a common methodology for relative pricing signals between DSOs and NGSO is a core requirement. It is clear that the emerging flexibility market, including the rapidly expanding storage market, will only function effectively when resource transparency arrangements are in place and supported by realistic relative pricing signals.
 - Ofgem needs to be able to incentivise parties to select solutions that are optimal from a whole system perspective.
 - A mechanism for providing funding needs to be available to the party delivering the whole system solution. As the whole system solutions are likely to be identified during a price control due to emerging needs, an uncertainty mechanism will probably be required that both transmission and distribution parties can access.

¹⁶ <https://www.theiet.org/sectors/energy/resources/fpsa/fpsa-project.cfm>

Q4. Do you agree with our minded-to position to retain the current start dates for the electricity transmission and electricity distribution price controls, and not align them?

As set out in the ENWL response to the July 2017 Open Letter, there is merit in aligning the start dates of the electricity transmission and distribution price controls. However, we also appreciate the challenges faced by Ofgem if these controls are aligned.

In the first instance, we anticipate that the greatest crossover will be between electricity transmission and distribution and therefore it is important the policy and incentive arrangements between these two sectors are aligned to ensure there are no perverse incentives to favour a transmission solution over a distribution solution (or vice versa). The most straightforward way to achieve this is to develop the policy and incentive arrangements for both in parallel, with aligned price control periods. However, this is not the only way to achieve this outcome.

It may be possible, for example, to develop aspects of the policy and incentive arrangements for electricity distribution at the same time as doing the Sector Specific work for transmission (discussed further below in response to Q49) for areas of potential cross-over, although we appreciate there may be some resource challenges in doing this.

Alternatively, a reopener provision or delayed switch on mechanism could be used within the transmission price control arrangements to allow these to be developed in parallel with the electricity distribution Sector Specific work and then come into effect across electricity transmission and distribution in April 2023. An approach like this could ensure that there are no inadvertent consequences from the timing of the two controls. It would also be well timed for a discussion and decisions to be made regarding future role of the NGSO and DSOs, where obligations best sit, and how these should be remunerated, when work from the Energy Networks Association (ENA) Open Networks workstreams and the current Network Innovation Competition (NIC) projects are further progressed and/or concluded.

However Ofgem proceeds, it is essential that the two year headstart for transmission controls does not cause challenges in progressing the optimal solutions in customers' interests that straddle the transmission : distribution boundary.

Q5. In defining the term 'whole system', what should we focus on for the RIIO-2 period, and what other areas should we consider in the longer-term?

In our opinion, the electricity transmission : distribution interface will be the focus for the RIIO-2 period to ensure that solutions developed to address a need on one network do not have an inadvertent or disproportionate impact on the other. A lot of thinking is already going on to understand the potential implications of this through the ENA Open Networks group and a new workstream on regulatory issues will be established shortly that should be able to further inform Ofgem's thinking in this area.

In our response to Q3, we described the work we are doing with the FPSA to develop a whole system CBA. We see this tool as an essential pre-requisite to effective whole system thinking and ensuring optimal solutions are identified and progressed.

Looking to the longer term, trade-offs that occur between all energy vectors will become increasingly important as the UK moves towards meeting its low carbon objectives. The interface with transport, particularly the increased uptake of electric and other low emission vehicles, will become more important. Similarly, changing demands and patterns with

regard to heat will have an impact on the definition of 'whole system' which needs to be considered.

➤ ***Are there any implementation limits to this definition?***

- One potential limit to this definition is in terms of parties that are not licensed energy networks. Whilst Ofgem can put mechanisms in place to support and facilitate 'whole system outcomes' that gas and electricity networks facilitate, it is much more challenging to consider those elements of the sector that Ofgem does not regulate or provide oversight to. We definitely see opportunities and benefits for collaboration beyond the Ofgem licensed energy networks but would be concerned if there were licence obligations on us where the behaviour of third parties, rather than actions within our control, would determine whether or not we were able to meet our obligations.
- Further consideration as to how Independent Distribution Network Operators (IDNOs) participate in whole system solutions is required. It may also be appropriate to consider whether the current approach using a relative price control remains appropriate for IDNOs. As DNOs seek to respond to the arising challenges facing customers and stakeholders, there is a risk that those customers connected to these networks do not see the benefits being made available more widely.
- There is potential for customers to receive significant benefits from network companies being able to invest beyond the meter in energy efficiency and related technologies. We believe this element needs to be included in whole system thinking as without this whole system outcomes related to heat in particular will not be enabled efficiently.

System Operator price controls

Q6. Do you agree with our view that National Grid's electricity SO price control should be separated from its TO price control?

We agree that the NGSO's price control should be separate from the price control of the transmission owner that is also owned by National Grid. This separation will give greater transparency to the outputs and outcomes that the two respective entities are committing to deliver and the costs associated with these. It will also assist industry parties by increasing the transparency regarding the roles and functions that are carried out by the two entities and increase confidence that National Grid is taking appropriate steps to address the concerns raised by parties regarding potential perceived conflicts of interest.

Q7. Do you agree that we should be considering alternative remuneration models for the electricity SO?

We recognise that a model based on return on the value of assets for an asset light entity may not be appropriate but suggest further work is required to identify alternative models that may be appropriate in the GB context.

➤ ***If so, do you have any proposals for the types of models we should be considering?***

- We think the NGSO should be more exposed to incentives, as opposed to simple allowances. Efficiency incentives are in our experience more effective

in driving performance. For example, explicit obligations to work with DSOs on identifying lower cost solutions to network constraints and operating flexible resources for whole system benefits not just NGSO needs, combined with incentives to deliver efficient outcomes would be most effective.

Q8. Should we consider alternative remuneration models for the gas SO?

No answer.

Network utilisation, stranding and investment risk

ENWL agrees with Ofgem that it is essential that sufficient and timely investment is made within the system to ensure that the needs of customers are met, both today and tomorrow. We work hard to ensure that the scenarios that we use to underpin our view of our anticipated investment needs are robust so we do not over-invest and drive unnecessary additional costs to our customers but also so we do not under-invest resulting in a network that is less resilient or unable to accommodate our customers' requirements in a timely manner.

We have a strong track record of delivering the investment needed, when it is needed. Ofgem's assessment of our investment during the DPCR5 closeout process recognised that we had successfully delivered all relevant outputs and that no adjustments were required. However, we appreciate that this will become more challenging as we move through ED1 and into ED2 and beyond. To help inform our thinking, we have undertaken a number of pieces of work to improve our ability to undertake forecasting and scenario work. Further information on this is provided at the start of our comments on chapter 4. A common set of base assumptions across DNOs, agreed with Ofgem, may be beneficial as we develop our Business Plans for ED2.

One element that is worthy of further consideration is whether it remains appropriate for assets to have a 45 year life in RIIO-2. As we move to a less certain future, it may be appropriate for assets to be depreciated over a shorter timeframe to ensure that those customers benefitting from their use pay for these assets¹⁷.

We understand that Ofgem is concerned about the potential for asset stranding. However, it is also essential that licensees have sufficient flexibility to be able to invest ahead of need, where there is a legitimate requirement to do so, whilst also ensuring the best value for customers and greatest level of reliability. In order for licensees to be able to make informed decisions of this nature, it is essential that closeout mechanisms are developed prior to the commencement of price control reviews so that licensees are able to make informed decisions about how to meet the needs of their customers and stakeholders. The risk associated with these mechanisms not being developed can act to curtail licensees from being as proactive as they might otherwise be because they are unable to assess the consequences of a decision that may be subsequently challenged.

¹⁷ The role of asset lives is also discussed further in response to Q42 and how asset lives can be used as a tool to address financeability challenges.

We also see potential for the use of a new capacity incentive mechanism as part of the ED2 arrangements that utilises volume drivers for funding new capacity provision as well as baseline allowances to enable capacity provision.

Q9. What options, within the price control, should be considered further to help protect consumers against having to pay for costly assets that may not be needed in the future due to changing demand or technology, while ensuring companies meet the reasonable demands for network capacity in a changing energy system?

For electricity distribution, we anticipate that there is likely to be a requirement for the development of a capacity incentive/mechanism in the RIIO-2 period.

We also recommend that further work is undertaken to consider the non-network drivers that lead to customers considering the use of private networks. We have been working with customers in Manchester to consider alternative options as we are concerned that customers who can afford such solutions moving away from the public network has the potential to unduly impact on customers less able to pay, which we do not believe is a desirable outcome.

End-use energy efficiency

We firmly believe that there is a role for energy networks to play in promoting end-use energy efficiency and recently submitted a NIC bid setting out how we might begin to test our thinking on this¹⁸. Unlike classes of other sector participants, we do not have the same drivers to promote the use of energy and there may be benefits to networks in terms of avoided or deferred investment from the effective deployment of end-use energy efficiency measures. We set out some of our thinking on the potential role we might have in response to BEIS' Building a market for energy efficiency: call for evidence¹⁹.

Considering the role of end-use energy efficiency is a logical part of whole system thinking. By taking a holistic view of energy demands, we believe there is the potential to release additional capacity, to facilitate the decarbonisation of energy vectors such as heat and transport and to support our customers to minimise their own energy costs. We welcome Ofgem's consideration of this within the consultation document.

Q10. In light of future challenges such as the decarbonisation of heat, what should be the role of network companies, including SOs, in encouraging a reduction in energy use by consumers in order to reduce future investment in energy networks?

As we set out in our Power Saver Plus NIC bid documentation, the current delivery approach in GB is expensive for customers and is failing to help prepare for the low carbon future. We believe that targeted efficiency interventions have the potential to avoid reinforcement and bring significant additional benefits for customers. Energy efficiency delivers benefits across the entire energy supply chain, creates or releases network capacity, reduces costs, reduces CO₂ and improves the economic well being of customers, particularly the fuel poor.

¹⁸ <https://www.ofgem.gov.uk/publications-and-updates/electricity-nic-submission-electricity-north-west-limited-power-saver-plus>

¹⁹ <https://www.gov.uk/government/consultations/building-a-market-for-energy-efficiency-call-for-evidence>

When one examines energy efficiency on a whole system long term NPV basis, it looks attractive as a means of reducing background electricity consumptions and hence releasing capacity for new electrical demands, such as heat and transport. Simple measures such as street lighting technology change can offset a considerable amount of capacity. Work through our original Power Saver Challenge project²⁰ showed that domestic capacity can also be readily released. The primary benefit and also the barrier is the incorporation of the energy savings (both carbon and cash) into the CBA. Whilst this is a benefit to network companies, the current approach required by Ofgem does not include these within CBAs.

- ***What could the potential scale of this impact be?***
 - Our analysis for our NIC bid suggested that this could offer savings across GB of approximately £350m to 2050, depending on the extent of reinforcement avoided, reducing domestic energy consumption by 1,008,828MWh.

²⁰ <https://www.enwl.co.uk/innovation/smaller-projects/other-projects/power-saver-challenge/>

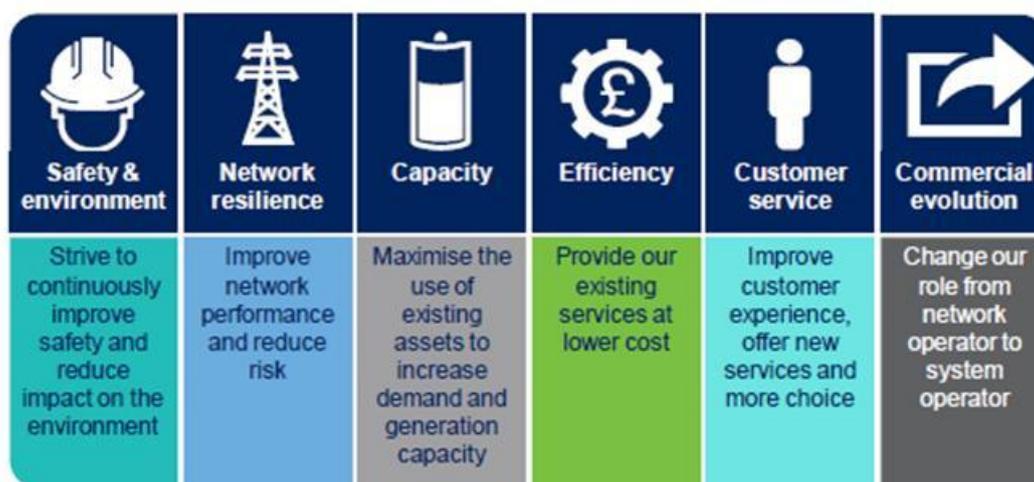
Chapter 5 - Driving innovation and efficiency

Innovation

At Electricity North West, we believe that it is essential that we continue to innovate to respond to the challenges that our customers face today and tomorrow. We have described in response to Chapter 4 how some of our work recently has been to develop tools and models that can better help us understand how our customers might use our network and also the costs that our customers might face in the event something goes wrong with our network. These are examples of how fundamental innovative thinking is to our business.

