Scottish & Southern Electricity Networks

RT2-GOV-002

RIIO – 2 Planning

SSEN Response

Open letter on the RIIO-2 Framework

12 July 2017

Introduction

SSEN welcomes the opportunity to provide comment at an early stage in the development of the RIIO-2 price controls. Our response to the specific questions in the open letter follow, but below we provide an overview of our thinking in relation to the objective and five principles that Ofgem propose for the framework review.

In general, SSEN is supportive of the outputs-led RIIO framework and believes that it is successfully incentivising network companies to improve the service that they provide to current and future energy customers. Energy networks are critical national infrastructure and it is evident that the regulatory model is supporting the timely, cost-effective investment in these networks that is required by the broader economy. As the RIIO model has been implemented for less than five years, it is SSEN's view that this framework review should seek to make incremental improvements rather than wholesale reform.

We note that there are concerns about the cost of networks to customers and whether licensees' returns are "fair". This is an important concern to be openly addressed through the RIIO-2 price control process. Central to this debate must be an objective view of residual risk. As with all elements of the price control settlement, finance decisions should be evidence based and follow consultation. Accordingly, SSEN is not comfortable with Ofgem's early assertions that "returns will be lower" and the "price control tougher" – this may ultimately be true, but should be a conclusion, not a starting point.

We look forward to an open and constructive dialogue with all stakeholders over the coming months that will inform the Framework Decision in Q2 2018.

Proposed objective: "RIIO-2 will ensure regulated network companies deliver the value for money services that consumers want and need."

One of the great strengths of the GB model of economic regulation has been its success, through targeted incentives, in driving behavioural change to meet customers' expectations. Most recently, under the RIIO-1 framework, the key areas of focus have been customer service and reliability. This builds upon a long term sustained regulatory focus on efficiency to minimise costs without compromising service outputs.

Customers' interests, considering both current and future energy consumers, have been structured around the three elements of the energy trilemma: affordability, security of supply and sustainability. The six outputs of the RIIO model reflect a balance of the three elements:

Energy Trilemma	RIIO Outputs
Affordability	Customer Service Social Obligations
Security of supply	Reliability and Availability Connections
Sustainability	Safety Environment

It is SSEN's view that the energy trilemma should remain central to the objective of the RIIO-2 framework. Moreso, we argue that Ofgem should continue to strive for a symmetric balance between the three elements of the trilemma. This is important in the context of the long life of network assets and the careful attention to avoiding intergenerational transfers (either of cost or service). We recognise that this can involve making difficult decisions: for example the attention that has been given under the RIIO-1 price controls to the balance between short term affordability and long term sustainability. Such difficult issues will continue to arise and the RIIO framework provides a forum for these to be debated in an open and transparent manner.

A further, and perhaps hidden, strength of GB economic regulation has been the endeavour to be data and evidence driven in decision-making. From the perspective of the end consumer, this allows for a welcome transparency between costs and outputs – the setting of targets and publication of annual performance against those targets is a clear measure of performance. Cost benefit analysis, in particular, is a powerful tool to assess the value of proposed outputs. Subjective or retrospective regulatory tools (such as the use of expert panels or within-period guidance) are a much weaker tool for driving the behavioural changes that customers expect.

The objective for the RIIO-2 framework proposed by Ofgem does not, in our view, give sufficient visibility to the energy trilemma or evidence based regulation. We consider these factors further below.

Principle 1: "Giving customers a stronger voice in setting outputs, shaping and assessing business plans."

SSEN strongly supports the outputs-led approach of the RIIO model and the six outputs: safety, reliability and availability, connections, environment, customer service and social obligations. The focus on the output (rather than the input) has strengthened the incentive to take novel approaches to both operations and capital delivery. For SHE Transmission in particular, the RIIO-T1 connections outputs (MW and MVA) have enabled us to deploy new technologies that speed up and, in some instances, lower the cost of delivery. This would have been discouraged (or even prevented) under an inputs-led approach.

Evidence based determination of appropriate outputs, in some instances as part of an uncertainty mechanism, is an important part of the price control process. Outputs that are determined within-period give limited opportunity for delivery (for example the current RIIO-T1 Network Output Measures). Thus SSEN would argue for clear, measureable outputs that are sustainable for the duration of the price control period. We agree that customers should contribute to the definition of the outputs with Ofgem playing an important role in ensuring that future customers have as strong a voice as current customers. We believe that RIIO-2 should strengthen the existing role of cost benefit analysis to include for socio-economic factors (including the environmental impact).

