Scottish & Southern Electricity Networks

POWER CUT? CALL 105

North of Scotland 0800 300 999

Central Southern England 0800 072 7282

Akshay Kaul
Director, Network Price Controls
Ofgem
10 South Colonnade
Canary Wharf
London, E14 4PU

15 October 2019

Dear Akshay,

Open Letter Consultation on approach to setting the next electricity distribution price control (RIIO-ED2)

We (SHEPD and SEPD) welcome Ofgem's consultation on the approach to setting the next electricity distribution price control, and early engagement on the RIIO-ED2 priorities, regulatory framework and approach. While there has been significant discussion on the framework as part of wider RIIO-2 consultations, we believe there are some specific considerations for electricity distribution. In particular the need to consider the impact of wider Government policy objectives following the Government announcement regarding targets to deliver net zero carbon emissions by 2050 for the UK and the Scottish Government net zero target by 2045, with a 75% reduction target for 2030 and phased roll out of petrol and diesel vehicles by 2032 (eight years earlier than the UK target).

While, we have provided a full response to the individual questions raised by Ofgem under the consultation document in Appendix 1, we have also set out below some of the key considerations that we are keen to ensure are kept at the forefront of further discussions and decisions.

1. RIIO-2 Objectives

Priorities must focus on current core commitments as well as future challenges.
We agree with the objectives set out by Ofgem in the consultation document. Meeting the needs of current and future customers should be at the forefront of all proposals and decision making. However, while we believe DNOs will have a central role to play in meeting emerging challenges particularly around Decarbonisation, Digitalisation, Decentralisation and Democratisation, it is essential that we do not lose sight of core commitments to maintaining a safe, reliable and resilient network and improve customer service. Our stakeholders continue to tell us this is important to them.

DNOs have delivered significant benefits in these areas in RIIO-ED1 in terms of improved network reliability (99.9%), improved customer service, quicker and more efficient connections, protection of vulnerable customers, innovation and efficiency. The regulatory framework and funding arrangements for

RIIO-ED2 must allow us to continue to develop this further and deliver for customers. In this context we are concerned that "lowest cost" should not be an objective in its own right. The lowest cost option in many cases will not deliver the required level of service or reliability, particularly in relation to new and future challenges. Also, the lowest cost today may not be in the best interest of future customers.

2. New Challenges

DNOs will have a central role in facilitating the transition to a low carbon economy. Immediate action is required to develop national and local plans across the broad range of interested parties.

RIIO-ED2 will need to consider and accommodate significant and important challenges associated with Government policy objectives to decarbonise energy, transport and heat. While this will have a significant impact on the needs of the electricity distribution network, we also believe DNOs can play a critical part in helping to facilitate the transition. However immediate action is required to help coordinate and develop national and local plans and scenarios across the broad range of interested parties (e.g. Government, Local Authorities, car manufacturers, consumers etc.). This is necessary to ensure our Business Plans reflect overarching needs and deliver outcomes in the most efficient way. Support from Government and Regulators is required to achieve this.

We are also mindful that future challenges are not be limited to EVs. There is still significant opportunity to develop renewable generation and SSEN is keen to explore through stakeholder engagement, opportunities to contribute towards wider social objectives, particularly the needs of vulnerable and fuel poor customers. We have separately responded to the BEIS consultation setting out our thoughts on opportunities with regards to energy efficiency.

Where there are new opportunities for DNOs to credibly help deliver wider objectives, roles and responsibilities must be clearly defined at an early stage and appropriate funding provided. Where funding is made available it is appropriate that there should be clearly defined outputs where delivery is within our control.

3. Strategic Investment

A proactive approach to investment is required to accommodate future challenges and maintain security of supply. While there are uncertainties regarding the scale and nature of change, DNOs are well placed to manage this.

As set out in the Ofgem consultation, the concept of "strategic investment" is not new. DNOs are used to developing investment proposals in anticipation of future demand and changes in how the network is used e.g. introduction of electric storage heating in the 1960's, focus on energy efficiency in the late 1980's and the push towards renewable generation in the mid-1990s. What is perhaps unique about the challenges we now face for RIIO-ED2 is the scale and nature of change and how this can be accommodated on the network. In this context, we are keen to consider how electricity networks can facilitate acceleration in the decarbonisation of heat and transport, and in a way that is cost effective for consumers and minimises disruption for communities over the long-term.

While growth in renewable generation can be managed to ensure there is no detrimental impact on security of supply e.g. through the connections process, this protection won't exist to the same extent for EVs. In most cases customers will be able to purchase, connect and charge EVs without the need to notify or seek permission from the DNO (e.g. standard domestic charging). To protect the network and maintain security of supply for all customers this requires a different approach. This will require wider monitoring of our network down to LV feeder level and proactive reinforcement combined with flexibility programmes to avoid thermal and voltage problems emerging on the network which could cause interruption to supply. It will not be appropriate in terms of customer service or network security to wait until a problem emerges.

While there are uncertainties regarding scale or nature of change, we believe DNOs are well placed to manage this. The greatest risk for most strategic investment in RIIO-ED2 (and beyond) is likely to be in terms of timing rather than absolute need. Through coordinated forecasting and scenario planning, along with robust stakeholder engagement, including Local Area Energy Planning with Local Authorities and transport authorities as proposed by the Energy Systems Catapult, we expect to be able to present Business Plans that consider the full range of investment options and set out the option of least-worst regret.

4. Dealing with Uncertainty and Risk

There are a number of existing mechanisms that provide a good starting point for dealing with uncertainty and risk. However, the regulatory framework needs to be more flexible and recognise increased risk.

We believe the current range of mechanisms that exist within distribution and transmission are largely capable of accommodating future challenges. However, the regulatory framework and decision-making process needs to be much more flexible and responsive to changing circumstances, ensuring timely decision making. It also needs to be willing to accept a greater level of risk if we are to meet customers' expectations and deliver wider Government policy objectives. The regulatory framework and decision-making process must not be a blocker.

We expect tools such as coordinated forecasting and scenario planning, options analysis and Cost Benefit Analysis will help mitigate risk. Clear guidance on this approach and framework for decision making is also required so that DNOs can take this into account when developing Business Plans. To ensure efficient outcomes, guidance should provide for the long-term nature of investment decisions, over several price control periods, and the broad range of benefits that new policy considerations can help to deliver e.g. health, social, environmental, economic etc.

5. Competition and Innovation

Given the scale and nature of future challenges, we need strong incentives to encourage more innovation; narrowing the focus could result in missed opportunities and have a detrimental impact on outcomes. Competition should only be implemented where there is a clear cost benefit case.
RIIO has delivered significant benefits for customers, driving innovation and competition by setting challenging targets which provide reasonable opportunity for reward through outperformance and incentives. Transparent reporting of individual DNO performance has also played a significant role and held DNOs to account. In relation to innovation there is clear evidence that the specific funding mechanisms have acted as a catalyst and helped drive a different way of thinking and meeting network needs. This has delivered significant benefits for customers. However, we strongly believe there is more to do and given the scale and nature of future challenges Ofgem's proposals to narrow the focus create a missed opportunity that could have a detrimental impact, shifting the focus and not providing the necessary incentives to accommodate risk. It also ignores wider customer priorities. We urge Ofgem to reconsider proposals in this area and retain a broad NIC mechanism.

In relation to competition, we note significant progress has been made in RIIO-ED1 in relation to the procurement of the broad range of network products and services, in connections, the provision of flexible services and new energy solutions. However, markets and services are still developing and, in many cases, costs can be prohibitive i.e. more expensive than traditional solutions. SHEPD and SEPD have many examples where this has been the case but are working with participants to try and facilitate development of competition and alternative solutions. Where products or services are more efficiently delivered by third parties, current mechanisms provide strong incentives for DNOs to adopt them.

While we accept there is more to do in this area, we believe this is largely related to stimulating markets, providing data etc. and is already underway. We are therefore extremely concerned that, at such a crucial time, Ofgem has set out proposals to introduce early and late competition models for RIIO-ED2, e.g. through competition obligations without any consideration of need, benefits or risks. The focus for RIIO-ED2 should be on providing the appropriate incentives for DNOs to continue to seek out and apply innovative and competitive third-party solutions and giving time for these things to work given the relatively early stages of competition in the market.

We are also keen to avoid competition for competition's sake – careful consideration should be given to ensuring focus is given to those areas where there is most potential and value, recognising markets for many DNO services are not currently liquid. It must also be on a level playing field with the same level of protection provided to network security and customer service as provided by licensees. This has not always been the case in previous proposals by Ofgem.

Fair Returns and financeability

A balanced price control for both consumers and investors requires a fair regulatory settlement.
It is important that a fair financial package is agreed for RIIO-ED2. Ofgem has a duty to deliver a balanced price control that will work for both consumers and investors. A good outcome for customers would be networks which are able to secure the capital necessary to run the business efficiently while being able to have confidence to investment to deliver value for customers and meet wider stakeholder needs. For this to be achieved, a balanced and fair regulatory settlement is required. The policy direction of RIIO-ED2 to

date has been to expect low returns. We are not clear on what basis this has been assessed and note that lower returns are not necessarily fairer returns. A fair outcome is one where the financial parameters under which networks operate are based on evidence and represent a balanced package.

The evidence referred to in our Open Letter response represents industry wide views, is substantiated by expert advice and has been the subject of engagement with Ofgem. This evidence shows that there is no justification for a downward allowance versus expected returns adjustment nor is the rationale for Return Adjustment Mechanisms (RAMs) sound. In seeking a low return settlement Ofgem is increasing the risk to networks through increased earnings volatility and a negative equity market response. Ofgem must reconsider its position on these items to avoid current and future consumer detriment.

Ensuring financeability in RIIO-ED2 is key to networks being able to operate efficiently and deliver for stakeholders. Ofgem should consider both short and long term financeability in line with the horizon for current and future consumers. Ofgem should not use short term measures to inflate cash flows and should instead ensure that networks are genuinely financeable by ensuring a fair financial settlement is reached.

Should you wish to discuss any aspect of this response, please do not hesitate to contact me. We would be happy to engage further on the points raised in this response.

Yours sincerely,

Beverley Grubb
Acting Head of Electricity Distribution Network Regulation

Appendix 1

SSEN (SHEPD and SEPD) Response to Ofgem's Open Letter Consultation

Approach to setting the next electricity distribution price control (RIIO-ED2)

Chapter 3: Our proposed objectives for RIIO-ED2

We welcome Ofgem's broad recognition of wider challenges and opportunities associated with Decarbonisation, Decentralisation, Digitalisation and Democratisation and commitment to deliver a fair settlement. We believe DNOs have a central role to play in helping facilitate delivery of wider objectives. However, greater clarity around future roles and responsibilities is required and focus should also continue to be given to core outputs.

We recognise the potential for innovation and competition to help meet future challenges, but we do not support competition for competitions sake.

Question 1: Do you have any views on the proposed objectives for RIIO-ED2?