ENWL recognises that Ofgem intended the innovation funding to be a time-limited stimulus but does not agree that the need for these mechanisms has ended. Network companies can, and potentially will, continue to innovate without mechanisms like the Network Innovation Allowance (NIA) and NIC. However, if companies are required to bear the entirety of the risk, they will adopt an approach driven by a focus on commercial benefit. Particularly given the likely move to 5 year price controls, this would drive towards tactical innovation. Also companies would be less likely to share innovations for the benefits of GB customers as this would result in additional cost and effort alongside loss of potential competitive advantage. The innovation funding and associated Intellectual Property Rights (IPR) treatment currently drives collaboration but that limits commercial advantage.

In the first three years of ED1, we have utilised all of our available funding under the NIA. To ensure we have a balanced portfolio of projects and achieve the best overall outcomes for our customers, we have identified six key innovation themes which relate to the challenges of the low carbon future and to our business plan. These are shown in the diagram below. Each of our projects is designed to support one or more of these themes.



However, we do not limit innovation solely to projects funded under the innovation mechanisms and encourage our colleagues to continually seek more effective and efficient ways of delivering for our customers. One example of how we are driving innovation is our inaugural request to interested parties for Expressions of Interest to provide Flexible Services²¹. This is the first time that we will invite our customers and stakeholders to assist us in responding to specific challenges on our network by using commercial arrangements and we are excited to see what new opportunities this presents.

²¹ <https://www.enwl.co.uk/innovation/our-approach/flexible-services/>

CLASS, our groundbreaking approach to being able to reduce demand at a substation level through voltage control without causing any loss of service to our customers²², is now being bid into the Balancing Services market as a direct competitor to more traditional business models such as diesel engines. This project was developed using funding from the Low Carbon Networks Fund (LCNF) and demonstrates the important role that dedicated innovation funding has played.

We strongly support the delivery of innovation as business as usual but must caution that this does present challenges in an environment where return and incentives are constrained. If Ofgem moves to a lower return / lower risk model, then innovation is likely to suffer. It is important that allowances and incentives for this area. Further, innovation is, by its very nature, uncertain and not every innovative project or idea will succeed. If returns are heavily constrained, there is a strong likelihood that companies will be cautious and only go for the 'safe bets'. This may result in value adding propositions being overlooked as outside companies' risk appetites or result in a slower transition of good ideas to business as usual. Both of these outcomes may result in less efficient outcomes for customers. Any decision regarding the future of innovation funding needs to consider the wider regulatory environment and the potential impact on innovation of the RIIO-2 framework as a whole.

Q11. Do you agree with our proposal to retain dedicated innovation funding, limited to innovation projects which might not otherwise be delivered under the core RIIO-2 framework?

No, we do not agree with this approach as we think it will prove challenging to define and implement and will lower overall innovation benefit to customers. The current innovation funding criteria are robust and have clearly delivered benefits for customers across DNO operations, including during the early phases of smart grid developments, that will be increasingly important. Recent work at Open Networks and other projects shows that the innovation challenge is more, not less, difficult going forward and so proposed constraints on the eligible scope for innovation funding is not appropriate when increased innovation and flexibility is required.

The current proposed RIIO-2 Framework is likely to have a significantly different risk profile from that currently observed which may drive also different behaviours from companies. As stated above, not all innovation will succeed and this changing risk profile may result in different projects being progressed as companies may seek to invest solely in those guaranteed to deliver results (i.e. Ofgem's aim to move to a low risk/low returns regime will impact innovation). Innovation mechanisms within RIIO-2 continue to be required to ensure that companies are able to progress innovation to meet the challenges in RIIO-3 and beyond, especially where solutions may have a long lead time.

We suggest that the detailed approach to how innovation funding mechanisms work is considered as part of the Sector Specific regime development. The mechanisms need to be designed to address the different innovation opportunities in each sector.

Q12. Do you agree with our three broad areas of reform: i) increased alignment of funds to support critical issues associated with the energy transition challenges ii) greater coordination with wider public sector innovation funding and support and iii) increased third party engagement (including potentially exploring direct access to RIIO innovation funding)?

²² <https://www.enwl.co.uk/innovation/class/>

ENWL supports the increased alignment of funds to support critical issues associated with the energy transition challenges and expect that companies would undertake this alignment naturally with the right incentives in place, although suggest that these critical issues may evolve over the RIIO-2 period so it may be preferable for Ofgem to avoid being too prescriptive as to what these critical issues may be.

The governance needs to allow access to the benefits from beyond the meter work and in particular the NIC governance needs to allow whole system benefits including energy savings to be included. The current exclusion is counter to UK government policy and to practice in the EU.

In principle, ENWL supports the greater coordination with wider funding and support for innovation but we do already consider a wide range of funding streams and some of the alternatives being considered by Ofgem are not necessarily appropriate.

ENWL is keen to understand more fully the increased third party engagement area as we are less clear what Ofgem is seeking to address with this. All of our innovation projects are developed with and informed by third party engagement. We believe this results in outcomes that respond to real issues and can be supported by customers and stakeholders. Third parties directly accessing RIIO innovation funding would not necessarily be a more effective model as this is likely to create a disconnect between the needs network companies are experiencing or expecting to experience and a solution that is developed in isolation of this.

Q13. What are the key issues we will need to consider in exploring these options for reform at the sector-specific methodology stage, including:

(i) What the critical issues may be in each sector and how we can mitigate the bias towards certain types of innovation through focusing on these issues?

(ii) How we can better coordinate any dedicated RIIO innovation funding with wider public sector funding and support (including Ofgem initiatives such as the Innovation Link and the Regulatory Sandbox)?

(iii) How we can enable increased third-party engagement and what could be the potential additional benefits and challenges of providing direct access to third parties in light of the future sources of transformative and disruptive innovation?

If a set of critical issues are identified then this needs to be undertaken as part of setting the innovation funding framework for all sectors as the funding regime needs to be compatible across transmission, distribution and gas and electricity, especially given the desire to address critical issues associated with the energy transition. Many of these issues are not Sector Specific and cut across at least two if not more of the sectors. It therefore seems essential to us that Ofgem explores any reform to the innovation funding scope across all of the network types and enables collaboration across energy vectors.

It is important that the arrangements do not prescribe what innovation funding can be spent on as needs to be able to respond to the challenges facing networks. It seems highly likely that the challenges facing the networks will continue to evolve over the ten years until the end of RIIO-ED2 and it is therefore essential that there is sufficient flexibility within the arrangements to accommodate this.

We are also concerned that third parties accessing funds tend to be interested in specific solution types whereas DNOs are interested in the most efficient solution for their customers. This is a very significant factor and a number of other funding solutions are more suited to early stage technology developments. NIA and NIC should in our view retain much of their current focus.

Q14. What form could the innovation funding take.

➤ ***What would be the advantages and disadvantages of various approaches?***

The current split of some innovation funded via allowance and some through a competitive pot seems, in our view, to be a sensible approach. The allowance enables network companies to tackle specific issues to their own network, that may or may not have appropriate wider learning points that can be shared more widely, whilst the competition drives focus and attention to the 'big issues'. We therefore support an evolution of the current arrangements, with changes to the governance that surround the different funding types to reflect the changes in policy as we move towards RIIO-2.

RIIO-1 set innovation allowances for NIA as a percentage of allowed revenue. We have found in practice, as shown by us utilising all the allowances to date, that this does not fully provide for us to take forward all the innovation opportunities we identify. We therefore propose that the available innovation allowances are set proportionately larger as a percentage of allowed revenue for smaller network companies to ensure a greater critical mass of innovation can take place as this will deliver increased benefits to consumers. We also recommend that the governance documents are amended to be clearer regarding the type of innovation that can be funded by NIA versus NIC. In particular, we are not convinced that NIA should be used to fund large scale trials and thereby avoid the NIC process.

Q15. How can we further encourage the transition of innovation to BAU in the RIIO-2 period? How can we develop our approach to the monitoring and reporting of benefits arising from innovation?

Companies will transition innovation into Business As Usual (BAU) when there is a clear business case to do so. In order for companies to prove such a business case, it is essential that closeout and reopener mechanisms are defined at the start of the game so the opportunities presented by innovative solutions can be properly assessed as well as Ofgem ensuring sufficient incentive opportunities exist within the RIIO-2 Framework.

Information sharing between licensees allows for an increased adoption of innovation and widening of benefits delivered, provided that the information shared is sufficient for others to make an informed decision. We expect that innovations that have been successfully demonstrated during RIIO-1 will be utilised as part of BAU within RIIO-2, where there is sufficient information to allow such uptake. This point must be considered carefully in any move to benefits funded innovation development; as this would tend to limit sharing.

The extent to which companies are prepared to innovate also needs to be considered against the overall risk environment. Creating opportunities for those companies that are prepared to take some risk on innovation to retain some of the benefits that arise from successful deployment is likely to make it more attractive than a situation where the

companies are exposed to all of the risk if deployment is unsuccessful and have little or no opportunity for reward if the innovation does succeed.

The Innovation Rollout Mechanism (IRM) was introduced for RIIO-1 to support the transition of innovation to BAU. However, uptake of this has been low to date. Consideration of the challenges facing network companies in utilising this may be beneficial as this is not assessed within the CEPA report on the RIIO-1 Framework²³.

Monitoring and reporting the benefits arising from innovation can be challenging. Replacing a widget with a new version that is cheaper or has an additional functionality is perhaps one extreme that is relatively straightforward to capture. However, it is rare that transitions are that straightforward and the baseline is hard to set. Clear guidance on what constitutes as innovative and how this should be captured would certainly help. The DPCR5 Closeout showed that it is possible and meaningful but it is much harder to capture this retrospectively than on an ongoing basis so establishing arrangements to track and monitor can assist this process for all involved.

Competition

At ENWL, we actively support the role of competition where it can be shown to demonstrate value for customers. During the DPCR5 period, ENWL successfully passed the competition test in seven out of the nine segments for delivering connections to its network, demonstrating to Ofgem's satisfaction that competition is viable in these segments. Throughout ED1, we are committed to continuing to work to provide opportunities for those seeking to connect to our network.

We believe it is important to distinguish between the types of competition that can be used by Ofgem. Much of the framework consultation document discusses competition for a market, particularly who builds/operates network assets. Whilst we are certainly aware of some opportunities that may present in this way, we anticipate that as we move forward into a world that increasingly seeks to use existing assets more effectively to respond to changing customer needs and behaviours then such opportunities may not be as great as in previous price control cycles.

We are anticipating a greater need for network companies to facilitate competition in markets, and most notably in the competition to provide flexibility services to network companies. We have already described at the start of Chapter 5 how we are seeking Expressions of Interest from those who would be willing and able to provide capacity services to us in forthcoming years. We expect such arrangements to become increasingly common in RIIO-2 and see the importance of such arrangements being open, transparent and competitive to allow a wide range of potential market players to participate.

We believe that the evolution and emergence of DSO may fundamentally challenge the concept of a regulated connection entity. With DSOs established, it becomes possible to disaggregate the provision of a Point Of Connection (POC) determination, design for the connection and the pricing and delivery of that design. The POC should almost certainly be a DSO function, whereas the detailed construction design and costing could be a competitive function. We believe this distinction will help drive competition more successfully

²³ CEPA, 'Review of the RIIO Framework and RIIO-1 Performance', March 2018

than historic approaches and as the Independent Connections Provider (ICP) market develops further will enable more effective competition in connections driving down costs.

Finally, in considering the use of competition within the RIIO-2 Framework, Ofgem needs to focus on the behaviours it wishes to drive. Increasing competition between networks is likely to result in a dilution of willingness to cooperate and collaborate, as discussed further in relation to Innovation. We do not believe that this is in customers' interest.

Q16. Do you agree with our proposal to extend the role of competition across the sectors (electricity and gas, transmission and distribution)?

As described above, we support the extension of competition across the sectors where it can be demonstrated to be in customers' interests. It therefore seems appropriate to ensure that where opportunities do present across all of the sectors then these should be explored.

➤ ***What are the trade-offs that will need to be considered in designing the most efficient competitions?***

- In order for competition to be truly considered efficient then the trade off between benefits and costs/risks need to be fully explored. Historically, this has been a relatively simplistic assessment of the costs of running a competition arrangement versus the potential saving to customers. As the networks get increasingly complex, we anticipate that this assessment may also need to become more sophisticated to consider the full range of potential costs and benefits that such competitions may present.

Q17. Do you consider there are any reasons why our new, separable and high value criteria might not be applicable across all four sectors?