Customers should also contribute to the determination of the strength of incentives for under or over delivery. The calibration of financial incentives (both the target and the reward/penalty rate) is one of the more difficult parts of economic regulation – too weak and the licensee will not invest to make the desired performance change; too strong and there is the potential for undeserved penalties or rewards. Where calibration is successful then customers benefit from meaningful service improvements. As far as possible, such calibration exercises should be evidence based and the underlying analysis openly debated. In this vein, subjective assessments of performance (such as expert panels) should be avoided.

We contend that "customers" should be "customers, communities and affected stakeholders". There is rightly an industry focus on the energy bill and affordability to current customers. As a consequence the impact of networks' actions on current customers is, and will remain, an important component of the RIIO framework. We support Ofgem's role in facilitating stakeholder discussions to ensure a consistent approach to raising the awareness of end customers about the underlying components of their energy bills. For example,

in electricity transmission, there is currently no common methodology for determining and presenting customer bill impact.

However it is SSEN's view that the end customer should not become a disproportionate driver of the RIIO-2 Business Plans and the wider community that is impacted by networks should also have a voice. This includes both direct (e.g. cost) and indirect (e.g. socio-economic) impacts on different groups. During the RIIO-T1 period, SHE Transmission has engaged widely with communities and affected stakeholders about its investment plans. Such engagement, and responding to the concerns raised, has been essential to the delivery of the investment programme. This engagement can significantly impact on outputs delivered, highlighting issues that might not be revealed through engagement with end customers alone.

Principle 2: "Allowing regulated companies to earn returns that are fair and represent good value for consumers, properly reflecting the risks faced in these businesses, and prevailing market conditions."

SSEN is supportive of prioritising justifiable and fair returns reflective of the level of risk and performance that network companies deliver. We believe Ofgem must continue to operate as an independent regulator and seek to calibrate returns considering the price control settlements holistically. RIIO-2 should rely on an evidence based approach to determining the appropriate cost of capital bearing in mind the level of risk inherent in the forthcoming period, the structure of the regulatory settlement overall, and seek to avoid polluting the process from adjacent price control reviews (such as PR19 in Water). Calibrating opportunities for networks to earn additional returns as a result of strong performance must rely upon a robust methodology which is carefully constructed and consulted upon throughout the period to ensure the level of returns is deemed fair to consumers and licensees. We also advocate for a review of how network performance is presented in RIIO-2 and consideration of whether Return on Regulatory Equity (RoRE) is indeed the most appropriate measure.

We strongly believe that Ofgem should ensure it considers all previous and new evidence when setting the cost of capital components. Any conclusions drawn must be a result of such a process, as opposed to Ofgem's early assertions that "returns will be lower" in the absence of the appropriate procedural requirements. We believe customers have benefited from the approach in RIIO-1 to setting the cost of capital, where allowances overall have reflected market conditions albeit more explicitly for the cost of debt.

We continue to support the use of RPI as the appropriate inflation indexation for RIIO-2. However, we recognise that the inflation measure will be reviewed to consider changes made by the ONS in relation to CPIH as the preferred measure of inflation. This is a complex and interdependent element of the price control and must be considered in that context, bearing in mind the historical circumstances of networks including their sources of funding and investors.

All other financial parameters such as asset lives, capitalisation rates and tax allowances should be considered accordingly as part of the process for RIIO-2. We recognise that work may be required in relation to asset lives following the CMA appeal on ED1, but we continue to support the previous conclusion of a 45 year asset life in the absence of any new evidence. We also believe that the principle of a price control package established 'in the round' must continue to be recognised in the development of RIIO-2.

Principle 3: "Incentivising companies to drive consumer value by shaping or proactively responding to changes in how networks are used and services are delivered."

SSEN's experience is that the RIIO model is responsive to changing customer need. We have experienced this most acutely under the RIIO-T1 settlement. Our 2012 Business Plan forecast significant growth to accommodate low carbon generation, with a wide range of potential outcomes depending upon the needs of users. Through well-designed uncertainty mechanisms and incentives, SHE Transmission has delivered investment for customers and responded effectively to changes in the policy environment.