We broadly agree with Ofgem's proposed objectives and priorities for RIIO-ED2. Delivery of a safe, high quality and reliable network is not only reflective of our legal and regulatory obligations under the Electricity Act and Electricity Distribution Licence but, based on recent feedback, it also remains a key priority for customers and society. We expect this to continue to be the case in RIIO-ED2. As such, it is important that appropriate funding and strong incentives to deliver these core requirements remain at the centre of RIIO-ED2 discussions.

We also welcome Ofgem's recognition of wider challenges and opportunities associated with Decarbonisation, Decentralisation, Digitalisation and Democratisation. We believe DNOs have a central role to play in helping facilitate delivery of these wider objectives. However greater clarity is required in relation to the scope of a DNO's role and responsibility in relation to each; at present we do not believe there is a consistent view across the industry.

We are also mindful that a DNO's permitted purpose is currently focused on developing, operating and maintaining the electricity distribution network and providing associated services. Any proposal to widen this role must take account of:

- A DNO's ability to control or influence delivery; and
- Additional funding requirements.

We would also expect any extension of current roles and responsibilities to be clearly provided for under the legal and regulatory framework to ensure clarity and transparency.

While we agree with Ofgem's view that innovation and competition can help meet future challenges and drive further efficiencies, it is important to consider the scope and framework for competition. We do not support an approach which endorses competition for competition's sake. Any developments in this area must follow clear evidence that it is in the customer's interest and that the benefits outweigh risk and costs. Lessons must be learned from other areas such as metering, roll-out of broadband etc. where competition has been introduced and not delivered the intended benefits or resulted in unnecessary complexity, reduced standards of service and fragmentation of services. Consideration should also be given to the maturity of markets, the ability to deliver and provide the same level of protection as regulated licensees.

In relation to innovation, we believe this will have a significant role to play in meeting future challenges but will continue to require clear funding mechanisms and strong incentives to deliver the required outcomes. We believe further consideration is required in relation to Ofgem's proposals. Our detailed comments are set out under the relevant sections below.

Finally, regarding protection of customers, particularly the most vulnerable, we agree there is more that networks can deliver, and we are keen to work with Ofgem and stakeholders to develop thinking in this area. Careful consideration needs to be given to interactions and the role of other bodies to ensure an efficient and appropriate approach is adopted.

Chapter 4: Strategic approach to RIIO-ED2

How to set price controls that support decarbonisation goals

A clear and coordinated strategy and plan is needed across Ofgem, Government and industry to define what needs to be delivered, when and how. This needs to be progressed urgently to ensure it can be reflected in Business Plans.

When assessing Business Plans greater consideration must be given to longer term and wider costs and benefits, including potential social, health, economic and environmental considerations to ensure efficient decisions are taken to facilitate delivery of network and wider Government targets.

Where appropriate funding is provided, we are supportive of transparent and targeted outputs, that take account of risk and funding mechanisms.

A key consideration for RIIO-ED2 must be the extent to which 'anticipatory investment' should be provided to deliver additional capacity for electric vehicles and Decarbonisation of heat and energy. A consistent methodology and guidance must be developed and agreed urgently to support the required DNO expenditure whilst maximising the long-term benefit to customers, so this can be applied in developing Business Plans.

Question 2 – To what extent should we consider outcomes linked to decarbonisation targets, and what outcomes might this involve?

We believe DNOs have a key role to play in facilitating the achievement of decarbonisation targets. As such, we are supportive of developing associated outcomes providing the DNO role is clearly defined, within our control and appropriately funded.

Outcomes must also consider risk, particularly given the scale and nature of the future challenges that we will face in RIIO-ED2 and beyond. We do not believe RIIO-ED2 will be low risk, as suggested by Ofgem in the consultation document.

We expect the range of potential roles and outcomes to emerge as we progress with stakeholder engagement, the development of Business Plans and consultation. However, we also expect there to be a continuing need to deliver further improvements in current areas such as Business Carbon Footprint (BCF), SF6, oil leakage from fluid-filled cables as well as focus on PCBs and strategic or anticipatory investment to deliver the additional capacity for Electric Vehicles (EV), decarbonisation of heat and energy.

We expect DNOs to present fully justified proposals in Business Plans, taking account of the broadest range of stakeholder input, including national and local plans. We note that in many cases local plans are more ambitious. Proposals set out should be fully justified and supported by Option and Cost Benefit Analysis to demonstrate investment is timely, economic and efficient. Business Plans should specify outcomes to be delivered with appropriate funding.

When reviewing options, Cost Benefit Analysis and determining outcomes, given the scale and nature of future challenges, greater consideration must be given to longer term and wider costs and benefits, including potential social, health, economic and environmental considerations to ensure efficient decision making and delivery of network and wider Government targets. We recognise this may require changes to Ofgem's statutory duties, but it is important that the legal and regulatory framework appropriately reflects the future priorities, roles and responsibilities of parties.

Question 3 – Are there activities that DNOs are best placed to carry out in order to achieve these outcomes? What are the alternatives? Why would it be appropriate for energy customers to fund these activities?

The key role of a DNO is to plan, develop, operate and maintain a coordinated and efficient electricity distribution network, and to provide directly associated services. DNOs have a strong track record of delivering outcomes related to this role, improving network reliability, delivering significant efficiency savings and customer service improvements in RIIO-ED1, as set out in Ofgem's recent annual report on DNOs' performance published earlier this year.

Most importantly in terms of specific challenges for RIIO-ED1, we have worked tirelessly to:

- Establish relationships, establish needs and build trust with stakeholders and customers;
- Facilitate delivery of new flexible solutions to increase capacity on the network in response to new low carbon technologies at reduced cost to customers relative to traditional investment, e.g. through Active Network Management, flexible connections and Constraint Management Zones;

- Coordinate investment with other licensees and deliver whole system solutions, e.g. in response to the needs of renewable generators, as evidenced in the Transmission Needs Cases for Orkney and Shetland; and
- Encourage third parties to develop alternative lower cost energy solutions through competitive processes using new technical and commercial solutions, e.g. The Shetland New Energy Solution.

Our understanding of network dynamics and oversight of the network across the entire licensed area places DNOs in a unique position to identify challenges and new opportunities, co-ordinate and deliver outcomes that deliver such benefits for customers and society at large. As such we do not believe any other party is better placed to help meet the challenges associated with Decarbonisation, Decentralisation, Digitalisation and Democratisation.

We would urge that consideration is only given to allocating activities or roles to third parties where there is a clear cost-benefit case and risks are carefully considered, particularly given the critical timescales involved. To date, we have not seen any evidence of the cost-benefit case. We also urge careful consideration of lessons learned from other high-profile initiatives such as the introduction of competition in metering, the roll-out of smart metering and broadband, etc. It is essential that efficiency takes precedence and that arrangements ensure no one is left behind.

We also believe there are areas where networks may be best-placed to deliver on wider social objectives as a natural extension to their current role, particularly in relation to vulnerable customers and fuel poor. We are working with stakeholders to identify areas where DNOs can add most value. Recent discussions have focused on opportunities for DNOs to help promote and deliver energy efficiency benefits, given our understanding of energy use, geographical placement and our ongoing relationship with end customers. SHEPD is also actively involved in a strategic partnership with Scottish Government and Transport for Scotland to help clarify the need for public EV charging points, network infrastructure investment and to assess alternative delivery and funding models, e.g. opportunities for Government or Local Authorities to fund or underwrite risk. This is still at an early stage, but we believe there is merit in exploring such options, particularly where there are wider benefits for society at large it would seem inappropriate for all the burden to fall on electricity customers, particularly the fuel poor. Proposals will be fed into Ofgem Working Groups and set out in Business Plans.

While DNOs are well placed to deliver wider objectives in RIIO-ED2 it is essential that Ofgem recognises many different parties need to come together. It is essential that DNOs, Ofgem, Government and all relevant interested parties work together to develop credible national and local plans and scenarios that will allow us to develop the option of least-regret. We urge Ofgem and Government to help facilitate this piece of work at the earliest opportunity.

Question 4 – How should we assess DNO funding requirements and measure DNO performance in these areas?

The focus of future funding requirements will comprise two key components:

- Traditional considerations and funding requirements, e.g. network safety, reliability, customer service; and
- New challenges, e.g. Decarbonisation, Digitalisation, Decentralisation, Democratisation and wider social issues.

While the nature and scale of new challenges may be different, fundamentally, the way in which we assess them should not change significantly. We expect the existing RIIO principles and approach to largely remain fit for purpose. Requirements should be clearly and carefully set out in Business Plans with supporting justification, option and cost-benefit analysis to demonstrate the level of funding is necessary, timely, economic, efficient and driven by customer or societal needs.

We also believe there is clear evidence that the RIIO framework, and TOTEX approach, which focuses on setting ex-ante allowances, has provided DNOs with certainty regarding funding and a strong incentive to deliver efficiencies, while also providing scope to respond to changing circumstances, make trade-offs and "do the right thing" within the price control period. This has already provided clear benefits to customers in RIIO-ED1 with customers benefiting from efficiency savings during RIIO-ED1 while companies have a strong incentive to pursue these efficiencies.

We strongly support continuation of such an approach except where there is material uncertainty regarding requirements and cost; as now, we would expect this to be dealt with through appropriate uncertainty mechanisms, e.g. volume drivers or reopeners to mitigate the risk for customers and network licensees. Specific requirements will be more easily assessed as detail emerges through Business Plan development. We expect further discussion to take place through Ofgem working groups later this year.

In terms of measuring performance, this can largely be achieved through output measures, regulatory reporting and incentive arrangements. We expect current categories to remain relevant, but additional outputs and incentives may be required to reflect new challenges and obligations associated with Decarbonisation, Digitalisation, Decentralisation and Democratisation.

Question 5 – How should we incentivise DNO performance when the achievement of outcomes could be dependent on the actions of others?

The fundamental principle underlying incentive arrangements under RIIO is to provide drivers to improve efficiency and standard of service. As such we continue to believe arrangements should only be applied to those areas that are within our direct control; for example, it would not be appropriate to have incentives linked to the number of low carbon technologies that connect to our network to the extent that this is not in our control and driven by other factors such as customer behaviour. However, it may be appropriate to have incentives linked to capacity released to ensure that DNOs are not a blocker to meeting future challenges. It is also essential that such arrangements are not used as funding mechanisms to cover core costs linked to core outputs such as network reliability, safety, customer service, etc. Incentives should be used to drive behaviour and reward outcomes above and beyond base levels or to reward those who coordinate, develop and implement solutions with a wider range of parties to deliver wider benefits. Incentive arrangements should not introduce perverse or unintended consequences or disproportionate risk / reward.

How to set price controls that support strategic investment

Question 6 - How do we ensure that network companies are best placed to undertake strategic investment and manage the associated risk? How should the risks of these investments be managed?