In principle, the criteria seem appropriate for all four sectors. However, it should be noted that the investment requirements vary significantly between the sectors and also between licensees within a sector. Electricity transmission does typically require more 'chunky' investment projects that can, relatively simply, be assessed against these criteria and deemed suitable or otherwise. Experience in electricity distribution suggests that there are a lot fewer projects that are likely to meet the criteria and it is therefore essential that appropriate work is undertaken to assess if there is a potential pipeline of suitable projects before committing customers' money to setting up the arrangements for such competitions for delivering distribution solutions.

➤ ***If so, what alternative criteria might be suitable?***

- As described above, we envisage a much greater requirement for competition in the market during the RIIO-2 period so non network build solutions are evaluated as well as traditional approaches. This type of competition is likely to be run by the network companies, looking to source new services to meet the evolving need for flexibility. Network companies are very experienced in running competitive processes as a consequence of procurement law. Whilst competition for services does differ from the provision of goods, we have a good track record of efficient and effective procurement that allows us to keep our costs to customers as low as practicable and we expect to utilise this expertise as we develop these new markets.

Q18. What could the potential models be for early stage competitions (for design or technical solutions)?

At this stage, we expect early stage competition to be something that evolves as network companies increase in their experience and confidence for running and assessing 'need-orientated' competitions. Such competitions would differ from 'solution-orientated' (where the network company has decided on the solution and is merely looking for the cheapest price) by being focussed on the particular need the company is (or expects to be) facing and being open to all viable approaches to resolving this. Such an approach requires a much more complicated assessment of competing bids to ensure that the potential costs and benefits are properly understood and quantified and is therefore likely to be something companies gradually evolve towards, with competitions becoming increasingly sophisticated. It should be noted that it is also potentially a more risky approach for companies and that this needs to be considered when setting the overarching framework to ensure companies are not dissuaded from such approaches because the risk : reward balance is inappropriate.

As DNOs move to a model of facilitating markets to compare costs against potential traditional network solutions, costs will be incurred against new cost categories associated with developing these markets, as well as the ongoing operational costs incurred as a consequence of facilitating such competitions. These cost categories will be in addition to the 'direct costs' of procuring such services.

- ***What are the key challenges in the implementation of such models, and how might we overcome them?***
 - The balance of risk and reward between parties is probably one of the biggest challenges of such models and Ofgem needs to be mindful of this when considering its overarching framework.

Chapter 6 - Simplifying the price controls

We strongly support Ofgem's stated desire to simplify the price controls. However, there are challenges that come with this. Much of the complexity in existing controls has been introduced to manage potential or perceived issues that could arise if simpler mechanisms were in place. Indeed, some of the solutions proposed within the consultation document to other perceived issues may only serve to increase complexity. We therefore suggest that the intended outcome from simplification can also be achieved by increasing transparency so those customers and stakeholders who wish to more actively engage with the process are able to do so.

Our approach to setting outputs

ENWL strongly welcomed the introduction of the use of Outputs as part of the RIIO framework and continue to see significant benefits for our customers and stakeholders in terms of being able to link the money we spend to delivering tangible benefits for them. We therefore welcome Ofgem's stated intention to retain the use of Outputs. The Outputs-led approach serves customers well by focussing on providing the services and outcomes customers value in a cost effective manner and should be extended.

Since 2003, we have actively promoted the use of condition based monitoring and assessment to determine the investment required to maintain our existing asset base. This approach has subsequently evolved and forms the cornerstone of the Common Network Asset Indices Methodology (CNAIM) for electricity distribution that underpins the development of the current thinking on NOMs. It recognises that different interventions result in different outcomes that can be quantified and assessed against customers' preferences. Such approaches are fundamental to shaping the development of output regulation. As set out in our response to the July 2017 Open Letter, ENWL proposes that the current Network Asset Secondary Deliverables be elevated to Primary Output status in ED2.

Outputs vary in their nature and our RIIO-1 business plan commitments are a mix of delivery outcomes (linked to specific investment programmes) and service standards where we define the overall outcome goal, but continually review the most effective and efficient way of achieving those objectives which naturally changes over time.

We believe that more of our investment programme can be linked to delivery outcomes (including the expansion of NOMs), and also that further service standards can be developed to demonstrate the efficient, effective and environmentally responsible stewardship of networks. We have seen the development of some of this thinking in the Ofgem annual reporting process for RIIO-ED1 and are keen to develop future options in this area and share them with stakeholders.

We are also talking to our customers and stakeholders about what they want us to deliver and see it as essential that the Output mechanisms developed for RIIO-2 have sufficient flexibility within them to reflect the differences that may emerge between different regions of GB. We are also considering the differences that may be appropriate within our own region. Whilst recognising the importance of avoiding criticisms of service being 'a postcode lottery', we are mindful that the different sub-regions within our area have different needs and priorities and we are keen to understand and reflect this in the services we offer.

In considering the approach to setting Outputs, it is essential to remember that these cannot be truly separated from the approach to setting allowances. Whilst we were unaffected, the approach adopted during ED1 did mean that allowances were cut for some licensees with no adjustment being made to the associated Output/s (or business plan commitment/s) that the affected licensees were required to deliver. This undermines the central role of Outputs in the RIIO Framework.

It will also be helpful to consider the role and function of business plan commitments in RIIO-2. As customer-facing promises, these are often a mix of measures; some identified under specific RIIO incentive schemes or linked to sub-sets of the RIIO allowances, but many are not. Those that are synonymous with RIIO mechanisms may contain harder targets than those set in the price control. We would be concerned if failure against stretching business plan commitments were to be separately penalised as this would result in companies restricting both the level of their publicly declared ambition and scope of outcomes for customers.

Q19. What views do you have on our proposed approach to specifying outputs and setting incentives?

ENWL supports the continued use of Outputs as a cornerstone of the RIIO Framework and recognises that there is a need to expand on how these are used, both in terms of setting price controls and assessing how companies perform. Establishing a clear linkage between Outputs and allowances where appropriate makes it easier for network companies to assess the business case for using innovative techniques but it is essential that the rules for the assessment of performance are established up front so companies, their customers and Ofgem are able to objectively assess performance on an ongoing basis.

It is helpful to distinguish in terms of Outputs setting a minimum that will be delivered by network companies, with incentives providing the justification for companies to exceed this (or otherwise) based on the preferences of the customers they serve. Clarity in the language used to describe these will assist all parties to understand what is proposed. We can see the following that network companies are required to deliver:

- Delivery outcomes: need is identified, network company has an allowance for £X to deliver a response to that need;
- Standards of Service: standards that network companies seek to deliver to improve their overall performance in some way, that are not subject to a specific incentive and arise as a wider benefit from their activities, such as performance against established guaranteed standards;
- Delivery obligations: services that network companies are obligated under licence to provide and receive an allowance for doing so, such as Black Start and Critical National Infrastructure (CNI) provision; and
- Incentivised activities: outcomes or services where customers have indicated a willingness to pay for an improved or enhanced level of service or where networks are penalised for failing to deliver the expected level of service.

In thinking about these, it is essential that the role of customers and stakeholders in specifying Outputs and Incentives is considered to ensure that network companies are delivering what their customers really want and need as effectively and efficiently as possible. This may result in differences between licensees within the same sector as companies respond to the priorities of their customers and stakeholders.

ENWL expects that the RIIO-2 schedule of Outputs will differ from that used in RIIO-1, although we are still looking at exactly what this might mean for electricity distribution. We expect to develop our thinking with our customers and stakeholders in due course. We therefore believe it is important that the RIIO-2 Framework for Outputs is not overly constrained by what was appropriate for RIIO-1, and also that flexibility is retained to reflect regionally-specific plans.

We are looking into the extent to which we can link more of our activities, in terms of spend, to delivering outcomes for customers. At present, these might be defined in terms of a business commitment, Output or something else but we are keen to understand this interaction. A logical next step would be to understand the driver for these outcomes which in turn should make it possible to assess the impact on our costs and Outputs in the event that one or more of these drivers should change. This would allow a transparent assessment, along the lines suggested by Ofgem. Then if a driver falls away so an Output is no longer required, the associated allowance (minus any efficient spend) can be returned to customers. For this to work, it is essential that the mechanism is set up front and recognises all efficient costs that have been incurred by network companies prior to this change happening and can also increase funding in the circumstances where more Output or outcome was required.

Consideration also needs to be given to the role of Business Plan Commitments under RIIO-2. At present, these are only used in electricity distribution where they provide a beneficial mechanism for ongoing dialogue with customers and stakeholders and lead to a tailoring of our operational delivery to new circumstances and our region specific concerns. If these are to be continued to be used, we suggest that clarity as to the role of these and what customers can expect from their network company would be beneficial. Consideration should also be given to the reporting of these as it is current difficult to compare, even where similar commitments have been made. Increased transparency around these requirements may assist customers and stakeholders to understand relative performance.

- ***When might relative or absolute targets for output delivery incentives be appropriate?***
 - A small number of stakeholders have been relatively vocal in recent years regarding the use of relative targets to reflect performance between licensees. We are unconvinced that this approach is in the best interests of customers. ENWL strongly supports all network companies being challenged to improve the level of service they provide to customers, where it can be demonstrated that the costs of improving service in this way are at or below the level that customers are willing to pay for such improvements. There is also significant benefit in companies collaborating to share learning and best practice to deliver such improvements.
 - However, relative targets between licensees significantly increase the uncertainty associated with such incentives making it much more difficult to develop a business case to justify the necessary investment as one cannot predict the behaviour of others. Consequently, as a result of increased risk through an artificial state of competition being created overall customers may actually see an erosion in value.
 - The use of relative targets to drive improvements based on a licensee's own performance may be more appropriate, encouraging a continual stretch in performance. The approach taken to Worst Served Customers in ED1 illustrates how this may be used.

- ***What impact would automatically resetting targets for output delivery incentives during a price control have? Which outputs might best suit this approach?***
 - The impact that resetting targets during a price control might have largely depends on how the mechanism works. Where there is uncertainty regarding how such amendments might be made, there will be an increase in risk. The extent of that uncertainty and risk is likely to determine the impact of such a recalibration process on the behaviour under an output delivery incentive.
 - Where the mechanism is set beforehand and it is possible to calculate the change to targets, network companies can make informed decisions and respond to this accordingly. There are already examples within electricity distribution where such an approach is used, such as Interruptions Incentive Scheme (IIS).
 - In determining which Outputs might best suit this approach, it is important to consider whether resetting is necessary in a five year price control period and the extent to which customers are prepared to pay for increases in performance.

Our approach to setting cost allowances

The setting of cost allowances is the reverse side of setting Outputs. Different companies take different approaches in developing their business plans and proposing what allowances are required to deliver a set of proposed Outputs and it is important this is borne in mind both in terms of setting the approach and then in assessing companies' proposals.

At ENWL, we set ourselves a challenging business plan for the ED1 period, both in terms of the Outputs we committed to deliver and in our aim to provide leading value for money. This approach led to ENWL being ranked by Ofgem as the most efficient of all of the DNOs, including those fast-tracked, during Ofgem's assessment²⁴.

The IQI matrix did not adequately reward companies for efficient business plans and the application in RIIO-1 was with errors. For RIIO-2, we believe that the distribution of awards, incentives and sharing factor should have been on a greater sliding scale to award efficient business plans.

Q20. What views do you have on our general approach to setting cost allowances?

The approach set out in the Framework Consultation is very high level and discusses little about the actual approach that will be used to set cost allowances, focusing instead on how Ofgem will seek to protect customers from forecasting risk. Further information on how Ofgem intends to use the techniques available to it such as benchmarking, disaggregated models, statistical tests and other methods would be useful to understand the extent to which Ofgem intends this to be a common approach across the sectors or something to be dealt with on a Sector Specific basis.

In particular, it will be helpful to set out the structure and form of the cost assessment approach, e.g. the relative mix of totex and disaggregated methods, and the identification of relevant cost drivers.

²⁴ Ofgem, 'RIIO-ED1 Final determinations - business plan expenditure assessment', November 2014

We expect there to be a number of new types of costs that we will incur during the RIIO-2 period as we transition to being a DSO. We are interested to understand how Ofgem will assess these costs where there is limited historic or comparator information likely to be available.

Q21. What views do you have on our intention to index RPEs?

We recognise the inherent challenges in setting an allowance for costs like RPEs and see potential benefit in the use of indexation for costs of this nature. Identifying and linking to appropriate indices will be critical and we look forward to working with Ofgem further on this.

In considering the treatment of uncertain costs of this nature, consideration should also be given to regional differences and locally specific inflationary effects.

Q22. What impact would resetting cost allowances based on actual cost performance (eg benchmarked to the average, upper quartile or best performer) during a price control have? Which cost categories might best suit this approach?