One consequence of the changing policy environment has been the **move towards whole system planning.** During RIIO-1 there is already a strong and growing collaboration between transmission owners, the transmission system operator and distribution licensees, along with Government and affected stakeholders (for example the ENSG, forums for the Scottish islands, ENA's Open Networks project). Of note, in Scotland we also collaborate with the gas network on a "whole energy" basis.

Taking a whole system approach relies upon transparent, evidence-based totex cost-benefit analysis and shared output objectives. SSEN has growing experience in taking such an approach to the accommodation of flexible connections and as a consequence has, for example, modified Grid Supply Point works with benefits to customers, local communities and wider stakeholders. There are opportunities to encourage this approach in RIIO-2 by setting targeted outputs and incentives.

The quality of system operation and planning decisions is fundamentally affected by the information asymmetry between the network and the customer. Customers' requirements can change quickly and non-predictably (e.g. in response to Government policy or markets such as with solar, electric vehicles or embedded benefits). Industry rules can (inadvertently) incentivise customers to send false signals (e.g. the "cliff edge" in underwriting price signals). This reinforces the longstanding principle that networks make decisions based on best information available at the time.

From SSEN's perspective, we disagree that the "scale of uncertainty has changed for RIIO-2". There has been significant uncertainty and change during the RIIO-1 period (and DPCR5 before that) and, taking the long view, it could be argued that change is one of the only constants in the energy sector. While there is evident focus on the current and future change associated with the role of the distribution network, parallels might be drawn with "the dash for gas", NETA and BETTA, the growth of low carbon generation and opening up of market segments to competition. All of these past changes have been accommodated within the GB regulatory framework – and, in parallel, costs have gone down and service levels gone up.

There will be uncertainty and further change in RIIO-2, but SSEN's current view is that this can be accommodated through considered, well-calibrated uncertainty mechanisms.

SSEN is not clear on the case for ED2 and T2 alignment. The open letter identifies both costs and benefits. The benefits described – "improved coordination and greater information synergies" – feel intangible and might be able to be delivered by other means, e.g. operational engagement. The scope of the potential costs should also include increased uncertainty/risk and the transaction costs of roll-over. We would welcome further analysis and quantification of these points to inform the decision.

Principle 4: "Using the regulatory framework, or competition where appropriate, to drive innovation and efficiency."

RIIO, and RPI-X before that, has a strong track record of driving innovation and efficiency. As many independent analyses and commentators have observed, the GB regulatory framework has resulted in costs going down and service levels going up. This outcome is underpinned by the cost scrutiny undertaken by Ofgem at the price control, along with the strong incentives for cost efficiency within the price control period. Thus 'gold plating' has largely been avoided (unlike in other regulatory models such as rate-based). SSEN believes that it is important Ofgem maintains a strong focus on costs and outputs – in particular ensuring that service improvements are efficiently delivered.

The cost assessment toolkit is mature and key strength of the RIIO framework. The Information Quality Incentive (including sliding-scale sharing factor) is a powerful tool that targets information asymmetry. SSEN is not aware of a compelling alternative to the toolkit and IQI (supplemented by fast track incentives under RIIO). Models of 'notional' networks or 'whole cost' benchmarking are challenging with significant forecasting errors when translated into the 'real' network with, amongst other things, regional factors, legacy assets and varying performance profiles. Regarding Ofgem's proposal to "take an independent view of the likely costs" – we welcome further discussions to understand how this would differ from IQI and also how such a view would take account of outputs.

The introduction of a specific innovation stimulus has been a positive development to the regulatory model. The variety of approaches, and continual development of the stimulus, has contributed to the success of the programme. It is SSEN's view that the focus placed by Ofgem on innovation, supported by the funding mechanisms, has resulted in a step change in activity in the sector. Importantly, the innovation funding mechanisms under the RIIO model have not proven the sole driver of activity with third party involvement (including supply chain collaboration) also making significant contributions. We support Ofgem's approach of keeping the regulatory framework for innovation under review and making changes as required.

Competition has played an important role in the evolution of the regulatory framework. SSEN has supported, and indeed participated in, competition in networks and developing the competitive supply chain. However, we remain firmly of the view that competition should be implemented only where appropriate. The benefits to current and future customers should be evident and supported by a strong policy and regulatory framework. Extension to competition needs to be implemented with due care to the wide range of Government objectives regarding the energy market in particular and critical national infrastructure more widely. Ofgem generally adopts a "light touch" approach to the regulation of new entrants – despite the long term nature of the assets involved – and does not have the same powerful regulatory tools to continually drive year-on-year cost reductions and performance improvements.