As referenced by Ofgem in the consultation document, DNOs are used to making strategic and anticipatory investment decisions to maintain safety and security of supply and to meet changing needs. DNOs have a strong track record of delivering solutions and investments over RIIIO-ED1 to significantly improve network reliability (currently 99.9%), meet the needs of low carbon technologies and growth in renewable generation while also increasing efficiency and customer service. We have established a range of tools and experience to ensure this is achieved in a timely and efficient manner, e.g. through robust stakeholder engagement, a risk-based approach to asset management (looking at long-term monetised risk), scenario planning, option and CBA analysis and use of flexibility services, etc. As such, we believe we are best-placed to identify and deliver the strategic investment required in RIIO-ED2.

In terms of how to set price controls and manage risks associated with strategic investment, we believe clear recognition of Government policy objectives as a legitimate stakeholder requirement by Ofgem is essential from the outset. As set out above, development of robust scenario planning across all interested parties is then essential to ensure Business Plans are developed around a clear need. We note that in many cases uncertainty is likely to be around timing of investment, rather than nature or scale. However, it is important that the framework remains flexible and can accommodate changing circumstances. Clear guidelines and methodologies for assessing anticipatory investment decisions are also required early in the process to help manage and reduce risk and uncertainty for DNOs.

To protect customers, performance, efficiency and service improvements can continue to be monitored and incentivised by Ofgem through targeted reporting arrangements, outputs or performance targets and strong incentives.

In terms of how investment risk should be managed, consideration and justification of investment decisions, option and cost-benefit analysis should clearly be set out in Business Plans, along with corresponding mechanisms that ensure appropriate funding is provided. For example, ex-ante allowances should be used where there is reasonable certainty; where there is uncertainty regarding the need, timing, scale or cost of investment, this should be accommodated through a range of uncertainty mechanisms, as is currently the case in distribution and transmission. Appropriate incentives / penalties can also be used to reward efficiency and drive strong performance while maintaining a balance of risk between customers and shareholders. Mechanisms should be developed and targeted to reflect needs set out in Business Plans.

While we understand concerns associated with customers being saddled with stranded assets, we believe that by adopting a robust, economically rational and transparent 'least regrets' strategic approach to investment, this risk can be mitigated and we are keen to work with Ofgem to develop an appropriate approach to ensure anticipatory investment can maximise customer value in the long-run. We believe this will be critical given the greater need for such investment in RIIO-ED2, relative to DPCR5 or RIIO-ED1

through conventional as well as flexible solutions to meet the challenges of Decarbonisation. With Decarbonisation (except where there is robust network monitoring down to LV feeder level), we will not be aware of new EV charging until after it is connected. It is essential that we adopt a proactive approach to avoid issues materialising on the network as it will be extremely inefficient to rely on piecemeal incremental investment after issues emerge, particularly where local demand might quickly reach a capacity constraint "tipping point"; this would also result in significant customer impact while placing achievement of Government objectives at risk. Managing network capacity strategically and with the future in mind is likely to represent the most efficient outcome relative to a reactive approach based on short-term network fixes.

While the case for proactive investment will need to be clearly demonstrated in Business Plans, it will also require Ofgem to adopt a more flexible approach to regulation and accept an increased level of risk relative to the status quo, but with the measures above and DNOs' solid understanding of networks, customer behaviour and network dynamics we believe we can deliver investment that drives safe, reliable, economic and efficient outcomes while protecting the interests of current and future customers.

Question 7 - What if any changes to the framework are required to support strategic investment?

Details regarding changes to the framework specifically to support strategic investment and mitigate risk are set out under Question 6 above but, in addition, we believe further consideration should be given to the changing role and responsibilities of the DNO under RIIO-ED2, e.g. reflecting the move to DSO and wider environmental and social obligations. These need to be more clearly defined to ensure there is clarity and transparency from the outset.

Careful consideration also needs to be given to certainty of requirements in relation to Government policy objectives and corresponding needs set out in Business Plan submissions. Consideration can then be given on a case-by-case basis to where risk should sit and how it can be best mitigated, and investment supported.

In terms of the wider the regulatory framework, as in response to Question 6, greater flexibility is required within the regulatory framework to accommodate changing needs and DNOs must be appropriately rewarded for any incremental risk and delivery of outputs to meet wider objectives or delivery beyond BAU. As set out under Question 29, strong financial drivers, both in terms of ex-ante allowances and incentive mechanisms, will be necessary but, more fundamentally, Ofgem must recognise the need for a greater level of anticipatory investment if we are to deliver on future challenges in a timely and efficient way.

Question 8 – How should we hold the companies to account for the delivery of strategic investment, and the outcomes that they are expected to deliver?

As is the case for all funding under RIIO-ED1, we would expect revenues to be linked to delivery of relevant outputs. This has been and should continue to be a fundamental principle of RIIO. The role of "close out" is also vital in holding companies to account and ensuring outputs have been delivered efficiently. However, consideration should be given to control over outputs and risk or consequences of non-delivery. Tolerances, caps and collars and sharing mechanisms can all be used to appropriately reflect and deal with

risk / uncertainty. That said, we believe the framework should avoid unnecessary or disproportionate complexity which runs the risk of unintended consequences. The framework should facilitate change, not act as a barrier to delivery.

We support Ofgem's desire to protect customers but, as set out above, we believe this can be achieved in a number of ways with existing mechanisms, e.g. uncertainty mechanisms, phased investment and "check-ins" along the way for larger or higher risk projects, setting milestones that must be met to trigger the next phase of investment and funding. As above, there are examples of such approaches in distribution and transmission that can be built on for RIIO-ED2. We are keen to work with Ofgem and other industry participants to develop these options over the coming months through industry work groups.

How to set price controls for DSO functions

Carbon targets and future needs cannot be delivered through traditional network reinforcement alone. The importance of active, flexible, DSO and whole-system approaches needs to be recognised.

We believe the transition to DSO will be incremental with many of the functions being a natural extension to the current DNO role. We do not believe there is any evidence of conflict of interest to date. Moreover, we believe there are significant disbenefits associated with separation of the traditional DNO role from new DSO functions and delivery by third parties. This would fail to take account of the significant experience and expertise built up by DNOs, the efficiencies associated with integration and materially jeopardise delivery of Decarbonisation targets. We believe any concerns regarding potential conflict and neutrality can be addressed through the regulatory framework e.g. clear licence obligations, incentives and Ofgem review of actions at close out.

Question 9 – Is there a need to separate out the revenues and outputs for "traditional" DNO functions from DSO functions? How should this be achieved?

Firstly, we broadly agree with the functions set out by Ofgem in relation to potential DSO functions, particularly in relation to long-term planning, real-time operation of the network, facilitation of markets for and application of flexibility services. These are natural extensions of the DNO function. However, we question whether it is appropriate or efficient for settlement functions to sit with the DNO.

We also support Ofgem's preliminary view, set out in its summer 2019 'Access SCR' Working Paper that it is not appropriate to separate out the revenues and outputs for DNO and such DSO functions; we believe functions are best delivered through a single entity subject to a single price control. This allows licensees to maximise efficiencies and make trade-offs as required. We strongly believe measures can be implemented to remove any perceived tensions through the regulatory framework.

We expect Business Plans to naturally set out activities, costs and revenues to support key requirements going forward and to set out where and how best the DNO function needs to develop in RIIO-ED2, and

beyond. We believe the transition to DSO will be incremental to the current DNO role and that associated costs and funding requirements will be supported by relevant technical / justification papers as part of Business Plan submissions and we would expect appropriate outputs to be linked to revenue.

To the extent justification for separation of activities and costs emerges as understanding and experience of the DSO role develops in RIIO-ED2, this can be accommodated later but this does not necessarily mean the DSO role needs to be separately licensed or delivered by a separate party now. We do not believe there is currently sufficient evidence that potential conflict of interest is real or would offset the benefits and efficiencies of a combined approach, particularly during exceptional or emergency events, and as we move to a whole system approach. Given future challenges we believe an integrated approach provides greater opportunity to consider the interdependencies and efficiencies of load and non-load approaches.

Question 10 – In the event of the DSO function being delivered by a separate party, how might we determine the revenues for DSO activities? What type of funding model would be appropriate to set DSO revenues? In this event, would changes also be required to DNO revenues and outputs?

As suggested in our response to Question 9, it is difficult to envisage a separate party delivering the DSO function, particularly in RIIO-ED2 timescales. There would need to be very clear justification with a cost benefit case to proceed with this approach. Notwithstanding, if Ofgem were to pursue such an approach, the obvious funding model would be that which is currently used to set the ESO's revenues, but this would require greater clarity around role and responsibilities of a DSO relative to a DNO to ensure obligations, revenues and outputs are appropriately allocated.

As set out by Ofgem in the consultation document we would expect this to focus on cost forecast and justification associated with long term planning and forecasting of generation and demand, integrated T/D planning and real time operations such as active network monitoring and management, provision of ancillary services, data management and coordination between T and D interfaces.
Changes would only be required to DNO revenues and outputs to the extent they were duplicated in DNOs' Business Plans or currently sit within their permitted purpose or responsibilities. We do not see any justification for a DSO's role extending into current DNO functions, as such we would not expect any adjustment to be required to core DNO activities or funding arrangements.

Question 11 – Where a DNO is undertaking a DSO function, what type of outputs or outcomes are necessary to measure how efficiently they are performing this function? Over what time period could these be measured?

As set out in response to Question 10 above, we expect DSO activities to initially focus on long term planning and forecasting, integrated T/D planning and real time operation, monitoring and management of the network, provision of ancillary services, data management and coordination between T and D. We would expect outputs or outcomes to reflect these activities e.g. accuracy of forecasts, delivery of integrated solutions etc.

While the costs and benefits of such an approach need to be considered over a longer timeframe than the price control period, it is essential that any outputs or outcomes match the funding period i.e. the price control period itself and that where outputs are implemented, they are within the licensee's control.

It is also important that there is clarity regarding the DNO / DSO role and responsibilities and that outputs clearly align with Ofgem's expectations of core requirements within RIIO-ED2.

We are mindful of Ofgem's concerns regarding potential conflict of interest but note that in our current role with responsibility to facilitate development of markets and introduce competition e.g. in connections and development and delivery of third party flexibility services, there is strong evidence of DNOs demonstrating neutrality through efforts to facilitate market development, third party involvement and adoption of a wider range of third party services, following full assessment of all options to ensure delivery of the most economic and efficient solution for current and future customer. We are not aware of any specific concerns regarding market distortions or conflict of interest. We believe there is sufficient scope to ensure the RIIO-ED2 framework continues to provide the right incentives through licence obligations, efficiency drivers etc. to continue to drive neutrality. Further confidence can be delivered through close out arrangements whereby Ofgem can test efficiency of solutions implemented during the price control period. Work underway through the ENA and Frontier to develop a consistent and transparent process and decision-making framework to avoid any bias should also help address concerns.

However, we are mindful of Ofgem's focus on the" lowest cost" option in the consultation document and note the lowest cost solution is not always in the best interests of the customer over the short, medium and long term. It is therefore important that we consider wider impacts under the RIIO-ED2 framework, such as environmental considerations and apply engineering judgement to ensure the best solution is delivered for the customer.