We are unclear what Ofgem is looking to achieve with this proposal. Resetting cost allowances during a price control period has the potential to increase the overall risk profile and increase regulatory burden, particularly with the proposal for when a return to five year price controls meaning cost allowances will be more frequently reset than under RIIO-1. A proposed approach resetting allowances during the period would result in increased risk and cost volatility which could be detrimental to customers.

Information-revealing devices

Q23. Do you agree with our assessment of IQI?

ENWL does not agree with the assessment of IQI. This section of the consultation document relies heavily on the use of averages but there are some significant differences in the behaviours observed in electricity distribution that mean it is not appropriate to use averages in this way. Paragraph 6.48 of the RIIO-2 consultation states that forecasts submitted in the Business Plans were on average 15% higher than companies intend to spend. We are currently forecasting a 3% difference between our cost allowances, which largely match our Business Plan submission, and our expected spend to the end of ED1. This difference is being driven by efficiency gains and the use of innovation, the benefits of which we are sharing with our customers now, together with the associated improvements in service against targets, and will result in lower costs going forward.

The decision on how to respond to IQI in developing our Business Plan was severely limited by the details of the mechanism being available quite late in the ED1 process. It was not possible for companies to make profit maximising decisions due to lack of clarity of the mechanism. However, we submitted a challenging plan with cost efficiencies and the right Outputs for customers as we believed this to be the best approach for ENWL and our customers. For RIIO-2, the IQI mechanism (or its successor) should not be a commercial game but an incentive for doing the right thing for customers with rewards appropriately aligned.

The IQI mechanism is complicated and variance should be expected between business plans and actual performance as companies move from the challenges of forecasting to delivering for real. Further work is required to explain the concern with the current mechanism and to refine thinking on how this could evolve.

As part of an evolution, we suggest that assessment should be undertaken on a licensee by licensee basis, with consideration given to the extent to which costs inside a group are appropriately and fairly shared across all customers.

ENWL believes that IQI rewards for developing challenging and realistic plans that also demonstrate the characteristics of being stakeholder-led and based on a long-term view should be increased. Stretching plans could be rewarded through recognition in incentive mechanisms, where supported by customers and stakeholders and appropriately calibrated as part of revisions to RoRE.

Q24. Do you agree with our assessment of fast-tracking?

There were a number of unintended consequences from the fast-tracking approach that may not have been in customers' best interests. ENWL does not believe that any benefits to customers from the use of fast-tracking in ED1 were greater than these unintended consequences. There is merit in retaining fast-tracking for distribution but, if fast tracking is retained, changes will need to be made to the approach so that the benefits for being fast tracked are legitimate in the eyes of customers. We agree that fast tracking should not be retained for transmission.

Q25. What are your views on the options we have described?

As a distribution company, we see greatest merit in the use of a single business plan incentive (option 3) for distribution that builds on the IQI approach, whilst maintaining the ability to use proportionate assessment for those licensees who submit ambitious and efficient plans. We need to understand Ofgem's thinking more fully in terms of how a reward might work in the event it was to differ significantly from the approach used by the IQI mechanism.

- ***How might these apply in the different sectors?***
 - We see merit in removing fast-tracking from the transmission sector, given the lack of comparators available. The use of proportionate assessment in distribution for those companies who submit a stretching plan seems appropriate.
- ***Should we retain the IQI, amend it or replace it entirely?***
 - We see merit in retaining the IQI, potentially with amendments, to encourage companies to submit a challenging plan. There would be benefit in increasing the differential between the most and least efficient plans in terms of the sharing factors that are used. We also recommend that early publication of the details of the mechanism and how it will be used are important to enable companies to be able to respond to the incentive when developing their plans.
 - As discussed above, we believe stretching plans could be rewarded through recognition in incentive mechanisms, where supported by customers and stakeholders and appropriately calibrated as part of revisions to RoRE.

Q26. What factors should we take into account when assessing plans for example, under fast-tracking (option 2) or a single business plan incentive (option 3)?

We suggest the following should be taken into account:

- Level of support for the plan from the Customer Engagement Group / User Group;
- Feedback from the RIIO-2 Challenge Group;
- Extent to which companies have previously provided complete and accurate cost information;
- Quality of the plan, i.e. are appropriate proposals included for uncertainty, efficiency of financing proposals, efficient outputs and costs, evidence of longer-term planning, and strong stakeholder engagement;
- Any assessment should be transparent and replicable; and
- Clear criteria for any proportionate assessment.

A simple scorecard, similar to that used in ED1, that sets out how plans have been assessed against the adopted criteria would assist this process.

Criteria	ENWL
Process	Green
Outputs	Green
Efficient expenditure	Yellow
Efficient financing	Green
Uncertainty and risk	Green

Where regional work has been undertaken to consider customers' preferences that has directly influenced the plan then this should also be a criterion. For example, willingness to pay for particular services established at regional level should be factored into the assessment.

Q27. Do you have any views on the factors we should take into account when deciding how to differentiate efficiency incentives for companies if we do not use the IQI?

At this stage, an evolution of IQI seems the most appropriate method for differentiating between companies and recognising those companies who submit an efficient and ambitious plan. However, as discussed above, this could be enhanced by increasing the incentive strength and providing details of the IQI approach to be used at an earlier stage in the price control process.

Q28. Is an explicit upfront financial reward required to incentivise companies to submit high quality business plans, in addition to differential incentive rates or sharing factors?

The use of an upfront financial reward can be beneficial in terms of providing a mechanism to cover the costs incurred by companies putting additional resource into developing an

ambitious and efficient plan. The rules for how this is calculated and assessed should be clear and made available to companies in advance.

Q29. Do you have any views on our proposal to remove fast-tracking for transmission?

We see merit in removing fast-tracking from the transmission sector, given the lack of comparators available.

Q30. Do you have any views on how we propose to incentivise better business plans from transmission companies, including removing the prospect of an upfront financial or procedural reward and placing greater reliance on user and consumer engagement and scrutiny?

We see significant benefit in an increased reliance on user engagement and scrutiny of the transmission companies business plans and believe distribution companies have an important role to play in supporting this process. However, it should be noted that there is a resource implication from such engagement by distribution companies that needs to be appropriately funded to ensure a meaningful dialogue takes place.

Whilst increased reliance on user and consumer engagement could be beneficial, Ofgem continues to have a key role in scrutinising plans to ensuring value for money for customers and stakeholders using its information on historic company performance and other sources of information gained through regulatory activities.

Annual reports/reporting

Increased transparency around the performance of network companies is essential to address some of the concerns that have been levied regarding the legitimacy of network companies' performance and the level of returns associated with the sector. However, in order for transparency to be meaningful, it is important that it is timely and understandable by interested parties.

Establishing the mechanisms to determine end of period performance prior to the commencement of the control period will enable ongoing monitoring of companies actual performance against Outputs, as well as costs, on an annual basis. This will enable Ofgem, customers and stakeholders to be able to objectively assess whether companies are actually delivering outperformance or where they may be falling behind against their outputs.

Q31. How can we best improve the suite of annual reporting requirements to be as efficient and useful as possible?

The annual reporting requirements can be best improved through a streamlining exercise to identify what Ofgem really needs to capture to enable it to effectively perform its functions. A

litmus test that could be applied is to question whether the data is needed to inform a price review (as the most data-hungry exercise that Ofgem undertakes). If not needed for this then arguably this requirement could be dropped from the annual reporting. It is also worth developing the current data sharing discussions between Ofgem and the network companies to investigate ways of moving on from the current plethora of standalone spreadsheet-based returns.

A wide range of additional reporting requirements were introduced in ED1 with limited consideration of their interaction and overlap, and that the publishing of a report was often the default assumption in areas of uncertainty. Consideration of whether these multiple requirements are the most effective way of assessing performance seems appropriate.

In our response to the July 2017 Open Letter, ENWL also suggested Ofgem might wish to consider an annual efficiency performance exercise to assist it in defining the benchmarking methodology for subsequent price controls.

Q32. How can we make the annual reports easier for stakeholders to understand and more meaningful to use?

There can be mixed messages in terms of what stakeholders are looking for in annual reporting and it is important to be clear that different stakeholders will look for different things depending on their activities and interaction with network companies.

Some national stakeholders, for example, may be interested in comparable information to be able to understand how companies within a given sector compare. Regional stakeholders, by contrast, may be less interested in such comparability and more interested in specific details of local schemes and what it means for them. We suggest it is important to be aware of such differing requirements when developing thinking and recognise that there may be legitimate differences in requirements.

We also suggest that some lessons can be learnt from the challenges facing the development of RIIO Accounts where the same phrase has meant different things to different stakeholders. This has resulted in lots of agreement on what is required at a high level but this has not necessarily translated into a common view on the detailed requirements.

Within the reports themselves, consistency in terms of presentation and content would be helpful. We have seen in ED1 that the metrics used for assessment evolve each year as there was no clear blueprint set up front. This has led to a mix of relative and absolute measures, sometimes with limited if any read across to existing regulatory incentives and/or business plan commitments.

Chapter 7 – Fair returns and financeability

Cost of debt

Q33. What are your views on the policy objectives that we have defined with respect to the cost of debt?

ENWL welcomes Ofgem’s comments in paragraph 7.1 of the consultation document that “the price control allows companies to recover the costs of running their networks, including the cost of financing their activities”, and in 7.2 it is stated that “the aim is to ensure that a well-run company can access the financing it needs while ensuring that consumers pay no more than they need to.” These comments are consistent with the findings in the SONI CMA appeal case when, in the context of the discussion on financeability, the CMA ruled that the regulator’s financial framework should reflect SONI’s specific characteristics.

ENWL is in broad agreement with the policy objectives and guiding principles as defined with respect to the cost of debt. However, we do not feel that the RIIO-1 indexation methodology is consistent with these principles.

The proposed debt indexation methodology may, in total, approximate to the average efficient cost of debt across all networks companies. However, it does not allow individual companies to recover the cost of financing their own network, in that it fails to take into account the specific circumstances of the licensee, be they, for example, embedded debt, efficient debt issuance size (i.e. frequency of access to the markets), individual credit ratings or debt issuance costs.

In overall terms, any mechanism that seeks to average debt allowances across the networks necessarily creates windfall gains for some networks, and potential financeability issues for others. Neither of these two outcomes is in the interests of customers. When more holistic measures of performance are presented to customers (not just RORE), it is likely there will be questions asked over the legitimacy of the windfall gains and underperformance across the industry.

Ofgem’s proposed approach seeks to incentivise networks to be efficient. Given the transparency of financial markets, efficiency is assured on all public issuances. Debt costs vary between networks not through efficiency, but through circumstances of debt raising timings, credit ratings, issuance sizes, tenor, refinancing frequency and double handling costs. Therefore, we believe that debt costs should be a passthrough cost, subject to an efficiency review.

It is not in the interests of customers to have networks underfunded as a consequence of accidents of timing, rather than efficiency. If this ultimately results in financeability issues, this will significantly increase equity risk, both specific to the network concerned, but also to all networks, and will be factored into the assessment of equity betas by investors.

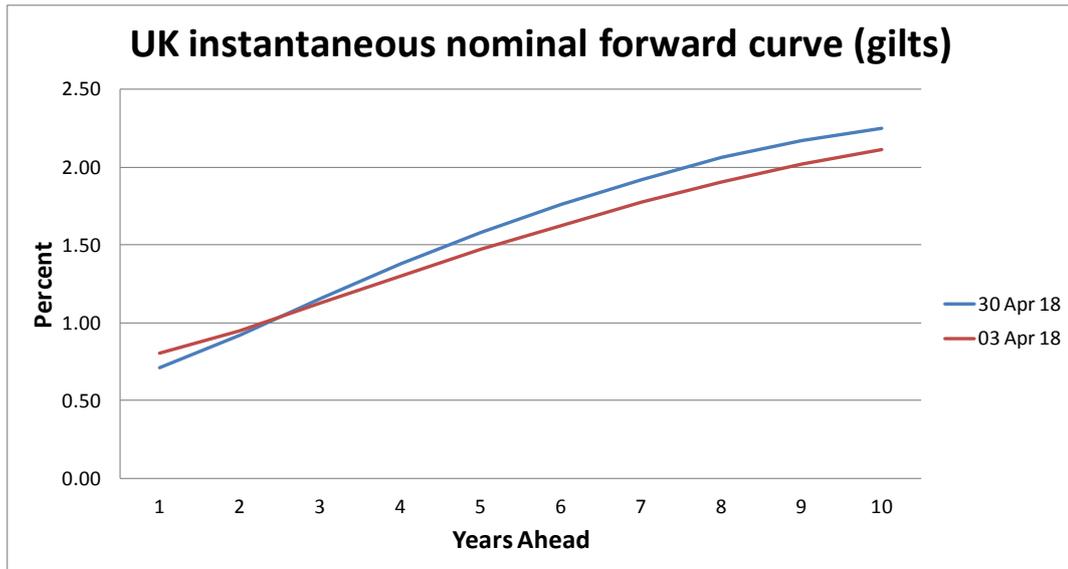
In this context, we have three key issues with the current RIIO-1 indexation methodology that need to be addressed in developing the approach for RIIO-2:

(1) Trailing average mechanism.