The eight year duration price control period has had positive benefits. For SHE Transmission, currently midway through the control period, the longer duration control has provided much needed regulatory stability during intense growth driven by low carbon generation. This has been possible because of the careful assessment of risk and targeted uncertainty mechanisms that are at the heart of the RIIO-T1 settlement. It is our view that eight years is an appropriate duration of price control for electricity transmission.

SSEN recognises that the duration of the price control period is a balancing act between the risk of forecasting errors and the management of exogenous uncertainty. We agree that it is right that Ofgem consider this issue carefully and might come to different conclusions for different sectors at different times. In this consideration, however, we would encourage due regard to the cost (time, money and distraction) of the price control process. We would also urge against an enhanced mid-period review that to all intents and purposes becomes a price control.

Principle 5: "Simplifying the price controls by focusing on items of greatest value to consumers."

SSEN is keen to participate in open fora to establish a common view on consumer priorities. As described above, we further believe that this debate should be wide enough to include customers, communities and affected stakeholders. It is our experience that stakeholders' priorities can change by affected group, geographic location and time. Thus there is no simple "one size fits all" view of the customer drivers for all energy networks. In developing its RIIO-2 framework and associated Business Plan requirements Ofgem must recognise that variability (where there is good evidence to support it).

Variations between networks and their customers also make it challenging to set prescriptive Business Plan templates and guidelines. However, SSEN believes that clear guidance from Ofgem on Business Plan content and presentation is essential to the efficiency of the price control process and the engagement of customers, communities and affected stakeholders. Such guidance should be prepared and consulted upon at the earliest opportunity to allow networks to use it during Business Plan development and engagement activities.

As with all aspects of the price control process, SSEN contends that Business Plans should be evidence based and, hence, Ofgem's assessment criteria should be evidence based. Early disclosure of the assessment criteria would again, in our view, assist with the development of Business Plans that are accessible and easily comparable. A cross-sector effort to simplify regulatory terminology would be welcome.

We can provide the information Ofgem needs: this is easier if the requirement is clearly described in advance, and also if there is dialogue about what it will be used for. In considering this issue, we would encourage Ofgem to maintain an ongoing dialogue that takes into account the implications of the request (cost, data security, confidentiality/competition, risk). We would welcome further advice from Ofgem regarding the purpose of the data request and to collaboratively devise a strategy to provide more value in targeted, timely data both during the price control itself and subsequently.

Fast track is a powerful incentive to address information asymmetry and instill a competitive discipline in the price control process. There are evidently lessons to be learned about the application of fast track during the RIIO-1 process, particularly in light of the changes to the appeals process. It is SSEN's view that, while the process might be flawed, the incentive benefits should be retained. One means to doing this might be a clear distinction between "light touch" and "full scrutiny" following submission of the first Business Plan, with a strengthening of the rewards and penalties for Business Plan quality. Regardless, it is essential that Ofgem has sufficient time in the process to make justified, evidence based decisions.

Question 1.
Do you agree with our overarching objective for RIIO-2 and how we propose to achieve it?

In RIIO-1 there was a careful balancing of objectives across affordability, security of supply and sustainability (also known as the trilemma). Whilst there will rightly be a debate about the relative weights given to a range of objectives for RIIO-2, we believe that it will be important to continue with this balanced approach as we anticipate an uncertain policy and commercial environment during RIIO-2.

A great deal has been done to connect renewable generation, but there remains a lot of potential for future investment in green technology, whether wind or tidal and, as network operators, SSEN will be expected to connect these generators to the grid and ultimately deliver the electricity generated to end customers. Similarly, there is likely to be significant political pressure for us to invest ahead of the take up of electric vehicles. Moreover, the wider political and market uncertainties linked to the process of the UK withdrawing from the EU mean that investment in security of supply is likely to be of even greater importance in RIIO-2 than has been the case in RIIO-1. This wider set of objectives is more readily accommodated within the existing balanced approach than it would be within the proposed narrow focus. The nature of the overarching challenge set by Government for the sector during RIIO-1 is captured in The National Infrastructure Delivery Plan 2016-2021, published by The Infrastructure and Projects Authority in April 2016.