How to set price controls that drive innovation and competition

We agree innovation has real potential to improve efficiency and the range of services available in RIIO-ED2. However, the significant developments delivered by DNOs in RIIO-ED1 should be recognised and appropriate funding and strong incentives should continue to be available to drive further improvements in RIIO-ED2. In terms of competition, this should be focused on areas where there is a clear cost benefit case. We do not support competition for competition sake.

Question 12 – In what ways could the existing arrangements drive more innovation and competition?

Innovation

We believe Ofgem's concerns regarding potential conflict of interest where DNOs propose projects and are also the arbiter of different solutions, including third party solutions, is without evidence. We have been active in driving projects in RIIO-ED1 that develop and test innovative solutions to network challenges, delivering significant efficiencies and wider benefits for customers working in partnership with third parties and encouraging greater third-party involvement. This is evidenced by independent research undertaken by Pöyry on behalf of Ofgem which concluded that DNO innovation projects could result in up to £1.7bn of benefits by 2031. As such we support the overarching principles set out by Ofgem around

refreshed focus on the energy system transition and increased third party involvement but are keen to avoid a framework that artificially constrains innovation or has too narrow a focus. We believe appropriate funding and strong incentives such as a strong TIM sharing factor to ensure we continue to deliver additional value in RIIO-ED2 in those areas that stakeholders confirm are of greatest value.

Competition

It should also be noted that under the existing framework we have seen significant development of competition in electricity distribution during RIIO-ED1, in terms of supply chain competition, procurement, connections, flexible solutions, new energy solution for Shetland etc. However, it is important that competition is introduced where there is clear evidence of value and not just for its own sake. In many cases the market is still immature and does not always deliver at lowest costs or the most reliable solution or service, as can be seen from our experience introducing Constraint Management Zones (CMZ) and the Shetland New Energy Solution tender process. Ofgem must ensure a proportionate and efficient approach to competition is taken and every effort must be made to mitigate risk e.g. associated with complexity, fragmentation and potentially reduced levels of accountability. Competition should also be on a level playing field with third parties providing the same level of protection to customers as provided by DNOs under licence. Also, consideration should be given to mechanisms to 'compensate' DNOs for increased risk where they remain the provider of last resort and must step in where competition or third parties fail.

We believe existing licence obligations to facilitate competition along with strong incentives such as TIM sharing factors, have provided and will continue to provide sufficient incentives for DNOs to continue to deliver in this area but given the critical and long-term nature of network assets and services, we strongly urge an evolutionary approach that allows risks to be managed and lessons learned rather than a revolutionary approach. We have significant concerns regarding Ofgem's proposals for all forms of competition to be considered in RIIO-ED2 and do not believe there is any evidence that is justified in terms of customer benefit relative to risk.

How to set price controls for a smart, flexible energy system

DNOs should continue to be incentivised to identify and explore flexible solutions in RIIO-ED2. However, it is important to recognise that in many cases traditional investment may be the most economic and efficient solution. Flexible solutions alone will not be sufficient to manage all demands on the network in RIIO-ED2 (and beyond). Overall, we believe the focus should be on ex-ante allowances.

13. To what extent should we set (and incentivise) performance against baseline Totex allowances for activities where flexible solutions could be provided?

DNOs should continue be financially incentivised to identify and explore flexible solutions in RIIO-ED2. However, it is important to recognise that in many cases traditional investment may still be the most economic and efficient solution. Flexible solutions alone will not be sufficient to manage all demands on the network in RIIO-ED2 (and beyond). There are many cases where the level of existing constraints means the options for flexibility are limited and if baseline allowances are set according to flexible solutions only, DNOs will not be able to meet obligations to maintain security of supply.

A strong way to incentivise flexible solutions is to ensure that the regulatory framework remunerates DNOs for "appropriately" incurred costs plus a fair margin or by rewarding them with a share of potential cost saving relative to the traditional investment solution (as is currently the case in RIIO-ED1 for Load Related Expenditure where an ex-ante allowance is provided). Given the limited experience of options and markets for flexibility solutions, despite the significant inroads made in RIIO-ED1, we strongly recommend the later approach at this stage. Given relative market immaturity we believe this is the most appropriate approach. The mechanism provides Ofgem with an opportunity to assess efficiency at close out and take action where required.

There are also other options that could be considered to build on this approach e.g. sliding scale arrangements with a growing proportion of benefits shared with customers as markets mature and greater certainty is provided to the DNO regarding options, cost and reliability of services.

To the extent ex-post funding is considered, recognition of the funding gap and cash flow risk to DNOs must be acknowledged and offset.

14. Should we instead set allowances based on the costs revealed through the flexibility tendering process? How might this work?

As set out in our response to Question 13, this proposal ignores the fact that flexible solutions alone will not be sufficient to manage demands on the network in RIIO-ED2 and beyond and the risk that markets are not mature or may not provide lower cost or reliable services. There will be wider considerations than cost alone. Also, we do not believe that there is currently sufficient information available on the cost of such solutions to establish reliable allowances. Instead, we should use RIIO-ED2 to drive change in behaviour and to gather the necessary experience and data to allow these options to be considered for future price controls.

Also, this proposal would not provide any incentive to drive further efficiency savings or outperformance. This approach is only generally used for large projects separately provided for under licence e.g. Shetland where costs are subject to individual review.

How to set price controls in a big data environment

We agree that more transparent and better use of data will help drive the transition and unlock potential benefits of innovation, whole system approaches and efficiency savings. However, arrangements must be proportionate to ensure they deliver value for money at minimum costs. Consideration also needs to be given to legal ability to share data. In terms of funding mechanisms, we believe data should be viewed as any other asset; requirements should be clearly set out in Business Plans and supported by stakeholder engagement.

15. To what degree should DNOs modernise their handling practices to adhere to data best practice, and therefore (among other things) provide available, transparent, and interoperable data about their networks? What measures will be needed to ensure data remains secure?

We recognise the need to transform data practises to provide open, transparent, and interoperable data about our networks in a timely and efficient way to help drive greater third-party involvement, innovation, whole system approaches and efficiency. However, we think a proportionate and targeted approach is required that focuses on relevant data sharing that will deliver real and proportionate benefits. The approach to implementation also needs to avoid excessive cost. Appropriate funding must also be provided in RIIO-ED2 along with due consideration of the legal framework and potential barriers to data sharing. In particular, consideration needs to be given to powers under licence.

Further input from Ofgem is also required to inform the creation of data triaging frameworks and sharing agreements. This will also inform the format of the data held in platforms to ensure consistency across the industry. We note in previous discussions BEIS has suggested consideration should be given to the criticality of operational data, and optional data, with potential for the latter to be charged for in the same way as DCC.

16. How should we structure RIO-ED2 to encourage metadata to be made available, and for data to be presumed open? How should we measure DNO performance in this area, and on what basis should funding be set to deliver relevant outcomes?

As set out above, we recognise the need to transform their data practises to provide open, transparent, and interoperable data about their networks. The RIIO-ED2 framework needs to support this evolution by recognising data as an asset with Ofgem providing appropriate funding and incentives to allow DNOs to drive proposed changes and performance improvements in the traditional ways e.g. through obligations or output measures, ex-ante allowances and strong incentives to deliver and outperform.

It should also be noted that DNOs are co-ordinating activities to deliver the benefits of modernising energy data through the Energy Networks Associations (ENA) with input from wider stakeholders. DNOs are collectively developing a Digitalisation Strategy that will provide a consistent view of requirements across all energy networks. Individual network companies will then tailor their own Digitalisation Strategies and plans to align with a central ENA Strategy following feedback from their stakeholders. Consideration is

also being given to potential developments in the Priority Service Register. We expect details to be set out in our Business Plans along with appropriate funding requirements.

Although we welcome metadata and open data, early clarification is required in areas such as format, mechanisms for sharing data etc. with realistic timescales attached to allow the development within Business Plans. We welcome further discussion and cooperation with the industry to develop a best practice standard & consistent format for these interactions.

17. Do you agree with the themes we plan to include in our guidance on data best practice?

We broadly agree with the themes Ofgem plans to include in their guidance on data best practice however, further clarity is required on aspects including the notice period for changes to be implemented. Legal ability to share the level of data proposed also needs to be carefully and urgently reviewed.

Chapter 5. RIIO-ED2 Framework Consultation

The regulatory framework must focus on what stakeholders need and value most. It should also recognise and accommodate new challenges, risks and opportunities while remaining flexible. It should avoid undue complexity and ensure no one is left behind. We fully support a five-year price control on the basis this provides a reasonable planning horizon and fully support proposals to introduce additional challenge to Business Plans through Consumer Engagement Groups and Ofgem's Challenge Group.

Length of the price control

18. We welcome views on our proposed position of a five-year price control for RIIO-ED2.

We welcome the return to a five-year price control period for RIIO-ED2; we believe this shorter timescale strikes a reasonable balance, allowing planning over a sufficient timeframe to incentivise efficiencies and innovation while protecting customers and networks against undue risk and associated uncertainty, particularly given new and wider challenges. However, it is important that Cost Benefit Analysis is carried out over the short, medium and long term to ensure efficient outcomes for current and future customers.

19. Are there any elements of RIIO-ED2 price control that we should consider setting over a longer or shorter period? Please give reasons.

It would be useful to have a little more clarity surrounding this question. In general, we are not supportive of differing periods for different elements of the price control and believe uncertainties or new information can generally be accommodate through reopener or uncertainty mechanisms. However, we are keen to understand if there is something else that Ofgem has in mind.

Giving customers a stronger voice

20. We welcome views on whether these enhanced engagement arrangements are appropriate for RIIO-ED2.

We are supportive of enhanced engagement and believe it is appropriate for RIIO-ED2 as there are clear benefits which are evident from RIIO-ED1 and RIIO-T2. It is important that stakeholders understand what network operators can and cannot do and have an opportunity to give direction, provide comment and influence outcomes. These views should also drive Ofgem decisions and outcomes.

We have already set up our Customer Engagement Group which will scrutinise our Business Plans. Learnings from Transmission and Gas Distribution to date demonstrates the need for any revisions and updates to Ofgem's guidance in this area to be provided as early as possible to ensure clarity from the outset. There must also be sufficient time built into the process to take account of feedback as we want to be able to demonstrate that decisions we make are driven by and cognisant of stakeholder feedback.

Greater consideration and guidance should also be established on the methodology to be applied for considering competing objectives or tensions as part of the Ofgem assessment process. Further coordination is also required in relation to determining willingness and ability to pay for these.

What customers want and value from networks: Overarching framework for outputs and incentives

21. We welcome views on whether the proposed output categories and incentive arrangements are appropriate for RIIO-ED2.

At this stage, we believe the consolidated output categories proposed for RIIO-ED2 are sufficiently broad to cover 'core' services. However, the balance, priority and weightings given to each is critical, and further consideration must be given to whether they are sufficiently broad to cover Decarbonisation, Digitalisation, Decentralisation, and Democratisation. However, the balance, priority and weightings given to each is critical, and further consideration must be given to whether they are sufficiently broad to cover Decarbonisation, Digitalisation, Decentralisation and Democratisation. We believe they may need to be expanded or new ones created to give appropriate focus to these new requirements. In all cases they should be tested through stakeholder engagement to ensure they adequately reflect stakeholder needs, ambitions and priorities.