- The trailing average mechanism, as currently constituted, does not incorporate the efficient cost of debt raised outside the reference period. ENWL raised £450m in bond finance pre-2005, before the start of the trombone period. It is not unusual for utility sector issuance to have

maturities in excess of 20 years, which help reduce refinancing liquidity risk. Ofgem needs to take into account debt issuance efficiently raised under earlier regulatory regimes, including prior to the iBoXX index period.

- The trailing average mechanism assumes a smooth and frequent profile of debt issuance for both embedded debt and new issuances. It assumes a steady proportion of debt is refinanced, and new debt issued, in efficient market tranches, each year. This is not realistic for many companies, particularly smaller operators.
 - i. The timing of the refinancing of existing debt is governed solely by the existing debt maturity profile. This is reflected in the profile of debt issuance presented by Ofgem in Figure 4 of the consultation document.
 - ii. It is not efficient for smaller operators to raise 1/20th (to match a 20 year trailing average) of their total debt each year as the resulting issuance sizes would not be sufficient to drive full and competitive pricing (i.e. in issuances of c.£250+m), particularly when issue costs are taken into account.
- There is no allowance for the debt carry costs of refinancing ahead of debt maturity (“double-handling”). To support investment grade credit ratings, companies need to refinance in advance of maturities. Flexible facilities, such as overdrafts, are expensive, cannot be relied upon for any substantial period of time, and raise risk in investors’ and rating agencies’ eyes. Any policy that discouraged double-handling would place undue risk on companies and not be in the best interests of consumers.
- It assumes that debt is raised at the average annual pricing level. Debt pricing can fluctuate materially within the year. Again this can create windfall gains or underperformance due to lucky timing rather than good management performance.
- In rising interest rate environments, as indicated by the current market yield curves, increased borrowing to fund investment will be raised at future (higher) market yields whereas the debt allowance will be provided at an average of the previous 20 years (lower) rates. Depending on future interest rate periods, the debt allowance may not catch up with the interest payment costs for up to 20 years. This underfunding represents a disincentive to invest in the network.



Source: Bank of England website – 01 May 2018 using data from Bloomberg Finance L.P., TradeWeb and Bank calculations

- There are unintended consequences of encouraging short term debt raising behaviour, increasing the risk profile from subsequent and more frequent refinancing, that should be avoided.

As a consequence, the trailing average mechanism is a crude and inaccurate estimate for the debt profile of individual operator companies. Therefore, we do not agree with the assertion in paragraph 7.8 that the best approximation for an efficient company's cost of debt is likely to be a trailing average of market rates, particularly if this is a simple, unweighted average (see below) or disregards older efficiently raised debt.

- (2) Reference market indices. A blend of iBoXX A and iBoXX BBB indices are used to estimate reference debt pricing for operator companies.
 - i. There is an implicit assumption that an efficient, notionally geared operator company will have a credit rating between A and BBB. We challenge this assumption. ENWL is an efficient, well performing company with gearing below notional level, but is rated BBB only. In para 7.74 of the consultation document, Ofgem stated that the RIIO2 proposals could lower credit ratings for networks. It is unclear how this has been factored in.
 - ii. There is no allowance given for issuance costs, nor for double handling, included within the index.
 - iii. The pricing of smaller debt issuances is often at a premium to larger, issuances. There is no adjustment for this 'small company premium', despite the requirement for frequent debt issuances implicit in the debt trombone mechanism.

We believe that the simple blended average of the iBoXX A and BBB indices can often understate the actual financing costs, particularly for smaller, standalone operator companies.

- (3) Nominal to real inflation adjustment. The inflation 'wedge' observed on UK 10 year Gilts is used to convert the nominal iBoXX data to a real basis.

Gilt derived inflation rates typically include liquidity premia and can be a misleading estimate for future interest rate expectations. As a result, the calculation of the debt allowance using the gilt spread may not accurately reflect, or compensate for, the inflation expectations over the regulatory period.

We believe the factors noted above demonstrate that the current RIIO-1 indexation methodology is not a *“fair and reasonable estimate of the cost of debt likely to be incurred by a notionally geared, efficient company.”*

Overall, we consider that the methodology is unfairly weighted in favour of the larger operator companies, both because it favours higher investment rated companies and those able to access the market more frequently. It delivers undeserved outperformance to large entities that are able to raise debt tranches on a regular basis. This hidden, unearned outperformance is not visible in the headline RORE figures and risks violating the key tenets of regulation - legitimacy and transparency.

It also benefits those entities that are fortuitous enough to issue debt at favourable times at the expense of those that are not as lucky.

As a result, the current indexation methodology creates windfall gains for the lucky and the large, while leading to underperformance and financeability issues for smaller companies whose debt issuance has, by necessity, to be less frequent.

Financeability should not depend on luck. Neither should Individual operators be penalised as a consequence of their size.

We believe that any cost of debt methodology should be based on the actual financing costs of individual companies, not sector averages. This approach would be consistent with the pension deficit allowance that is based on individual company established pension deficits, rather than on a network average deficit.

Investors have a reasonable expectation to be able to recover efficiently incurred financing costs. If debt allowances remain as at present, then this significantly increases the future refinancing risk of the sector as there is a disconnect between rates on future issuances (based on prevailing market rates at point of time) and debt allowances (based on trailing, historic averages). This risk needs to be factored into equity betas in setting equity allowances.

Q34. Which option might help to ensure that the approach to updating the cost of debt methodology delivers best value to consumers and why?

Option A: Re-calibrate the RIIO-1 indexation policy

For the reasons noted in response to Q33, ENWL does not believe that the RIIO-1 indexation methodology is consistent with the guiding principles.

The policy would need to be overhauled, rather than re-calibrated, in order to provide a fair and reasonable estimate of the cost of debt. We therefore propose that:

- The trailing average mechanism should be amended (as described below) and developed into a system that more accurately matches the existing debt and future issuance profile of individual companies. This should include double-handling costs where appropriate.
- Reference pricing should be based on iBoXX BBB index only where this is consistent with the company concerned. Efficiently incurred issuance costs should be included, while Ofgem should consider if the inclusion of a smaller company premium is appropriate for issuances below a threshold size level.
- Companies should not be punished or rewarded for accidents of timing, either within years or between years. If indexation is going to continue to be used:
 - a. the period of indexation should include periods prior to the iBoXX indices, where actual debt predates these indices, and
 - b. the actual allowance should be weighted according to the value of actual debt issued within a given period, to reduce the impact the timing of debt has on outperformance or underperformance. The proposal to use RAV growth as an approximation for actual debt issuance is unnecessary given the availability of actual data.
 - c. We note the proposal to take into account the ability of companies to issue at lower rates than the benchmark indices. To be consistent, Ofgem should ensure there is appropriate provisions where companies must exceed the index rate for legitimate reasons.

The above measures would increase the complexity of the methodology. However, we believe this would be justified by the improvement in framework legitimacy and the removal of windfall gains observed during RIIO-1.

Regarding the specific items of calibration suggested by Ofgem:

- **The tenor of debt issued by companies compared to the tenor of bonds used to construct the benchmark indices.**

ENWL supports this in principle, but believes that a sector-wide assessment would be too simplistic and create opportunities for windfall gains. It instead needs to be assessed on an individual company basis. The tenor of debt varies as a matter of judgment based upon availability of market appetite at the time coupled with the need to spread liquidity risk by avoiding debt maturity concentrations.

- **The inflation assumption used for calculating the real cost of debt.**

We believe that gilt derived inflation projections are distorted as a result of supply-demand imbalance in the index linked gilt market, resulting in an inflation risk premium being built into the pricing. Given the targeting of the Bank of England for CPI to be long term at a rate of 2%, market inflation forecasts usually reflect this, and vary according to forecasters' assessments of how long it will be before the Bank of England is successful. Therefore long term inflation rates for RPI tend towards the 2% CPI assumption plus the RPI/CPI wedge. Gilt market derived inflation rates tend to reflect this assumption, with actual pricing dependant on the relative demand from pension funds and similar investors for index linked income or hedges compared to government issuances.

Regarding the tenor of the inflation assumption, further consideration is needed to ensure that companies are not unduly rewarded or punished for taking out nominal fixed debt rather than inflation-linked debt. Companies have issued nominal fixed or floating rate debt as index linked debt markets were not historically as well developed. Through the debt allowance mechanism, the assumed market expectation of inflation at the time is not compensated, but rather the actual RPI has been compensated for through the RAV indexation. This has introduced a risk into the networks, as they are effectively paying a fixed (assumed) rate of inflation and receiving a variable rate of inflation. In order to reduce risk, networks have, to varying degrees, swapped their fixed or floating nominal rate debt for a floating rate RPI linked cost. Further consideration should be given by Ofgem as to how efficiently incurred swap costs are built into the debt allowances.

- **Comparing secondary market trades to infer whether the RIIO-1 allowance is upwardly biased.**

ENWL does not support this approach. The inferred cost of debt will change over time due to market conditions. However, the cash cost to companies will not. Companies cannot refinance at times of their choosing and the debt allowance needs to be based on the prevailing rate and circumstances only at the time of issuance, and not with the benefit of hindsight. The secondary market will be influenced by a range of circumstances unconnected with circumstances prevailing at the time of issuance.

- **The transaction costs associated with raising debt.**

Debt allowances should be based upon the actual costs that will be incurred by an efficient company in raising debt, including both transaction costs and double handling, as noted above.

- **The sensitivity of trailing averages to increases in market rates (length of averaging period).**

The use of averages favours those companies that by circumstances of size or luck are able to access finance more frequently and is therefore not appropriate.

- **Company specific factors.**

Company specific factors need to be considered for any mechanism to be considered fair and appropriate. We would include within these factors older debt raised in earlier regulatory periods, debt issuance size, and the timings of actual debt raisings.

Option B: A fixed allowance for existing debt plus indexation for new debt only

We believe that using a fixed allowance for existing debt, coupled with indexation for new debt, strikes a reasonable balance between simplicity, fairness and incentivising companies.

ENWL would be supportive of any option that provides debt allowances based on the specific circumstances of each network company. We do not support any proposal that gave windfall gains to some networks, whilst creating financeability issues for other efficient networks, where such issues arise from circumstances of timing or size. Derivatives used to reduce or manage risk should also be factored in.

Our thoughts on how to best develop and implement this option are:

Embedded debt

We agree that “*consumers should pay no more than an efficient cost of debt*”. Any allowance for embedded debt will need to ensure that companies are not rewarded for inefficient debt.

However, debt raised within debt capital markets is inherently efficient as it is raised through a competitive process. We believe Ofgem can take reassurance from this fact when structuring the methodology.

As highlighted above, the calculation of debt allowance should be based on company specific factors, financing features including debt tenor and not simple sector averages. This will help avoid windfall gains from luck as opposed to good management.

The costs or income from derivatives that are efficiently taken out should also be factored into the methodology. They are used to manage risk (e.g. inflation), address financeability issues and maintain credit rating metrics.

New debt

In relation to indexation for new debt, we reiterate the concerns raised above and in response to Q33. However, providing that the allowance for embedded debt is calibrated accurately, the impact of indexation assumptions on the overall allowance is reduced. We still submit that, given the efficiency and transparency of the financial markets, it is very easy to assess the efficiency of any public debt issuance and to allow a passthrough allowance for new debt as well as embedded debt.

Our comments regarding the deficiencies of all sector indexation, discussed in relation to Option A, need to be read in conjunction with any proposal for indexation of new debt. In particular, given it unlikely that many networks will do issuances in every year, the allowances for individual networks should be based on the periods in which they actually issued debt. In addition, derivatives used to reduce debt need to be factored in.

Option C: Passthrough allowance for debt

Passthrough of debt costs would align the cost of debt allowance with the mechanism for pension deficit repair, providing consistency across the regulatory framework. It would remove the scope for windfall gains in the sector which are indefensible from a customer perspective, and manage financeability concerns arising from debt allowances being lower

than actual costs. It has the advantage of being transparent, simple in concept and legitimate in customers' eyes.

As a consequence of all of the complexities required to ensure individual network finance ability whilst avoiding windfall gains, and the need to factor in derivatives, we would support, Option C, a passthrough allowance with a reasonableness review, as the simplest and fairest outturn for customers and investors alike.