> *"In the current Parliament and beyond, they [electricity distribution and transmission networks] face an unprecedented investment challenge to maintain a reliable, secure network, and deal with changes in demand and generation that will occur in a low carbon future. RIIO is designed to help ensure this is delivered at a fair price for consumers."*

We are only part way through the investment programme which we agree is necessary to secure the long term energy security of the UK and would caution Ofgem as to the impact on investment conditions of a significant shift in the stated objectives of the regulatory framework. An approach that is consistent with that of the Government is clearly preferable to a situation where network operators are faced with a different set of objectives. We believe that it is possible to continue to deliver in the interests of end customers within a broader, more encompassing set of balanced objectives which more accurately reflects the requirements on the industry. We appreciate the value of more effectively explaining how our activities serve the interests of end consumers and this is something which we look forward to developing during the work on the price control framework.

We ask that Ofgem recognises that for network companies it would be better to set objectives in the context of customers, communities and affected stakeholders. Whilst we appreciate Ofgem's intention in highlighting the importance of end customers, those customers engage with our activities only as part of a wider stakeholder community. SSEN agrees with the importance of delivering in the interests of end customers, but an overly narrow focus on end customers (even a primary focus) fails to capture adequately the breadth and diversity of the demands of the wider community of stakeholders, including Government, on network services. We believe that a focus on customers, communities and affected stakeholders provides a more accurate description of the demand side which would be consistent with the retention of the current balanced trilemma approach that has served stakeholders well.

Ofgem will need to consider carefully the practicalities of mediating the often conflicting views of the wide range of affected stakeholders. Networks can not be expected to address every 'ask'. It is important for the process and for stakeholder buy in and Network business plans that this is clearly established from the start. It must be transparent to avoid any party (Ofgem or network) being accused of ignoring stakeholder input.

Ofgem must ensure that networks making investments for 20-40 years are judged on that timeframe and not against current and continually changing wider market conditions. Therefore prevailing market conditions are

relevant, but so are historic and future market conditions. Following current conditions will lead to increase in uncertainty and perceived risk, ultimately having a negative impact on end customers.

In the context of potentially increasing the role of competition it is important to ensure clear distinction is made between competition which identifies efficient delivery of a solution and competition to determine the solution. Network operators are already benchmarked / tested for delivery – it would be inefficient to run that twice during a price control. The SO/DSO model offers the network operators the ability to encourage competition for the solution. There is therefore no evident need for 'more' competition in this context.

Question 2.
How can we strengthen the consumer voice (primarily end-consumers), in the development of business plans and price control decisions?

Ofgem's focus on the end consumer (primarily) is understandable but we believe that a focus on customers, communities and affected stakeholders provides a more accurate description of the demand side and would encourage a consistent use of this terminology. This wider definition of the demand side more accurately describes the interactions we experience in practice and reflects our stakeholder engagement process when developing proposals and business plans.

We are very supportive of the need to increase the input from customers, communities and affected stakeholders in the business planning process. We agree with Ofgem that there are interesting alternative examples of engaging consumer voice. However the WICS application is more relevant for the SO price control and the CAA process only workable with a very limited a discrete small group of customers, airlines. This is more challenging in energy when we try to engage consumers (as distinct from suppliers or generators).

However, we believe that there are a number of steps Ofgem can take to enhance the role of customers, communities and affected stakeholders in the development of business plans and price control decisions. We set out some of those potential activities below.

* **Increase energy literacy**: We note that Government places obligations on Ofcom to promote media literacy to further the ability of citizens and consumer to participate in the shaping of the UK's media sector. Given the increasing levels of public interest in energy policy, we would welcome Ofgem accepting similar responsibilities in relation to customers, communities and affected stakeholders. Increased energy literacy would serve to strengthen the ability of the wider set of stakeholders to engage in an informed and effective manner. This would be an extension of work that Ofgem undertakes already in relation to the retail market and would be consistent with the messages from Ofgem at the consumer event run in July. Ofgem should be able to build on this work, reaching out to incorporate domestic, small SMEs and larger customers of network operators, such as generators.

Ofgem's proposal to publish a Strategic Performance Overview is a welcome initiative and should complement our own efforts to raise awareness of the challenges we face and improve understanding of the processes that lie behind the decisions we take (for example SHE Transmission's recent publication on future energy scenarios in the north of Scotland). We would encourage Ofgem to continue along this path of increasing transparency. For instance, we would welcome an agreed methodology for effectively explaining to end customers the different components of their bills. This will need to be accompanied by an agreed consumer awareness programme. In particular, there is a need to ensure that consumers understand how network performance is measured.