In terms of incentives, relative targets require comparability across the DNOs. While they may be appropriate for some incentives, they will not be appropriate for all. Relative targets also introduce a dimension of risk to companies outside of their control and the proposed incentive calibration should recognise this.

We note that in some areas the opportunity to drive further improvements is also becoming limited and greater recognition of network specific challenges, starting positions or unique characteristics (including

stakeholder requirements and priorities) is required. We must also guard against incentives which drive short term outcomes at the expense of long-term efficiency, reliability or sustainability.

We note that in some areas the opportunity to drive further improvements is becoming limited and greater recognition of network specific challenges, starting positions or unique characteristics (including stakeholder requirements and priorities) is required. We must also guard against incentives which drive short term outcomes at the expense of long-term efficiency, reliability or sustainability.
We urge Ofgem to consider regional sensitivities and the contributions of customer and stakeholders to our Business Plans. While Ofgem encourage DNOs to get customers and stakeholders involved in shaping RIIO-ED2 there is a need to allow this input to ultimately shape Ofgem's decision making.

In conclusion, we believe there is a stronger case for the use of absolute incentives where changes are based on a DNO's own performance and the incentive is mechanistic in nature. This allows for a reliable assessment of potential reward or penalty and it can be more effective in driving the intended outcomes.

In terms of proposals to set dynamic targets, we question the need and appropriateness under a five-year price control where the risk of outperforming is substantially reduced, particularly in the context of new challenges. Also, dynamic targets can stifle performance as it is seen to punish strong performers.

22. We are interested to hear if there are new elements of the services DNOs will need to deliver that should be included in the current output categories. Alternatively, we welcome views on whether these should be captured by a new output category. For these new elements, we are interested to hear how delivery of these services should be valued and measured.

Throughout our response we have set out views on areas of new challenges and opportunities. At this stage in the process we believe output categories need to be flexible enough to accommodate feedback from ongoing stakeholder engagement and provide for new and specific output categories associated with new challenges where this is deemed necessary, particularly in relation to the 4 Ds (Decarbonisation, Digitalisation, Decentralisation and Democratisation) e.g. we believe consideration should be given to output categories that consider delivery of wider policy objectives relating to data, facilitating Decarbonisation, flexibility services procured and delivered, flexible connections, whole system, DSO and social objectives.

23. We welcome thoughts on how to ensure that we continue to protect the interests of vulnerable customers, particularly in light of the energy system transition.

We agree DNOs have a role to play in protecting the interests of customers in light of the energy system transition. Particular focus is given to vulnerable customers and DNO's ability to adapt to their needs. However, we would welcome further clarity on network obligations, roles and responsibilities in this area and are keen that this is developed through stakeholder engagement and is mindful of existing third-party roles and responsibilities in this area to avoid conflict and confusion.

Stakeholder engagement tells us that our Business Plans need to ensure success is maintained in the next price control while being ambitious in meeting the challenges of a changing energy environment.

Stakeholder feedback highlights key themes of Decarbonisation; affordability; environmental impact; a sustainable, flexible, network; and supporting vulnerable customers. We will continue to work with our stakeholders to better understand how we can best support these areas beyond the core services provided currently e.g. generators for storm resilience, learnings from our energy efficiency project SAVE, and Condition Based Risk Management system CBRM vulnerable scoring of assets.

While we develop plans in the coming months, it should become clearer where safeguards will be needed to further protect the interests of vulnerable customers, but we believe this is an area of the framework that remain flexible and adapt to new challenges and opportunities.

Maintaining a safe and resilient network

24. We welcome views on how DNOs should continue to ensure their networks are resilient, particularly in the context of the new or changing way assets are used.

We welcome the suggested wider focus on severe weather, flood risk, cyber security etc. We have started to make significant inroads in these areas in RIIO-ED1 but recognise more needs to be done, particularly in relation to data management and data security given the importance placed on this for efficient network management and facilitation of further innovation, flexible solutions, whole system solutions etc.

We also recognise that with the changes in how networks are used, there are new risks that didn't exist previously and could result in networks becoming overloaded. For this reason, we need to invest to ensure there is greater visibility of power flows and to manage load on our network. To do this, we require large-scale roll-out of monitoring devices and development of tools to act on the data received. We expect this to be a key area of funding requirement for RIIO-ED2.

As Ofgem have highlighted, there are also concerns surrounding the move to NARM rather than NASD and clarity is required to understand the impact this may have. We believe it is in the customer's interest to consider the long-term benefit of work across relevant price control periods as average asset lives span more than a single price control period. Asset management arrangements must consider the longer-term benefits of interventions. However, assets must also be fit for flexibility; NARMs does not account for this. The model also does not account for many assets which contribute to asset and network resilience. Therefore, it is essential that the industry, Ofgem and other key stakeholders work together to consider the best way to measure and report on the long-term benefits of asset interventions. We are currently working in the Network Output Measures Electricity Distribution Working Group (NEDWG) to develop a high-level approach as to how asset values of Probability of Failure (PoF) and Consequence of Failure (CoF) might be initially calculated and to which assets such an approach could be applied. The purpose of this task is to build on the groups' proposals creating a series of modelling types and suggested application to a range of assets.

While the above points are crucial, it is also important to be mindful that we are only part way through a large asset replacement and refurbishment programme, replacing critical assets that were built in the 1950s and 1960s. This shouldn't be lost in the face of new challenges and changing ways in which assets are being used. Appropriate funding for all requirements must be provided.

25. We are interested to hear stakeholder views on how DNOs should ensure their networks are resilient to physical and/or virtual threats, as well as being able to withstand the effects of adverse weather and the impacts of climate change.

We have placed considerable emphasis on ensuring networks are resilient to physical or virtual threats through our sustainability strategy which captures the impact of both current and future challenges and changes. Where management of physical and virtual threats is largely within our control we will continue to plan and manage our business accordingly and seek appropriate funding to mitigate these risks as they emerge. However, we also recognise this is not efficient or possible in all circumstances and where this is the case there is a need for "exceptional events" provisions. We are concerned that current provisions in the licence in this area don't adequately reflect circumstances that are out with a DNO's control or recognise individual network characteristics and proportionate risk, particularly in relation to IIS. We believe this will be of greater significance in RIIO-ED2 and would urge more detailed analysis ahead of target setting to protect against exceptional third party or weather events where it would not be economic or efficient to invest to mitigate this risk.

We are currently in the process of developing a strategic investment plan for cyber resilience, which will outline the steps we will take to comply with the NIS Regulations during RIIO-ED2 and beyond. However, it is important to reiterate that we do not operate in isolation. Careful consideration should also be given in this area to interactions with plans to increase network data availability to third parties and the increased risk this creates in relation to protecting against physical threats on network assets.

26. We would also like to hear how stakeholders believe climate change mitigation and adaptation may affect network maintenance and development in the short, medium, and long term.

As we have witnessed through RIIO-ED1, our networks are experiencing more frequent and extreme weather events. In the short and medium term, areas which could affect network maintenance and development are:

- Higher wind speeds are likely to push DNOs towards wider tree-clearances and increased tree-cutting.
- Increased lightening will require consideration of additional protection measures such as surge arresters and shield wires.
- Increased temperatures can put severe strain on networks e.g. through cable sag and result in derating of circuits – this will be a particular issue as summer loads change with PV generation, air-conditioning and EV charging.

In the short term, this will drive the need for more real-time monitoring to identify issues, management of LV networks and increased overlay which we would ask Ofgem is consider when assessing Business Plans.

27. We would like to hear views on how we ensure DNOs remain resilient to the challenges presented by an ageing and changing workforce.

We are fully aware of future challenges and have plans in place to address the skills and ageing workforce challenge to ensure we are able to meet future needs. We put considerable emphasis on ensuring we have the right people and skills and provide the opportunity for people to develop within our organisation. We have implemented a broad sustainability strategy that ensures our current and future workforce remains well positioned to deal with industry challenges and future energy changes. We have also identified the need to develop and strengthen key capabilities to achieve our vision. For instance:

- We are developing a strong team ethos and safety culture into a performance-based culture that will drive accountability and empowerment
- We are working to secure good leadership at all levels from people who have the capability to successfully drive performance, implement change and deliver continuous improvement.
- Key areas we are building our capabilities:
    - building a truly customer and stakeholder-led organisation
    - pursuit of best in class asset management
    - relentless focus on productivity, performance and operational efficiency
    - developing our commercial capability and data-led decision making

We recognise we must compete for the same skills as many other companies and to address this we put considerable emphasis on initiatives such as robust training schemes to develop talent, inclusive recruitment strategies, fair pay and incentives. This is necessary to for recruitment but also retention of staff.

Delivering an environmentally sustainable network

We recognise that electricity distribution networks are the linchpin to meeting current and future environmental and sustainability targets, including the recently announced net zero carbon target. Our application of leading-edge operational technology together with the valuable knowledge gained from our flagship low carbon innovation projects positions us to help lead this agenda and the Decarbonisation challenge. We need to unlock customer value at maximum pace but need the right RIIO-ED2 framework to deliver this.

28. We welcome views on how DNOs should work to minimise the impact of what they do on the environment and facilitate the transition to a low carbon energy system. We are particularly interested in the implications of the government's updated target of net zero emissions by 2050.

As set out above, we believe we have a key role to play in meeting future challenges in this area but believe greater clarity is required in relation to the plan to deliver the Government's net zero emissions target by 2050 along with clarity on our role, responsibilities, accountabilities etc. We believe we have a role to play in helping to facilitate development of these plans and potential scenarios with help and input

from Government and Ofgem, along with other interested parties. Once there is greater clarity in these areas our focus should be on developing the network to meet these future requirements, facilitating innovative and flexible solutions and the connection of low carbon technologies. We believe the regulatory framework should have a strong focus on these areas and incentives to reduce the environment impact where outcomes are within our control.

Existing challenges

We believe we still have much to do in relation to reducing our BCF from our operational activities, SF6 emissions and oil leakage from fluid filled cables. Going forward into RIIO-ED2 significant funding will also be required to meet obligations in relation to replacement of assets containing PCBs. We note potential impact of EU legislation in some of these areas may not be fully known at the time of initial RIIO-ED2 Business Plan submission. Sufficient flexibility should be provided in the process to take account of requirements as they emerge.

Given the significance of these outcomes, we believe further consideration should be given to the financial incentives for RIIO-ED2 rather than the current focus on reputational drivers only. This to incentivise DNO's to target the governments expectations.