ENWL notes Ofgem's concerns about whether the network companies would have an adequate incentive to be efficient in debt raisings. Given the transparency of the debt markets, we do not see that questions of efficiency occur, other than in respect of very marginal concerns about debt issuance costs and double handling costs, which could be easily managed through an efficiency review as new issues take place.

Consistent with the responses above, ENWL believes that any passthrough mechanism should be based on company specific information and include efficiently incurred derivative instruments.

Cost of equity

Q35. Do you agree with our proposed methodology to estimate the cost of equity?

ENWL believes there are fundamental flaws to the proposed methodology and the indicative range for cost of equity of 3.07% to 5.08% is not appropriate.

In particular, there is an apparent inconsistency in CEPA's estimates for the RIIO-2 cost of equity and cost of debt. It implies that the return required for unleveraged equity is lower than the return accorded to the debt. Given the ranking of debt in insolvency, equity investors should be more highly rewarded. Oxera conclude that this a perverse outcome, therefore suggesting that CEPA's cost of equity estimate for RIIO-2 needs to be revised upwards.²⁵ Also, the proposed sample set and measuring of asset betas presents challenges. It is essential that data sets are large enough to avoid distortions generated by variations in performance in individual networks, but remain relevant and appropriate.

It is important to note that energy networks are a mixture of liquid (i.e. listed) equities and illiquid (i.e. those in private ownership). Ofgem's treatment of the cost of equity needs to recognise that these equities have different characteristics and the ease with which investors can divest their interests.

Oxera recently prepared its own review of the cost of equity for RIIO-2²⁶ and we consider that report to be more balanced, with less weighting placed on anomalous data. We broadly support the 5.51% to 6.34% cost of equity range proposed by Oxera.

In relation to the specific components of Ofgem's proposed methodology:

- **Proposal to continue to use the Capital Asset Pricing Model (CAPM) as the basis for estimating the cost of equity.**

We agree that the CAPM is the most appropriate method to estimate the cost of equity under the regulatory framework. It is well understood and established within UK regulation. It is also a widely-used model within the investor community, helping benchmarking and aiding decision making.

However, care is needed to ensure that the model inputs are sensible and appropriate, and that any derived cost of equity is sense-checked against other measures to ensure that the results are meaningful.

- **CAPM computes the cost of equity as the weighted average of a risk-free rate and the expected return on the stock market as a whole. The less risky it is for investors to own the shares in a network company relative to investing in the stock market as a whole, the greater the weight placed on the risk-free rate and the lower the weight placed on the expected market return. The weighting factor is called equity beta. It measures the relative riskiness of a network company from an investor's point of view.**

Equity beta measures the co-variance of a company's return to the wider market. It measures the relative level of systematic risk in the company, such as the potential impact of a recession on its returns. It does not capture company or Sector Specific

²⁵ Oxera, 'Review of Ofgem's initial cost of equity proposals for RIIO-2', 1st May 2018

²⁶ Oxera, 'The Cost of Equity for RIIO-2, A review of the evidence, prepared for the ENA', 28th February 2018

risks, such as the threat of nationalisation to UK networks, a faster take-up of EVs, or the impact of regulatory change on equity returns.

The CAPM proposes that investors are rewarded for systematic risk only, as residual risks can be diversified away in a portfolio. However, it may not be realistic to assume that infrastructure investors, including pension funds, can efficiently and effectively diversify away these risks, particularly nationalisation and regulatory uncertainty risks.

Ofgem should be cognisant of the limitations of CAPM theory and its application when determining inputs and sense-checking its results.

- **Proposal to estimate the Risk Free Rate (RFR) by using the current yields on long-dated index-linked government debt. Rather than predicting how such yields might change over the course of the price control (or building in a premium for potential forecast error by “aiming up”), Ofgem propose to consider indexing the calculation.**

CAPM is based upon the RFR, being the nominal return expected by investors lending on a risk free basis. Historically, it has been common practice to estimate the RFR using yields on long-dated index-linked government debt. The expectation of future inflation has then been deducted to arrive at a real risk-free rate. However, we believe that current market conditions are sufficiently distorted to require an adjustment to gilt-yields when estimating RFR.

ENWL does not believe a negative long-term real RFR is logical. It is actually counter to the required returns of pension funds, which are at levels above RPI. These pension funds, the long term providers of patient capital, are our investors. Any decisions based on counter-intuitive assumptions should be approached with great care.

Factors for consideration:

- i. The supply-demand balance for long-dated index-linked government debt is currently unequal. Demand far outstrips supply, increasing prices and suppressing yields. Pension funds and life companies have acute demand for index-linked income and, most importantly, for the inherent liquidity risk protection that is actively encouraged by the Government and Pension regulator.

As included in our response to Q33, this has implications for the use of gilt spreads when estimating market expectations of inflation.

- ii. A negative real RFR is both unsustainable and counterintuitive to the investment strategy of pension funds, which are looking to invest to receive RPI+ returns. It would imply that such funds are investing to lose money, long-term, on a real basis. This is illogical and cannot persist. Ofgem should be mindful that the cost of equity determination needs to be logically defensible to the life and pension funds that are the investors into UK infrastructure.

- iii. Shorter term factors, occasioned by Quantitative Easing and potentially near-term monetary tightening, create additional yield volatility and distortions, further undermining the reliability of the data sets.
- iv. In February 2018, the Bank of England signalled that interest rates could now rise faster than previously expected. The normalisation of interest rates to longer-term levels will likely increase index-linked gilt yields above 0.0%.

Given the issues noted above, ENWL does not believe that long dated index linked gilts can be used unadjusted when setting RFR. In addition, any indexation mechanism would need to ensure that there is minimal lag between observing data and setting allowances. These factors would create challenges for any indexation methodology.

The start of RIIO-2 is three years away for transmission and gas distribution and five years away for electricity distribution. Market data needs to be carefully monitored to ensure that the final estimate of the cost of equity is appropriate for RIIO-2 market conditions and developments.

- **Proposal to estimate the expected market return by considering the historical long-run average of market returns as the best objective estimate of investors' expectations of the future. However, Ofgem propose to take full account of the findings of the Competition Commission in Northern Ireland Electricity (2014) as well as the forward-looking approaches indicated recently by regulators such as Ofwat and CAA, all of which suggest that 6.5% is probably at the top end of reasonable estimates of the expected market return.**

It is observed frequently that when economic uncertainty escalates, there is an increased demand for low risk assets, including government gilts. This suppresses the yield on low risk assets and increases the return required by investors to hold more risky assets. This gives rise to the notion of a stable long-run Total Market Return (TMR) with an inverse relationship between the RFR and the Equity Risk Premium (ERP)²⁷.

We believe that the weight of evidence supports the stability of the TMR over the long term, implying an offsetting relationship between the two components. We support this view. As such, we do not believe that the ERP should be considered in isolation from the RFR.

Additionally, we believe there is only limited evidence that the TMR has reduced in the last 5-10 years as a result of actions taken to mitigate the effects of the economic downturn.

We agree that the expected market return should be estimated by looking at historical long-run market averages. There should be no disconnect between the period over which the TMR is assessed and the long-term horizon of 'patient' equity investment that is desirable to both regulators and customers. A shift towards more contemporary evidence would risk this disconnect and will also contribute to inter-generational issues relating to customer bills.

²⁷ Oxera, 'The Cost of Equity for RIIO-2, A review of the evidence, prepared for the ENA', 28th February 2018, Section 2.3.

- **Proposal to estimate forward-looking betas by looking at historical correlations between the share prices of regulated utilities and a stock market index such as the FTSE All Shares Index. Ofgem propose to inform its estimate of beta by making use of sophisticated econometric techniques such as those referenced in the UKRN report to filter out noise from the underlying datasets. We also propose to investigate the appropriate measures of gearing in translating between raw equity betas and notional (asset or equity) betas for the network companies.**

We have the following specific concerns regarding equity beta estimation:

- Listed comparator companies. There are only a small number of listed UK regulated entities. These companies often contain non-regulated operations that influence share performance, impacting derived beta. Small sample sizes are likely to result in high degree of sampling error, while extending the sample size (e.g. to overseas companies) can significantly weaken the appropriateness of its application.
- Use of cross sector comparators. Electricity distribution carries a different, higher risk profile than that of water supply and wastewater management due to the high degree of technological change facing the energy networks sector. Furthermore, the measured asset beta for National Grid, an energy utility, tends to be higher than the asset beta of the two pure-play water comparators (United Utilities and Severn Trent).
- Data selection. There are a number of options available when calculating beta. Reference index (FTSE 100, FTSE All Share), period (daily, weekly, monthly), timeframe (years) and start/end dates. The calculation of beta can vary markedly between selections and is often volatile over time.
- Backward looking. Any timeframe used to calculate beta will likely incorporate factors and periods of return relating to previous regulatory regimes. For example, for RIIO-1, Ofgem successfully encouraged networks to outperform via well-structured incentive schemes that benefitted customers and investors alike, supporting equity returns. The outlook for RIIO-2 is significantly more negative for equity investors, with increased uncertainty and substantial risk of low/nil returns. Older market data for beta is just not appropriate when assessing RIIO-2 systematic risk and equity returns required.
- Gearing and asset betas. Comparator equity betas should be de-gearred appropriately to derive asset betas, before re-gearing at notional gearing level.

The points above demonstrate the challenges faced when estimating equity betas. However, these issues can be minimised through an unbiased and consistent approach. Betas should be calculated using a transparent methodology, which can be verified externally using market data. There should be no opportunity to cherry-pick data. Timeframes should be sufficiently long to minimise error and volatility, but with consideration of how past market data and performance may not be indicative of equity risk and returns under RIIO-2. Data sets need to be large enough to avoid distortions generated by variations in performance in individual networks, but remain relevant and appropriate.

- **Proposal to sense-check the results of the CAPM calculation against evidence from market-to-asset ratios (MAR) and returns bid by investors in competitions run by Ofgem regulated assets, such as the Offshore Transmission Operator (OFTO) regime.**

We support Ofgem's proposal for the results of CAPM to be sense-checked. However we advise caution in drawing conclusions from MARs premiums, as these will be specific to individual investors, companies and to circumstances at the time of transactions, including regulatory outlook.

An investor may be willing to pay a premium to RAV on transaction for many reasons, such as debt allowance outperformance not reflected in Ofgem's RoRE figures, incentive revenue opportunities, potential synergies and planned efficiency opportunities. Before applying the resultant RAV premium across the sector, these transaction specific factors need to be reliably assessed. This is likely to be a very subjective exercise given the limited availability of public information on these transactions.

Similarly, neither the OFTO regime nor the proposed Competition Proxy model being considered for Hinkley Seabank are directly comparable to the RIIO framework. The risks and objectives between these three approaches vary significantly. Such differences must be appropriately factored in to any 'read across' between these frameworks and the relevant costs of equity.

Simplistic comparisons, made without careful adjustments, would undermine legitimacy in the sector.

Ofgem should remain mindful that confidence in the UK regulatory market is underpinned by a consistent and predictable approach in key areas. Equity returns need to be sufficient to attract the long-term patient capital that is desirable to both customers and the regulator.

- **Proposal to distinguish the regulatory allowed return from the regulatory expected return. The UKRN report highlights that Ofgem's expectation of returns can be different from its (ex ante) baseline allowed return as far as it expect companies, individually or collectively, to benefit from other financial incentives (positive or negative). This could include reasonable expectations of outperformance across all the areas of the price control including our incentive mechanisms, the cost of debt, and tax.**

We agree that Ofgem should distinguish between the regulatory allowed return and the expected return.

Any evaluation and presentation of company performance (including RoRE) should reflect actual data, not notional. This should include all areas of the price control that may impact results, including under/over performance on cost of debt, tax and incentive mechanisms.

- **Proposal that CAPM should not be used to estimate the cost of debt. Ofgem believe that the cost of debt is an observable quantity and using one of the methods in the preceding section would be less prone to estimation error. A CAPM-based calculation of the cost of debt can however be an interesting reference point against which to sense check the results of indexation over time.**

We agree that CAPM should not be used to estimate the cost of debt. A CAPM-based calculation of the cost of debt could be useful in sense-checking the CAPM based cost of equity.

Q36. Do you agree it would be desirable to index the cost of equity?

➤ **Do you have views on our proposal for indexation?**

ENWL does not agree that it would be desirable to index the cost of equity for the following reasons:

- Cost of equity indexation is very difficult in practice for the following reasons:
 - The cost of equity is not directly observable.
 - The design of such a mechanism will be highly subjective. The choice of model, inputs and methodology could result in very different outcomes.
- We believe that the long run TMR is stable and therefore there is minimal need to reset rates annually. Any indexation of RFR would be broadly compensated by movements in ERP.
- If the regulatory period reduces to 5 years, then risk of deviations of cost of equity component parameters from initial estimation are diminished further, rendering indexation largely unnecessary. Reassessing the cost of equity each period, based on an assumption of broadly stable TMR would be sufficient.