*** Ensure that outputs are measurable**: To further improve the effectiveness and impact of customer engagement it is important that outputs being agreed can be objectively measured. That would improve the ability of network operators to report to customers in a consistent way. Ensuring that outputs are measurable would not only make engagement more effective but would make discussions relating to trade offs between outputs and objectives more meaningful and objective.

*** Ensure that stakeholder representation is balanced and properly focussed**: Ofgem needs to ensure that those informing target and output setting are also those informing willingness to pay (wtp) – a mismatch in groups expressing wtp and setting an output is fatal in achieving a balanced price control package. It is important that representation is also drawn from those groups whose objectives are the delivery of the UK's industrial strategy and critical national infrastructure.

*** Stakeholder engagement criteria**: Ofgem should set out criteria for the network companies' RIIO-2 engagement; for example the minimum criteria set out in the Stakeholder Engagement Incentives:

- The network company has a comprehensive and up-to-date stakeholder engagement strategy.
- A broad and inclusive range of relevant stakeholders have been engaged. This specifically includes engaging with challenging or hard-to-reach stakeholders (e.g. community energy).
- The network company has used a variety of appropriate mechanisms to inform and engage their stakeholders – these have been tailored to meet the needs of various stakeholder groups, and are fit for purpose in allowing a detailed analysis of a breadth of stakeholder perspectives.
- The network company can demonstrate it is acting on input/feedback from stakeholders.
- The network company can demonstrate that stakeholder engagement has led to positive outcomes for stakeholders.

Question 3.
How should we support network companies in maintaining engagement with consumers throughout the price control period?

Ofgem has an important role to play in creating an environment for effective engagement. As per our answer to Question 2, there would be considerable benefits from Ofgem accepting a role in promoting increased energy literacy, extending the work already started in the retail sector. This would strengthen the ability of a wider set of affected stakeholders to engage effectively with network operators. As part of this responsibility, Ofgem could usefully serve to facilitate cross-sector engagements, such as round tables, with relevant stakeholders, for instance where there was a consultation on a significant new policy proposal. Similarly, Ofgem could serve to facilitate and aggregate research on the behaviours and expectations of different stakeholder groups, including the Government. Not only would this promote a consistent understanding across the industry, it would enable that wider set of affected stakeholders to more effectively engage with and inform the wider policy debate on energy policy.

Question 4.
Does this structured approach to defining outputs provide the right level of clarity around delivery?

We strongly agree that the structured approach to defining outputs provides the right level of clarity around delivery. For example, the outputs focus in RIIO-T1 for connections and boundary capability has provided a clear focus on delivery of an upgraded transmission network capable of supporting a low carbon network. This approach has allowed SHE Transmission to focus attention on the connection of over 1GW of renewable generation during RIIO-T1 to date, with an expectation that circa 3GW will be connected by the end of the period. We also agree the range of output categories ensures the correct level of focus across the broad spectrum of business activities undertaken by TOs. Where there is a case for setting secondary deliverables

targets, care needs to be taken to ensure enough flexibility is available to the network operator to encourage delivery of the most efficient and economic solutions.

Ofgem should recognise the learning from the DPCR5 close out process. The RIIO framework will need to allow sufficient time for the development of agreed output methodologies. In DCPR5 there was considerable confusion caused by leaving the methodology to the end. RIIO-ED1 is an example of the considerable time which will be required to develop methodology during the price control and we need to ensure that this learning is recognised and accommodate it in the framework for RIIO-2.

It is worth drawing out the example of NOMs in electricity transmission to illustrate the difficulties for all stakeholders, including Ofgem, resulting from the failure to establish the agreed methodology at the outset. We are more than half way through the RIIO-T1 control and yet there is still no agreement on NOMs. We can appreciate the desire of Ofgem to simplify the price control, but great care needs to be taken to ensure that a similar situation does not arise in RIIO-2.

Question 5.
How can the outputs framework be improved, including the introduction of additional output categories for example around efficient system operation for distribution network companies?