New challenges

In terms of meeting new challenges around Decarbonisation and the Government's net zero target for 2050 (2045 for Scottish Government), as set out above, clarity is required on the roles and responsibilities, obligations and boundaries. There is also a significant need for coordinated development of plans, forecasts and scenarios and alignment of incentives across sectors. There are many approaches that can be considered:

- Business Plans set out proposals for network development with justification and evidence – this would consider specific requirements on the network and reflect national and regional differences.
- Uniform obligations e.g. to facilitate connection of X EVs per annum or to ensure everyone is within Xm of a charging point.

A base level of funding to reflect reasonably certain needs could be provided and where there is uncertainty, volume drivers (as used to incentivise DG connections in DPCR5) could be used along with reopeners for specific and material projects. Other mechanisms such as phased review and funding options can also be considered as set out above along with caps and collars.

While DNOs have a crucial role in facilitating the low energy transition, we note this should be in the context of meeting wider legal and regulatory obligations e.g. competition and ensuring no unfair advantage or disadvantage is given to a particular customer or class / classes of customers. DNOs cannot give preference to connect renewable generation in advance of other customers in the queue at present.

29. We also welcome views on what this may mean for the type of activities networks undertake, how these may be funded, as well as the outputs and/or incentives they should be exposed to.

Our response to Question 28 above sets out our thoughts on funding arrangements and incentives. In addition, we need to be mindful of current uncertainties and work required to clearly define potential

scenarios e.g. advances in technologies, uptake rates, changes in Government policy which could have a sudden impact on uptake of EVs, heat pumps etc and be prepared for this. Hand in hand with this, we will need to improve our forecasting capability and data accuracy (and transparency). This will need to be accommodated when considering funding requirements, but we also see potential for financial incentives in both these areas (i.e. forecasting accuracy and data sharing). We also see this driving a need for investment ahead of need as discussed above and later in this response.

We must also be mindful of the very different risks future challenges will pose e.g. EV charging relative to embedded generation connection which can be planned, managed and controlled e.g. network resilience secured before load connected. We won't necessarily have the same control or forewarning with EVs; in many cases they will use existing connections to charge and the first we will be aware is when problems on the network materialise. A proactive approach is required to maintain network reliability and meet customers' expectations. **We strongly believe a shift change is required towards anticipatory investment.** As set out above, need should be sufficiently evidenced in Business Plans and where justified funded through ex-ante allowances; where uncertain this can be accommodated through volume drivers, uncertainty mechanisms etc.

We also believe further consideration should be given to alternative funding arrangements given investment is intended to meet wider Government, environmental and social objectives and benefits will not be limited to electricity customers e.g. alternative funding models such as funding being provided or underwritten by Government, rather than electricity customers should be explored. To the extent DNOs take on additional risk this must also be appropriately rewarded.

Risk and funding requirements should be considered on a case by case basis, as network characteristics and requirements may differ by location. Options and Cost Benefit Analysis should be presented in Business Plans and be supported by stakeholders.

Benefits and risks must be assessed over longer time horizons than the current and next price control given the long-term nature of assets, targets and benefits. Also, wider social, environmental, health and economic considerations must be taken into account to ensure the most economic and efficient solution overall is taken forward.

30. Finally, we are keen to understand how DNOs' performance should be measured, and how we should assess the value that customers place on the provision of these services and activities.

Delivering an environmentally sustainable network is about achieving national and local targets and obligations and doing the right thing. It is important to understand the value that stakeholders place on this while also identifying solutions that maximise value for money. Ofgem should set proportionate but challenging targets and incentives in relevant areas that are within our control such as BCF, SF6 emissions reduction and reduction in oil leakage. However, new areas associated with low carbon transition may be more challenging to measure, determine credible targets and control. We would ask Ofgem to consider what is required in these areas, following review of Business Plans and stakeholder engagement.

Enabling whole system solutions

We expect whole system solutions to play a significant role in RIIO-ED2. However, we do not believe the mechanisms put forward by Ofgem in its sector-specific consultation create the framework necessary to drive and deliver a sustained approach. We believe an alternative package of mechanisms are required which include:

- A strong whole system idea delivery framework e.g. a sandbox approach
- A strong Totex Incentive Mechanism (TIM) to drive the right behaviours; and
- A new sharing mechanism that allows the resulting costs and benefit of any whole system solution to be fairly shared between customers, licensees and third parties.

31. We welcome views on how RIIO-ED2 can best capture the benefit of whole systems solutions. We are also interested in views on how these benefits should be measured.

We are supportive of the industry's ambition to identify and deliver whole system solutions. We believe they are an obvious objective and means of driving efficient outcomes for customers. However, while this goal is simple and obvious, the reality is much more complex and requires significant coordination across a range of parties, differing priorities, funding provisions and drivers. As such the approach in RIIO-ED2 needs to be targeted at areas where there is likely to be most benefit.

Our view is that greater focus should initially be in relation to coordinated forecasting and planning across gas and electricity, transmission and distribution and sharing of potential opportunities to jointly develop solutions and share funding. SHEPD has started to explore such approaches in RIIO-ED1 e.g. in relation to island investments and has delivered significant potential to deliver savings for current and future customers. Lessons can be learned from these projects, particularly in terms of regulatory assessment of options, coordination of funding, appetite for risk and timeliness of regulatory decisions.

Some of the framework challenges that we experience and believe need to be addressed include:

- Demonstrating a clear benefit for customers across a number of sectors
- Developing incentive arrangements that recognise costs and benefits across different licensees
- Recognising delivery and operational risk for whole system solutions
- Allowing investment decisions to be taking ahead of need as opportunities arise and there is a more immediate need on another network

This requires proactive effort to uncover the opportunities and address tensions and can require additional time and effort. Coordinating the delivery of outputs through the actions of other networks or industry participants also requires alignment of outputs, delivery deadlines and a clear understanding on how risk can be shared. This is a change from the current experience where network, client and / or contractor is focused on one set of outcomes. It also introduces additional operational and commercial risk as well as a different approach to regulatory and legal risk. While understanding will evolve over time, it is reasonable to expect that concurrent delivery of network outcomes through single or combined

system solutions may create regulatory tension initially. This needs to be addressed and accommodated in a successful and flexible whole system framework.

We do not believe the mechanisms put forward by Ofgem in its sector-specific consultation create the framework necessary to drive and deliver a sustained approach to whole system. We propose an alternative package of mechanisms which we believe are more commensurate with the challenge.

The three main elements of this package are:

- A strong whole system idea delivery framework e.g. a sandbox approach
- The continued, strong Totex Incentive Mechanism (TIM) to drive the right behaviours; and
- A new sharing mechanism that allows the resulting costs and benefit of any whole system solution to be fairly shared between customers, licensees and third parties.

We continue to believe this could be supported primarily through ex-ante funding and incentives e.g. to drive improvements in the way information is shared or made available to interested parties and collaboration takes place. Consideration should also be given to uncertainty mechanisms to accommodate additional risk and costs not foreseen at the time of setting the price control.

32. We further welcome stakeholders' opinions on whether the electricity distribution sector's approach should be different from the other sectors and if so, why.

We are not clear on what basis the electricity distribution sector's approach should differ or in what respect. Ideally, a whole system approach should consider a broad range of sectors.

We support the view that electricity distribution should align with other sectors but would urge caution; this must not be to the detriment of the energy transition. Electricity distribution is at the centre of the transition and needs an agile or flexible regulatory framework to meet the needs of future challenges and respond to new information as it becomes available in a timely and efficient way.

Managing uncertainty

We believe there are a broad range of incentives and uncertainty mechanisms such as sharing factors, volume drivers and reopeners that have served the industry well in RIIO-ED1. We believe they will largely remain fit for purpose in RIIO-ED2 although some modification may be required to ensure they are capable of meeting new challenges.

33. We welcome views on how we should manage the uncertainty associated with forecasting allowances, and whether there are any mechanisms we could or should consider in helping to manage this uncertainty.

As set out throughout this document, we remain convinced that outputs and incentives are the most effective way to drive efficient outcomes. This has been demonstrated throughout RIIO-ED1. RIIO-ED1 has also been successful in developing and applying a range of uncertainty mechanisms to address risk and respond to needs as they become more certain. These mechanisms must endure in RIIO-ED2 and provide an agile regulatory framework. We believe many of the existing uncertainty mechanisms will remain fit for purpose or can be developed to cope with new investment decisions and challenges in RIIO-ED2. However, we should not rule out new uncertainty mechanisms specifically designed to address new challenges at this stage. Greater clarity will be provided through Business Plans.

34. We seek views on the use of indexation, particularly on any adjustments for labour and construction cost inflation.

Our initial assessment of Real Price Effect (RPE) policy options is based on considering the merits of ex-ante funding versus indexation mechanisms for RPEs and also the application of indices on the future outlook for RIIO-T2. In doing so we have considered different factors to determine what is the most appropriate mechanism including:

- Impact on incentives including cost reflectivity
- Volatility to network allowances
- Impact on current and future customers
- Regulatory complexity

In considering these elements alongside external analysis undertaken on input indices for labour, plant and materials, we believe that RPEs should only be considered for labour costs. This is based on the underlying cost base and incentive properties while also reflecting wider macroeconomic impacts. We have considered the merits of ex-ante funding compared to indexation of labour RPE allowances and believe it would create uncertainty and a moving target. We do not therefore believe this is appropriate. Furthermore, we are not supportive of RPE indexation and believe it is more appropriate to have limited RPE allowances for clear and simple cost areas that are likely to exceed CPI. We believe that RPEs are more appropriately managed by the network operator by way of a fixed allowance.

We will set out the impact on our cost base in our Business Plan, considering the environment at the time and after further analysis of RPEs following an external review of our cost base and underlying cost drivers. We would therefore support decisions on RPEs being left open until after Business Plan submission.

35. We welcome views on our approach to highly anticipatory investment projects. We are interested to hear whether stakeholders would suggest additional processes or regimes for facilitating such investments that support the energy system transition whilst protecting customers from potentially inefficient investments.

As set out by Ofgem in the consultation document, all planned investment is strategic and anticipatory to some extent. This is something that the regulatory framework is used to dealing with. However, we recognise the challenges we will face in RIIO-ED2 are potentially of a different nature and on a different scale but do not necessarily agree they will be "highly" anticipatory. In many cases uncertainty will be around timing rather than absolute need and can largely be accommodated using existing mechanisms.

As set out in our responses above, particularly under Question 6, we believe efficient, coordinated investment decisions for RIIO-ED2 must look at need in the short, medium and long term. They must also consider the wide range of potential benefits and the need to proactively implement network solutions given the potential for a detrimental impact on the network and users, where we do not have the same level of control of use or forewarning e.g. with EVs and heat pumps. This requires a different approach to regulatory assessment as currently investment is generally only progressed where immediate need is known and can be demonstrated with certainty. It may also require a different approach to options analysis and appetite for risk.

To help deliver efficient outcomes there is a need for clear guidelines as to how DNOs should approach option and Cost Benefit Analysis and demonstrate the option of least-worst regret. Development of a methodology for Ofgem assessment is also required to provide certainty for DNOs and transparency for stakeholders and customers.