Further detail is needed on the proposed option mechanisms before concluding but, based on the information available, see merit option 3 in section 7.62 'Index risk-free rate and TMR'.

We concur with Oxera's conclusion that a move to cost of equity indexation would represent a considerable change in methodology. It would need to be appropriately signalled and introduced with appropriate transitional arrangements such that it did not undermine investor confidence.²⁹

Financeability

The section on Financeability focuses predominantly on policy options that could be implemented in the event that there are concerns that a company either ceases to be or has the potential to cease to financeable during the price control period. It highlights some measures that Ofgem may consider when determining whether or not a company is financeable. However, we believe that this section lacks detail on how Ofgem will fulfil its statutory duty to "secure that licence holders are able to finance the activities". We believe

²⁹ Oxera, 'The Cost of Equity for RIIO-2, A review of the evidence, prepared for the ENA', 28th February 2018

that it this is a critical element of the RIIO Framework that would benefit from increased clarity.

Whilst there is a role for the use of notional licensees within the setting of finance policy, we believe that Ofgem's financeability assessment needs to be undertaken on a company specific basis in order to demonstrate that the duty under the Act has been fulfilled.

Q37. Do you consider there is merit in removing the indexation of the RAV and adopting a nominal return model in RIIO-2?

➤ **What would be the benefits and drawbacks?**

In order for companies to deliver efficient services that customers expect, it is essential that the RIIO-2 framework remains viable and allows individual companies to maintain an investment grade credit rating and thereby raise capital efficiently to deliver network investment. It is not in customers' interests to fund an industry based on average companies, if some companies are then overfunded and make windfall gains while others suffer financeability issues.

We agree with Ofgem's assertion in section 7.74 of the consultation document that a lower allowed return is likely to make it more challenging to meet the standard financeability credit rating metrics. This would have an overall negative impact on customers.

We do not believe there is merit in removing the indexation of the RAV and adopting a nominal return model in RIIO-2 for the following reasons:

- Financeability should be based on consistent and transparent principles that are applied on a sustainable basis. Adopting a nominal return methodology just to solve financeability issues arising from RIIO-2 will be difficult to defend to long-term infrastructure investors.
- It will create inter-generational inequity. Customer bills would rise in the short-term, while future customers would see a fall in prices. Ofgem will need to justify this dynamic to customers and other stakeholders.
- Credit agencies are likely to discount any NPV neutral interventions, such as the switch to nominal return. Moody's state that "*intergenerational movements of cash flow do not fundamentally alter a company's credit quality*"³⁰. As such, it will not offset the negative effect associated with the remainder of a potential RIIO-2 determination.

Fundamentally, we believe that the RIIO-2 package has to be financeable without the need to apply temporary inter-generational 'patches'. Adequate remuneration is needed over the long-term to ensure there is an adequate flow of patient capital into the industry, supporting the future large scale investment required over forthcoming price controls.

Alternative tools are available to Ofgem that could have similar benefits to nominal financeability, but without the structural basis shift. A reduction to the capitalisation rate and an extension of asset lives could be used.

³⁰ Moody's Investor Service: 2018 outlook changes to negative as tough price review outweighs current performance (2018).

Further engagement is necessary with rating agencies and regulated companies to understand the financeability issues that will result from the RIIO-2 proposals (including the impact of proposed failsafe mechanisms) and explore what appropriate options are available to remedy the issue. An absence of a suitable solution will ultimately push company borrowing costs up in the future which will inevitably lead to higher customer bills.

Q38. Should the onus for ensuring financeability lie with the network operating companies in whole, or in part?

Ofgem has a duty to ensure that a company can finance its activities and imposes licence obligations on network companies to demonstrate how they can maintain investment grade in order to protect customers' interests.

It is important to investor confidence in the sector, and therefore important to customers to continue to maintain access to patient capital at legitimate rates, that Ofgem has a duty to ensure financeability of the network companies. A failure of any network company would lower confidence, and increase investor required rates of return, across the whole UK regulated sector.

As such, Ofgem needs to ensure that under the RIIO-2 Framework a notionally geared company is able to maintain investment grade credit ratings and can therefore access the debt markets frequently and efficiently. This is in the best interests of customers.

Investment grade credit ratings are important for both ensuring debt finance is available to companies and in providing lower debt costs.

Debt finance is a critical source of funding; facilitating network investment and helping to keep customers bills low. Investment grade rating ensures that there is investor appetite even during periods of market stress. Poor credit ratings result in higher debt costs and higher customer bills.

One method that companies adopt to maintain their financeability and credit rating metrics is the use of derivatives. It is critical that companies are recompensed fully through the cost of debt allowance for these derivatives.

Network companies retain the option to structure companies above/below notional level to assist in maintaining financeability. However, to protect customers' interests, licence conditions require network companies to maintain an investment grade rating which does restrict company flexibility.

When considering network companies' financeability, Ofgem should focus its attention on the regulated entity. Regulating beyond the ringfence has the potential to introduce reciprocal risks to customers which is not appropriate.

Individual network companies supply regional areas. It is important that investment funding continues to be available to support the economic growth of the area that a network serves. Ofgem should therefore continue to ensure the financeability of the network companies as a matter of public importance.

If network companies are already geared close to the notional level of gearing, equity injections to reduce gearing levels may not be an appropriate lever.

It is therefore essential that the Framework makes appropriate provision to ensure individual network companies remain financeable.

Q39. Do you consider the introduction of a revenue floor, to protect the ability of companies to service debt, to have merit?

If structured correctly a revenue floor could protect the ability of companies to source and service debt. This could add assurance to the debt investor community against short term fluctuations in cash flows. However, it would not be a substitute for proper funding of network costs in the long term.

A revenue floor could help support credit ratings, although further consultation with agencies with detailed proposals would be required to confirm what this effect could be. Lower credit ratings would reduce debt issuance costs and can lead to lower customer bills over time.

Any revenue floor should also include an equity component as periods of nil returns and dividends for investors do not correlate with the 'low risk' investment case that is being assumed by the regulator in its RIIO-2 cost of equity determination.

The revenue floor assumes that customers would fund the floor in a downside situation and recover this additional revenue once the company's trading position improves. Companies may employ derivatives within their debt structure to the same effect, maintaining financeability and the serviceability of debt by moving cash flows through different time periods. The benefits that derivative structures can deliver should not be ignored by Ofgem when setting the RIIO-2 cost of debt methodology.

Corporation tax

Q40. Do you agree that Ofgem should review the causes of any variances between tax allowances and taxes actually paid to HMRC (including the treatment of group tax relief)?

- ***Which of the options described in this consultation may be worth investigating further to address any material variances?***

ENWL considers it important that variances between tax allowances and taxes paid are understood by Ofgem and other stakeholders.

We are willing to assist Ofgem to understand the differences between tax payments, regulatory accounts, RIIO accounts and HMRC tax returns to aid this understanding. Ofgem already have the power to request this information.

There is an immense level of complexity associated with the UK corporate tax system. Reconciliations to tax allowances will be arduous and will require in depth, historic knowledge of corporate history and tax legislation to understand fully. HMRC rulings and decisions can take many years to conclude and are likely to span regulatory periods. Any decision regarding the RIIO-2 tax allowance needs to be balanced against the demands likely to be placed on Ofgem, companies and other stakeholders.

We do not agree with Ofgem's comment that allowances might be broadly equal to HMRC payments over relatively short time horizons and, by implication, not take into account payments made to other companies in the UK tax group to offset losses elsewhere.

- Firstly, many operators are members of UK tax groups and HMRC payments are typically made on a group basis. The net HMRC payment is an aggregate of the tax payable by all member companies and may be significantly different to the tax payable by the regulated entity. This is due to a huge range of items including group tax relief.

Factors outside of the ring-fenced group are not taken into account when assessing any other allowances and to take them into account for tax allowances would set a difficult precedent.

- Secondly, variances between allowances and HMRC payments are often driven by longer-term timing differences. For example, fair value movements on financial instruments may not unwind until maturity, which could be in excess of twenty years. Capital allowance timing differences may only reverse at end of depreciable lives. Such items can have a material impact over a five year period.
- Thirdly, tax payments in a year are best seen only as payments on account. The settlement for a given tax period can take years and items can remain under dispute by either parties for a very long time. Adjustments to tax charges could therefore be affecting closed regulatory period for many years, and the closing of a regulatory period could be delayed as a consequence.
- Finally, the tax charge in a regulated entity will include the taxable income/loss associated with activities outside of the scope of the price control, or outside of the scope of the allowance regime, such as tax payable in respect of mark to market movements on certain debt and derivative positions. The adjustment regime to factor these variables in, given the added time dimension, would be an immense burden.

Stability in group corporate tax structures is fundamental to the investment case for long-term investors, and are a fundamental tenet of the UK tax system. Any changes to the regulatory framework to exclude tax payments from/to other group companies, will have a significant and lasting impact for potential investors into UK infrastructure.

Other finance issues

Q41. Do you agree that we should move away from RPI for RIIO-2 (including for the indexation of the RAV if retained as a feature)?

- *If yes, which of the two potential indices – CPI or CPIH – might be most suitable?*
- *Is a phased transition between RPI and the chosen successor index necessary or desirable?*

Although the technical deficiencies within the construction of the RPI are noted, we do not yet believe that the overall benefits to customers from moving the RIIO framework to a CPI or CPIH based index have been demonstrated.

In 2016, Ofgem stated that “we do not expect to consult on our thinking on any changes in indexation for RIIO until the future role in the economy of an alternative measure of consumer inflation, which may be CPIH, becomes clear”³¹. We do not believe that this clarity is present and note below a number of specific challenges with the proposed move to a CPI or CPIH based index.

The potential change away from RPI has significant disadvantages:

- As previously noted by Ofgem, an established and liquid market in CPI or CPIH index-linked debt is necessary for operators to issue debt efficiently. We do not believe that these markets are sufficiently mature and note CEPA’s observation that the UK Government Debt Management Office has not issued CPI or CPIH linked products due to lack of demand³². Without market derived CPI or CPIH real rates, any construction from the existing RPI rates would be dependent upon a wholly subjective, and likely changeable, estimate of the RPI less CPI/CPIH “wedge”.
- The move to a CPI or CPIH based framework would lead to an increase in customer bills under RIIO-2 and would need to be justified to customers and other stakeholders.
- The debt structures of infrastructure companies typically include a high proportion of RPI linked liabilities and derivatives, issued to hedge against RPI-based allowances. The potential loss of hedging benefits for companies and the resulting accounting complexities needs to be thoroughly examined in advance of any decision. While there is reasonable correlation of RPI to CPI or CPIH over the long-term, it is far from perfect and there can be extended periods when correlation is poor.
- Investors in UK infrastructure are predominately life insurers and pension schemes who require RPI linked income to hedge RPI inflation risks. CPI or CPIH linked debt is less desirable to these investors and may result in inefficient debt financing for regulated companies, ultimately increasing customer bills.

As a consequence, our preference is to retain use of the RPI (and RPEs) to compensate for inflationary effects faced by the network companies and continue to set WACC and RAV indexation linked to RPI.

If any change to CPI or CPIH is implemented, Ofgem would need to ensure that the move is NPV neutral, including real CPI or CPIH based cost of capital. The inflation mechanism should not be used to manipulate return levels in the sector.

Should any change be proposed, we believe that a phased transition would be helpful and important to both regulated companies and their investors. Due consideration should be given to existing investors who made their decision to invest in UK infrastructure based upon the RPI linking of returns, needed to match their own RPI linked pension liabilities.

CPI and CPIH show similar levels of correlation to RPI. The choice between CPI and CPIH should include assessment of the relative levels of supply and demand for CPI/CPIH linked debt in the capital markets. This will help to ensure future financing is as efficient as possible.

³¹ https://www.ofgem.gov.uk/system/files/docs/2016/03/decision_letter_ofgem_indexation_310316_final.pdf

³² CEPA, ‘Review of Cost of Capital ranges for Ofgem’s RIIO-2 for onshore networks’, February 2018, p81.

Q42. In the light of our proposal not to amend, at a price control framework level, our policies for depreciation and asset lives set in RIIO-1 do you have any views or suggestions that you wish to put forward?

Network companies need to remain financeable. Depreciation and asset lives are levers that can impact key ratios, including Funds from Operations (FFO) to net debt.

To the extent that other changes to the framework for RIIO-2 threaten the financeability of network companies, changes to asset lives and depreciation should be considered.

Q43. We propose to review the fast/slow money split at the business plan submission stage, do you have views that you wish to put forward at this stage?

Network companies need to remain financeable and the split of fast/slow money has a direct and material impact on both debt serviceability and key ratios, including FFO to net debt and interest cost.

The capitalisation rate for RIIO-2 should be set at a level that ensures the financeability of companies.

Q44. Do you think existing mechanisms for providing allowed revenue to compensate for the raising of notional equity are appropriate in principle and in practice?

We do not believe that the existing mechanisms compensate adequately for the raising of notional equity.

We believe further compensation would be needed in the event that companies would need to raise equity as a consequence of the transition to RIIO-2.

Without adequate compensation, any change in the notional gearing level will have a significant impact on company valuations, potentially impacting the investor appetite of pension fund investors.

Ensuring fair returns

Q45. What are your views on each of the options to ensure fair returns we have described in this consultation?

The options presented within this section of the consultation document are very high level and it is therefore challenging to appropriately assess these. ENWL has therefore, in conjunction with other member companies, asked the ENA to commission a piece of work to consider the proposed options. The outcome of this work is being finalised, prior to being submitted by the ENA in due course.

We appreciate the challenges facing Ofgem in light of calls from certain stakeholders with regard to returns in the sector. However, we are unconvinced that a 'fair returns mechanism' is necessarily needed to address these.

The perceived higher returns have arguably arisen from how RIIO was calibrated and implemented, rather than from the structure of the regime itself. For example, hindsight now suggests that some investments by companies that were in baseline allowances were actually uncertain and should have been incorporated in an uncertainty mechanism with clear parameters as to what would happen to the allowance in the event that the associated output/s ceased to be required. These challenges can be addressed with the existing toolbox through a diligent application of existing price control mechanisms such as deciding how risks are shared and funded and the assessment of what is in baselines, volume drivers or other types of uncertainty mechanisms, whilst ensuring incentives continue to be effective for companies to innovate and find ever more efficient ways of delivering. The incentives should also be calibrated against each other using RoRE and should also be considered in the context of the assessed efficiency of the business plan and customers' willingness to pay to ensure that the potential returns are appropriately balanced, both between the respective mechanisms and against customers' expectations.

Introducing any form of fair returns mechanism into the RIIO-2 Framework will alter the risk profile for network companies and this needs to be factored into a full Impact Assessment of the proposed options to ensure that there are no unintended consequences for customers.

All of the proposed mechanisms lack detail on the timeframe that will be used to determine whether or not they are applied. One flaw in the current RoRE calculation, discussed further in response to Q46, is the lack of consideration of the impact of closeout mechanisms. A company that is currently showing high levels of outperformance as it currently has a number of uncertain allowances that are no longer required may, once the closeout exercise has completed, end up with a significantly different level of returns. RoRE can only be assessed meaningfully across the entire period, including assessment of output delivery and any adjustments for under-/over-delivery. A mechanism that solely assesses performance within a given year is likely to be at risk of gaming-type behaviours, with expenditure shifted between years to create an optimal returns position rather than the optimal delivery position to respond to customers' needs. In addition, true performance against the cost of debt and tax allowances cannot be assessed in a meaningful way on a single year basis.

Of the proposed mechanisms, we do not believe that those which use discretionary or comparative assessments are appropriate. With these approaches, companies are unable to assess the potential impact of a business case for a discrete project or business change. This greatly diminishes the potential attractiveness of investments as it is impossible to carry out a complete CBA as a network company cannot predict how Ofgem (or a Panel) might use its discretion or how its performance is likely to compare to others within the sector. Comparative approaches also introduce an increased element of competition between network companies which we believe may actually erode value to customers. The disadvantages for this approach are discussed further in response to Q19. As such, Discretionary adjustments and Zero-/Fixed sum incentives are unlikely to have the desired effect and therefore should not be used.

The proposed mechanisms that are company specific present different challenges. At present, it is possible to consider the business case for investments on a discrete basis and assess its merits. The greater the breadth of business activity that one needs to look across to understand the potential impact of a single project on mechanisms such as a cap/collar or a sharing factor on returns then the more challenging such assessment becomes. This

results in a higher hurdle rate for decision-making and effectively can act as a brake for a high-performing company. This presents difficulties for the other proposed options³³.

We believe further work is needed to design an appropriate 'fail-safe' mechanism that addresses Ofgem's concerns regarding "*higher than expected returns*". We suggest that the design should use the following components:

- a company specific approach, so the other elements of the RIIO Framework are not diminished;
- appropriate cap/collar that is at a fail safe level still high enough to incentivise desired outcomes and at a safe low so financeability issues are not triggered by its application;
- clear criteria that can be applied with a minimum degree of subjectivity so companies are able to forecast likely outcomes and apply to decision making processes;
- consideration given to company's performance across the entire period, using detail of the closeout mechanisms to assess performance against outputs across the period and not just based on single year; and
- consideration of all aspects of a company's performance to understand if the level of return is justifiable based on the service and outcomes being experienced by customers.

Q46. Is RoRE a suitable metric to base return adjustments on?

➤ Are there other metrics that we should consider, and if so why?

RoRE is a suitable metric if it is correctly calculated and includes all factors that affect returns. The approach currently being used does not take into account all relevant factors, particularly with regard to financial under-/over-performance on debt and therefore has the potential to over- or understate returns. This is unhelpful for all parties that wish to use this measure as an indication of how effectively and efficiently network companies are delivering against their business plans.

RoRE is also a relative measure rather than absolute, and when reported on, should be appropriately caveated to explain that it does not represent actual return on investment.

The current approach is further weakened by the lack of detail on the closeout mechanisms to be used at the end of the price control periods to assess how effectively licensees have delivered their outputs and whether any ex-post adjustment to allowances is required in light of the uncertainties that the companies have managed during the period. Without clarity on how these adjustments will be treated, it is impossible to accurately calculate the end of period position for any of the companies and RoRE cannot be adjusted accordingly.

There needs to be only one approach used to calculate RoRE. The annual report and developing RIIO Accounts currently have different interpretations of this measure. Clarity regarding the treatment of performance against cost of debt and tax allowances is also required as these cannot be assessed in a meaningful way on a single year basis.

These adjustments to the RoRE methodology need to be made as soon as possible to ensure that all parties can retain confidence in this as a metric, contribute to regime

³³ Anchoring presents challenges as it uses both comparative elements and requires this broader understanding of company performance.

legitimacy and so the change should be made definitely prior to the commencement of RIIO-2.

Chapter 8 – Next Steps

ENWL appreciates the steps taken by Ofgem to engage with ourselves and others during the development of this consultation. However, we are mindful of how tight the timescales are in order to be able to complete the T2/GD2 price controls, in particular. ENWL is committed to continuing to work with Ofgem as these proposals are developed, recognising the amount of work required to finalise the RIIO-2 Framework and to develop the Sector Specific proposals.

Q47. Do you have any views on the interlinkages and interactions outlined in this consultation and those that we will need to consider as we develop our sector-specific proposals?

As an electricity distribution company, we are concerned about the interlinkages and interactions outlined as many of the issues listed under para 8.8 to be dealt with as part of the Sector Specific work have wide-ranging consequences. We are concerned that if these are confirmed during the Sector Specific work then we will have to be fully engaged with these price controls, even though they are not directly applicable to us as a DNO. Whilst we are not opposed to such engagement in the other sectors' price controls, it does increase the regulatory burden to us as we will have to resource this activity, a burden which the TOs and GDNs will not be exposed to.

Whilst we recognise that Ofgem is seeking to divide the issues into those which must be addressed across all of the energy networks and those which can be addressed on a Sector Specific basis, it is our view that too much of the detail on matters that are directly applicable and very significant to us are being considered as part of the transmission and gas distribution work. We therefore expect Ofgem to be explicit in its subsequent work that these matters, where dealt with as part of the T2 or GD2 reviews, are not binding on electricity distribution and do not set a precedent for the ED2 review.

Q48. Do you have any views on the issues highlighted that we will consider as we develop our sector-specific proposals?

As described in response to question 47, much of the cross-sectoral work being considered for transmission and gas distribution is directly applicable to electricity distribution and we are not convinced that these can be addressed for these sectors without potentially setting a precedent for electricity distribution. However, as Ofgem is choosing to consider this work as Sector Specific, rather than developing as part of the overarching RIIO-2 Framework, we expect Ofgem to make it clear that the outcomes of policy development as part of the T2 or GD2 Sector Specific work is not binding on electricity distribution.

This clarity was lacking from the RIIO-1 work and we assumed that the implications of such topics would be revisited for electricity distribution as part of the ED1 work. However, it became apparent that this was not the case. In the event that Ofgem intends to adopt a similar approach for the RIIO-2 reviews, it is essential that this is made explicit prior to the commencement of this work and all network companies are included within any relevant work as part of the transmission and gas distribution Sector Specific work. Failure to do so would inappropriately limit DNOs' rights of appeal.

Q49. Are there any sector-specific issues or policy areas that we should ensure we review and consider as we develop our sector-specific proposals?

Given the extent of the cross-sectoral work highlighted under para 8.16 and the implications of these topics for electricity distribution, we are concerned as to what is planned to be treated as a Sector Specific issues versus more fundamental framework issues that are being pushed into transmission and gas distribution Sector Specific work as a consequence of a tight timetable.

Clarity from Ofgem as to the extent to which electricity distribution could diverge from the other sectors on these topics would be useful to assist us in understanding how precedent setting the transmission and gas distribution work will be for our price control.

Q50. Do you have any views on our high-level proposals for timing of RIIO-2 implementation, and on our proposals for engagement going forward?

There is a significant amount of work still to be undertaken by Ofgem and the network companies to allow for the implementation of RIIO-2 on the proposed timetables. Significant input will be required from customers and stakeholders too for the process to be successful. ENWL appreciates the depth and breadth of engagement to date and look forward to continued participation as this progresses.

Appendix 4 – CLASS case study: Investing for the longer-term

ENWL's CLASS project, funded under LCNF, trialled the application of innovative voltage management technologies to provide demand response to reduce peak network demand, and a new mechanism for frequency and voltage control to National Grid in its role as NGSO. The trial indicated the potential for the technology to provide significant benefits to GB customers in reducing costs and providing additional options for delivering overall system security to the NGSO.

Whilst the concept was trialled during DPCR5, the longer investment window provided by the eight years of ED1 was necessary to create sufficient investment certainty to support the CLASS business case.

Background

The CLASS LCNF Project ran for two years and concluded in September 2015.

Following the completion of the initial trial, a further six month extension was agreed with Ofgem to demonstrate how the technology could be deployed commercially and to agree with Ofgem the regulatory treatment of all costs and revenues associated with CLASS. This enabled an initial business case to be developed which demonstrated the potential benefits for a commercial deployment of CLASS. This was presented to the ENWL Board who agreed to commence the procurement phase in April 2016.

The procurement phase had to follow robust OJEU compliant procurement process due to the estimated value of the project. This was completed in January 2017, however, further delays were incurred as one of the unsuccessful bidders challenged the contract award. The procurement process enabled firm costs to be identified and the business case to be finalised. The business case assumed revenue streams to be earned up to the end of the RIIO-ED1 period. The regulatory assurances that were received in respect of CLASS only lasted up to the end of RIIO-ED1 and it was not possible to assume that benefits would continue to flow into the RIIO-ED1. The ENWL Board Decision to commence the installation work was taken in March 2017. The deployment phase commenced during the summer of 2017 and CLASS won its first contract in March 2018 for delivery in April 2018.

The overall timeline for the delivery of CLASS is illustrated in the diagram below:-



Proving the business case

The above timeline shows the challenges in taking a complex project from conception to deployment even within an eight price control period. In the project direction for CLASS, Ofgem stated that

“You will appreciate that the Authority is not in a position to fetter its discretion with respect to any RII0-ED2 price control arrangements that might be proposed. However, I acknowledge your concern that it could be inappropriate to base assumptions about cost and revenue levels in the RII0-ED2 period on RII0-ED1 outturn levels.”

ENWL recognises Ofgem’s desire to not pre-determine subsequent price controls. However, where benefits are to be earned over an extended period that spans price controls it can be difficult to justify investment due to the lack of revenue certainty.

ENWL decided to implement CLASS, taking significant financial and commercial risks due to the potential benefits this project brings to customers. In developing mechanisms for RII0-2 it is essential that they support the deployment on major innovation projects such as CLASS and other longer duration projects which potentially deliver significant value to customers. This will be particularly important if shareholders are to fund the initial trials. Consideration should therefore be given to providing mechanisms to allow for longer-term allowances, incentives or revenue streams where necessary to facilitate the development and deployment of such innovative and longer payback project approaches.