However, there are likely to also be cases where there may be very large, high value investments where a strategic long-term view, potentially impacting wider cross-industry and societal benefits, will need to be considered against highly uncertain future drivers, costs and benefits. Again, we believe there are examples of mechanisms now that can be used to accommodate this e.g. reopeners, Needs Cases, phased investment plans and decisions. Further consideration should be given to these mechanisms for RIIO-ED2.

If anticipatory investment was explicitly denied, this could have a significant detrimental impact on GB's ability to deliver against Government targets and would introduce significant additional risk for security of supply and costs to customers. The risk of new technologies connecting or changing the pattern of use and demand on the network is significant and could impose significant additional costs in dealing with reliability issues, reactive network investment and fault costs. It could also result in significant increase in flexibility costs where the DNO becomes a distressed buyer.

36. We welcome views on the type of issues that should be considered through an inter-institutional group.

We believe coordination between groups is key if efficient outcomes are to be achieved. For the electricity sector, it is important that we are kept informed of changes in other sectors that could alter demand for the use of our network e.g. change in heat policy or transport policy. Improvements in the accessibility and transparency of data and coordinated planning and forecasting is key but these improvements need to be coordinated and made across all relevant groups. An arbiter or facilitator through an institutional group would be helpful, particularly in addressing tensions between networks or energy sectors and in ensuring transparency and coordinated decision making.

We suggest consideration be given to the wide range of groups including for instance car companies, transport bodies, local authorities, water companies, heavy system users who would all be required to tie in with planning and forecasting to make the system more efficient.

37. We invite stakeholders to advise what type of expenditure they believe should be subject to alternative arrangements for sharing risk, and what these arrangements may look like.

We have set out in response to Question 29 options to be considered in relation to alternative funding arrangements or underwriting of risk.

Delivering efficiency through innovation and competition

38. We welcome views on the proposed innovation stimulus. We are interested to hear views on the types of projects that should be funded through either the NIA funding or a new funding pot.

We support proposals to remove the Innovation Rollout Mechanism (IRM) and to give greater focus to meeting future facing strategic challenges through the NIC. However, further consideration should be given to proposals relating to the NIA. We do not believe this should be limited to the energy system transition and customer vulnerability.

Both the NIC and NIA have delivered substantial benefits for customers in RIIO-ED1, with the latter also instrumental in driving third party involvement, a key ambition of RIIO-ED2. Moving forward into RIIO-ED2 we are mindful of the need to maintain network reliability and to address social challenges. We urge Ofgem not to prejudge priorities for stakeholders prior to engagement and not to rule out wider considerations. We believe there are many other areas where we can deliver real benefits to customers.

In relation to proposals to remove the Innovation Roll-out Mechanism, BAU funded innovation requires specific shareholder investment which will reasonably anticipate an appropriate level of return or reward. Innovations that have longer lead times before reaching implementation due to early technology readiness level or that deliver benefits to other parties would be unlikely to receive or progress without this.

The benefits of innovation should *also not be* constrained to a price control period; to avoid artificially dampening business cases for innovations in RIIO-ED2 mechanisms must ensure full consideration is given to short, medium and long-term benefits across price control periods.

39. How can the benefits of the innovation stimulus be maximised by supporting schemes proposed by non-network parties?

We believe that the existing arrangement have provided significant support for non-network parties. Organisations like the Energy Innovation Centre, created by DNO and GDNs, have created a network of over 3000 innovators willing to engage and respond to industry prompted challenges as well as their own

initiatives. We believe that the combination of the Open Data Taskforce's recommendations along with the commitments of the industry to create a level playing field for flexible solutions will step up the involvement of non-network parties in the solutions used to deliver energy efficiently going forward.

40. We also welcome views on our proposals for the different competition models in RIIO-ED2, and what, if any, criteria should be set out for the use of early or late stage competition models.

We note that significant developments have been made in introducing competition in RIIO-ED1 and we are committed to progressing this further where benefits can be delivered for customers. However, given the scale and nature of current and future challenges and uncertainties we do not think that Ofgem's proposals for competition as set out in this consultation document adequately considers risks and the level of market maturity. The merits of further competition within distribution must be properly scrutinised, and subject to regulatory impact assessment and demonstration of net benefits before they are progressed. They must also follow appropriate Parliamentary scrutiny and guidance.

In terms of specific competition models, we note the Open Letter Consultation does not appear to propose any 'new' competition models for RIIO-ED2. More detailed views on proposed early and late delivery models can be found in our response to Ofgem's RIIO-2 sector specific methodology consultation response.

41. We also seek input from stakeholders on how native competition obligations and best practices can be used to ensure the best outcomes for customers and to drive changes in the role of the networks in a transforming energy system.

Competition already has a central role to play in the activities of DNOs in RIIO-ED1. Significant benefits have been delivered and we have already adopted Ofgem's best practice principles and deployed flexibility solutions, competition in connections, competitive procurement processes etc.

While still at an early stage of development, taking CMZs as an example, since 2015 we have developed the concept of Constraint Managed Zones (CMZs) to allow us to contract with third parties to manage demand or generation flexibly on the network, reducing or avoiding the cost of conventional network reinforcement.

The key features of the CMZ are already closely aligned to Ofgem's proposed native competition principles contained within the Sector Specific Methodology Consultation:

- It utilises a market approach to procure constraint management services.
- It is technologically agnostic.
- It is open to a full range of market participants.
- It is a Totex solution with a fixed decision cycle and associated optionality value.
- It is replicable across a range of network scenarios.
- It is compatible with flexible connections and other smart interventions.

In addition to our own procurement processes, we are subject to competitive requirements by virtue of the Utilities Contract (Scotland) Regulations 2016 and we have consistently shown how the current approach under the RIIO framework provides powerful incentives for efficient delivery. We broadly agree with Ofgem's principles of best practice, in so far as the benefits of utilising competitive processes are not outweighed by the costs.

We therefore consider that the existing incentives placed on us through RIIO-ED1 place competitive pressure on DNOs to ensure transparent and competitive processes are used. Our CMZ procurement processes already goes above-and-beyond legal requirements to help drive changes and delivery efficiency savings. We would therefore suggest that Ofgem retains the current strong Totex incentive mechanism for RIIO-ED2 rather than introducing specific competition obligations or extending the introduction of additional models.

Forecasting and scenarios

42. We welcome views on our approach to planning, forecasting and scenarios for RIIO-ED2. In particular, do stakeholders have other suggestions as to how we can best manage forecasting risk for customers?

As set out above, given the inter-dependencies of new markets and new participants (e.g. EVs and other LCTs), we believe DNOs should be financially incentivised to improve the accuracy / reflectiveness of their forecasting and wider coordination with parties. However, we believe further clarity is needed from Ofgem on the roles, responsibilities and accountabilities of different parties and greater central coordination and input is required e.g. from Regulators and Government. Otherwise, there is a risk that DNOs plan and forecast for a scenario that is at odds with other sectors. To help mitigate this risk we support a bottom up approach to forecasting through regional and local development plans. In developing these plans, we will continue to cross-reference plans against national forecasts e.g. the Future Energy Scenario and ENA Common Energy Scenario but regional and local variations should be recognised and provided for so long as they can be evidenced and justified through stakeholder engagement and Cost Benefit Analysis.

As identified by Ofgem, uncertainty mechanisms will also play a key role in ensuring customers are further protected from forecasting risks as well as achieving the Government's net zero target.

Business plan and Totex incentives

We support proposals to remove fast tracking in RIIO-ED2 given the nature and scale of new challenges and potential uncertainty and support a Business Plan Incentive instead, providing clear guidance is given at an early stage of what "good" looks like and strong incentives exist to encourage ambitious and innovative plans.

43. We welcome views on our proposal to remove the early settlement process for RIIO-ED2, instead focusing on alternative mechanisms to receive high-quality and ambitious Business Plans.

We welcome the removal of fast-tracking for RIIO-ED2 given the complexity and challenges that the industry will face and support proposals to introduce a Business Plan Incentive providing clarity is provided from the outset regarding what "good" looks like and strong incentives exist to deliver ambitious and innovative plans. Assessment should then be relative to individual network requirements and stakeholder input rather than relative to other network submissions. Arrangements must also be transparent and avoid subjective assessment or being too narrow given the range of challenges and likely priorities in RIIO-ED2.

44. We also welcome views on our proposals to use the Business Plan Incentive and the confidence-dependent incentive rate arrangements for RIIO-ED2. In line with this, we are interested to hear stakeholder views on the range that should be used for both of these.

Rewarding companies based on Ofgem's confidence in their costs at a time when Ofgem recognises uncertainties and encourages companies to come forward with ambitious plans seems perverse. Applying a lower sharing factor (incentive rate) to less confident costs will arguably have the opposite affect and discourage parties from disclosing these costs in their Business Plans or being ambitious. We believe uncertainty mechanisms or sharing factors should be used to deal with cost uncertainty and strong and help drive the right behaviours and reward efficiencies.

A confidence-based approach is not appropriate; where an allowance is potentially too high or too low, diluting the incentive will move it closer to a pass-through arrangement.

The most appropriate tools are strongly calibrated business plan incentives and effective targeted cost assessment to identify and respond to underlying inefficiency.

Fair returns and financeability

We believe Ofgem's principles for considering financeability are clear:

- Ofgem should consider both short and long term financeability in line with the horizon for network investment;
- Ofgem should rely upon credit rating agency methodologies for evaluating investment grade and financeability of energy networks;
- Ofgem should adequately consider equity as well as debt financeability, particularly the impact of underinvestment on customers influenced by setting the cost of equity too low; and
- Ofgem should not use short term measures to inflate cash flows in order to generate a low headline rate of equity return.

45. We welcome stakeholder views on our proposals to introduce measures to enable network companies to finance their activities whilst ensuring they receive a fair return.

In the consultation document Ofgem references their Finance Annex to the Sector Specific Methodology Decision (SSMD) on RIIO-T2 and RIIO-GD2 in considering measures that Network companies can take to ensure they remain financeable for the forthcoming period. Financeability is fundamental to the RIIO-ED2 price controls and we do not believe it can be isolated to selecting financial parameters to improve short term cash flow metrics.
Ofgem mentions the following measures in the Finance Annex:

1. Equity injection from network companies or dividend restrictions (de-gearing)
2. Change in asset lives
3. Change in capitalisation rates

We have considered each of these elements in turn.

The investment and change required by DNOs in RIIO-ED2 is significant; we believe Ofgem's duties in delivering a price control framework that balances the needs of current and future customers while also ensuring the ability of network companies to finance their activities is clear. When also considering that both debtholders and shareholders finance company operations, it is clear Ofgem has failed to consider the impact on attracting and retaining future investment.

Ofgem has diminished the role of shareholders in their SSMD and Open Letter by focusing primarily on debt financeability while also inadequately considering long term financeability. Ofgem states financeability analysis remains focused on the upcoming price control[1]. Ofgem is therefore obligated to balance the needs and costs of current and future customers, meaning that financeability obligations span the same period, in both the short and long term, affecting these customer groups. In doing so, analysis shows that for both debtholders and shareholders, changes in depreciation rates, capitalisation rates and the change from RPI indexation of the RAV to CPI/CPIH, does not resolve long term financeability for either debt or equity investors.

For debt investors, a key investment grade credit ratio is the AICR or PMICR. As noted in the Finance Annex of the SSMD, this deteriorates over the long term[2]. This weakens credit rating significantly. Ofgem have chosen to ignore the credit rating agency methodologies and thresholds in considering financeability. This is inconsistent with the considerations of the capital markets and investors. In relation to equity investors, Ofgem's proposal for additional equity injections or restricting dividend payments is inappropriate compared to real world markets. Ofgem's proposed equity returns are below market evidence as the ENA have set out alongside several other network companies, including SHE Transmission plc. The equity returns proposed are also significantly lower than can be earned both in capital markets in the UK and internationally (particularly for similar sectors). We find it hard to believe that equity investors would wish to invest in energy networks under these conditions.

[1] Ofgem RIIO-2 Sector Specific Methodology Decision – Finance Annex (May 2019), pg 82 para 4.27
[2] Ofgem RIIO-2 Sector Specific Methodology Decision – Finance Annex (May 2019), pg 92 para 4.64 with reference to Moody's methodology for PMICR/AICR ratios

We would also like to highlight that during the British Gas (BGT) appeal to the CMA for RIIO-ED1 Slow Track DNOs, the asset lives decision by Ofgem was challenged but the decision was upheld. If this decision is being reviewed, Ofgem need to undertake suitable analysis, justification and an impact assessment before then consulting fully on any change.

In summary, we believe Ofgem's principles for considering financeability are clear:

- Ofgem should consider both short and long term financeability in line with the horizon for current and future customers as well as the useful economic life of energy network assets;
- Ofgem should rely upon credit rating agency methodologies for evaluating investment grade and financeability of energy networks;
- Ofgem should adequately consider equity as well as debt financeability, particularly the impact of underinvestment on customers influenced by setting the cost of equity too low; and
- Ofgem should not use short term measures to inflate cash flows (and bills to customers today) in order to generate a low headline rate of equity return, such as the use of CPIH, capitalisation rates and asset lives.

46. We are interested to hear from stakeholders on how they believe we should set allowances for the cost of debt, particularly around the method of recalibrating the index.

We believe that the cost of debt index should be transparent and in line with Ofgem principles. In line with previous price controls, Ofgem should leave options open on the most appropriate indexation and company specific arrangements until submission of Business Plans. During both RIIO-T1 and RIIO-ED1, Ofgem maintained options for indexation and company specific circumstances up until final determinations. In doing so, this allowed Business Plans and refinancing profiles to be considered as part of the process for calibrating the cost of debt mechanism.

We believe the cost of debt mechanism for RIIO-ED2 should deliver Ofgem's principles consistent with previous price controls including financing efficient costs of debt during the period. NERA[3] evaluated the cost of debt performance by sector against the mechanisms in those sectors. In each sector, Networks underperform their existing mechanisms in RIIO-ED2 based on a range of interest rate scenarios. Following on from this analysis, we believe a longer index is more appropriate starting index at this stage. This would be based on either the average of A/BBB non-financials consistent with RIIO-ED1, or a combination of these two indices dependent on Business Plans, credit ratings and justifications by energy networks. This may adjust depending on the investment grade credit rating of energy networks during the forthcoming period.

We also believe Ofgem should consider all evidence in relation to additional borrowing costs. The additional borrowing costs are significant and therefore must be considered in setting the appropriate index. NERA[4] has undertaken analysis of additional borrowing costs and concluded this is in the region of 53 to 82bps which needs to be funded from a cost of debt index. We also note there is no evidence of a

[3] NERA report, Cost of debt at RIIO-2, Prepared for the ENA (March 2019)
[4] Report by NERA prepared for the ENA, *Halo Effect and Additional Costs of Borrowing at RIIO-2, September 2019*

halo effect in energy networks and NERA has undertaken updated analysis and finds there is a negative halo effect when considering the tenor and credit rating of debt issued by energy networks.

We also note that care needs to be taken when considering the most appropriate methodology for implementing a change to CPIH/CPI given the lack of capital markets for CPI linked debt.

In relation to the recalibration, we have interpreted this as an update to the trailing average period. length or anchor point for a trombone or mix between A and BBB weighting. Should be left open for BPs but should look at debt costs, credit rating and additional borrowing costs, as detailed above.

47. We also welcome views on our proposed approach to setting allowances for the cost of equity, as well as our proposal to move away from RPI.

Cost of equity

We have summarised our main points on the cost of equity below, please also see our response to the RIIO-ED2 Sector Specific Consultation for further detail.[5] Ofgem has set the cost of equity too low for RIIO-ED2 as our sister company, SHE Transmission plc, set out in their consultation responses including the evidence provided from the ENA. We believe Ofgem's cost of equity range has been incorrectly set and that they should be moved significantly up and also should aim towards the upper end of a designated range. We are supportive of two steps of Ofgem's methodology for setting the cost of equity, namely using the CAPM and relying on cross checks. However, Ofgem has not provided sufficiently robust or compelling cross check evidence to justify their range for the cost of equity.

Areas we believe Ofgem has failed to consider more fully include the methodology for deflating nominal Total Market Returns (TMR) to real, ignoring appropriate and reliable beta evidence on comparable companies and reliance on poor cross-checks. For example, Ofgem has relied on Investment Consultants rate of returns but Oxera[6] highlighted in their report for the ENA that this is in appropriate and weak evidence. At best this evidence sets the lower bound once adjusted for geometric to arithmetic averages. Ofgem has ignored strong evidence regarding asset risk premium and debt risk premium presented by Oxera.[7]

Cost of equity indexation needs to be considered and developed further before being implemented. Cost of equity indexation using the risk-free rate (RfR) is a new regulatory innovation and should follow the same high bar set for cost of debt indexation. Implementing this methodology has some practical limitations, particularly given the academic debate surrounding the relationship between the Equity Risk Premium (ERP) and TMR for changes in the RfR.

Furthermore, Ofgem should not be applying any downward adjustment to allowed returns. The overall financial package and range of returns is unclear and therefore the cost of equity cannot be set based on any expectation of future performance until this is clearer. There are existing mechanisms and regulatory

[5] RIIO-2 Sector Specific Methodology Consultation, Scottish and Southern Electricity Networks, 14 March 2019, section 2.6
[6] Oxera report, Review of Ofgem's initial cost of equity proposals for RIIO-2, Prepared for the ENA, (May 2018)
[7] Oxera report, Review of RIIO-2 finance issues – Asset and debt risk premiums, Prepared for the ENA (March 2019)

tools in place to address any uncertainty in the price control. These established mechanisms, such as reopener mechanisms, the cost assessment and incentive target setting, are in place to continue to drive performance, recognise good performance and deliver for customers. As with Return Adjustment Mechanisms (RAMs), which are discussed at response 48, there is no clear justification or evidence that this new regulatory innovation is of benefit to customers more so than refinement of existing mechanisms. Ofgem has sought to include several new mechanisms in RIIO-ED2 which inadvertently overlap and are being used to address the same perceived problems from RIIO-ED1. How these mechanisms interact is complex and therefore dampens incentives to the longer-term detriment of customers.

We also note that a shorter price control of 5 years alleviates some of the concern raised by Ofgem in relation to network performance. We have highlighted in the past that outcomes from RIIO-ED1 are in line with Ofgem expectations as noted by CEPA's study[8] for Ofgem and summarised in our RIIO-ED2 Framework Consultation Response.[9] We therefore believe that the evidence supporting the introduction of such a mechanism does not exist while leading to poorer outcomes for customers.

Indexation

The transition to CPIH from RPI should be NPV Neutral across all aspects of the price control with care taken to mitigate value leakage from the transition. Ofgem should not use this transition to increase short term cash flows to support financeability metrics at the expense of longer term financeability and a lower headline cost of equity below market evidence. Of greatest concern is the observation that Ofgem appears to be relying on an immediate switch to CPIH from RPI to support cash flows during RIIO-ED2.

Return adjustment mechanisms

48. Finally, we would like to hear stakeholders' views on our proposed introduction of a 'sculpted sharing factor' in instances of high out- or under-performance, or whether an alternative mechanism could be more effective.

Our general view on RAMs is that they are akin to a tax on effort. Furthermore, they have a distortionary impact on incentives. Further detail is summarised below and in our response to the RIIO-2 Sector Specific Consultation.[10]

We note that RAMS have not been justified through a full and clear regulatory impact assessment and we continue to believe they are damaging to customers in the long term. To date, the performance of Networks has led to improved cost efficiency, productivity and customer service and the introduction of these mechanisms do not drive this performance any further. Ernst and Young (EY) complete a study for

[8] CEPA report, Evaluation of RIIO-1, Prepared for Ofgem (2018)
[9] RIIO-2 Sector Specific Methodology Consultation, Scottish and Southern Electricity Networks, 14 March 2019, section 2.6
[10] RIIO-2 Sector Specific Methodology Consultation, Scottish and Southern Electricity Networks, 14 March 2019, section 2.6

the ENA[11] which concluded these mechanisms were inferior to existing mechanisms and adversely affect customers in the long term due to the distortionary and behavioural affects. In this report, they stated:

> "The costs and benefits of these mechanisms, and the risks and uncertainties associated with them, need to be considered carefully, taking into account the objectives that RIIO-ED2 is trying to deliver, the principles of good regulation and whether those objectives could be more effectively achieved using some of Ofgem's existing tools."

EY's conclusion also stated that "Our assessment of the fair returns mechanisms summarised above tends to suggest that none of these mechanisms is clearly going to create net benefits for customers".

Ofgem's concerns around deviations from expectations at the start of the price control can be addressed by way of a reopener mechanism and a shorter price control, both of which are available to Ofgem for RIIO-ED2.

Furthermore, it should be noted that higher returns do not always equate to higher bills. If a company were to spend at allowance levels and not drive efficiencies, bills would be higher versus a company which drives efficiencies and innovative solutions, driving down cost. In addition, in CEPA's study of RIIO-ED1 for Ofgem in concluded there was little evidence of errors which caused excess returns.[12] The CEPA report shows there are limited issues in RIIO-ED1 with none requiring wholesale changes to the RIIO framework, such as RAMs.

In relation to the sculpted sharing factor in particular, this is the most appropriate of the RAMs proposed as it looks at individual company performance as opposed to a sector approach which would have resulted in performance being influenced by other companies. Although this is the most sensible option in terms of RAMs, we do not support its implementation given lack of justification of the need in RIIO-ED2.

[11] Evaluating the need for, and strengths and weaknesses of, fair returns mechanisms for RIIO-2, Enrst and Young, April 2018
[12] CEPA report, Evaluation of RIIO-1, Prepared for Ofgem (2018)