Our view is that all outputs, and the way in which they are assessed, should be measurable and clear to all parties. This is particularly important where delivery against an output will be judged by a third party. In this situation there needs to be clear and transparent rules in place to ensure fair and consistent assessment of output delivery. Care should be taken to ensure that any Business Plan forecast data used to set high level outputs is treated carefully, with mechanisms in place to adjust (if appropriate) in the event of significant change.

Given the ongoing development of Network Output Measures (specifically Network Risk) it would be reasonable to allow this working group to complete its efforts in this area and we would not expect any significant changes as a result of the RIIO-2 proposals. Specifically, the Risk Trading Model and the ability to substitute projects are vital to ensure that we can deliver appropriate risk reductions at best value for the customer and respond to changing circumstances which are outwith our control.

In some instances there may be opportunity to avoid delivering outputs by using innovative or alternative approaches and therefore it may be, in some circumstances, appropriate to incentivise delivery of alternative outputs (e.g. non traditional solutions).

Question 6.
Did the outputs target the right behaviours?

A key factor in delivering efficient and innovative transmission solutions is quick and collaborative decision making. This has been a key theme for SHE Transmission during RIIO-T1 highlighted by development/delivery of a number of initiatives:

* Early connection of a number of schemes in advance of their original connection date through installation of interim solutions (final solutions and outputs delivered at later dates).

* Development and delivery of new technology across a number of key schemes – new composite pole technology (Dornell), use of high temperature OHL conductor solutions (Bhlariadh/Beinneun).

* Delivery of efficient connection solutions – e.g. single transformer used to connect two separate generation schemes in collaboration with the customers (standard approach would be a single transformer per generation scheme).

SSEN's view is that delivery of the above initiatives has definitely been facilitated by a high level outputs focus.

There have been examples in RIIO-T1 where the outputs delivery has changed significantly since the agreement of the business plan (e.g. MORL OFTO connection). Our focus in these situations is always to provide the most economic solution. A pragmatic view should be taken in respect to the change in outputs delivered from the original plan and should take account of the category costs and outputs at a portfolio level with consideration of the scheme inputs. In some instances we agree there may be merit in an inputs based approach to determine expenditure but care needs to be taken to ensure mechanisms are in place to manage change and also ensure the most economic and efficient solutions are deployed.

Question 7.
How can we address areas of expenditure for which a clear output is difficult to define?

Where outputs are difficult to define, our view is this could under limited circumstances be covered by an inputs based assessment with associated cost allowance. Given the nature of our operating environment, care needs to exercised here to deal with changes to the business plan. In our RIIO-T1 Business Plan we have experienced significant change in two areas where an inputs approach was taken (Offshore wind and Demand connections – both influenced by factors external to our business). Given the potential complexity of managing this approach and likely changes through the price control, our view would be to limit this approach to areas where it is absolutely necessary and there is a higher degree of certainty. A series of prescriptive outputs will constrain a network's ability to make – and then be judged – on investment and operational decisions. It would also limit TOTEX flexibility – limit Capex / Opex equivalence.

Question 8.
Were the output targets and associated financial incentives set for RIIO-1 appropriate, reflecting what consumers value and are willing to pay for?

What consumers considered appropriate and valuable for RIIO-1 may have changed for RIIO-2 as consumers' preferences and lifestyles change reflecting the impact of technology, such as smart meters, electric vehicles, distributed generation, and flexible energy networks. As such the setting of output targets and understanding the consumer's willingness to pay and for what will require comprehensive engagement, consultation and pragmatic debate with consumers, suppliers, generators, affected stakeholders and politicians.

The outcome of the BGT appeal to the CMA for RIIO-ED1 illustrated that Ofgem undertook a reasonable approach to the timing and methodology of setting incentive targets for electricity distribution. In relation to other networks such as electricity transmission, Ofgem needs to develop, in conjunction with wider industry, appropriate incentives at the outset of the price control strategy decision to enable companies sufficient time to develop plans to deliver the behaviour changes that are being incentivised.

In relation to output targets, this must be set as part of the price control settlement on the basis of a well-justified Business Plan submission. There is likely to be scope for a more developed framework for setting outputs as well as broader outputs while retaining a focus on the most important elements of a network's purpose for consumers and wider stakeholders.

Question 9.
What changes in the RIIO framework would facilitate returns that are demonstrably good value for consumers?

We continue to support incentive based regulation and there is a plethora of evidence that demonstrates that customers have benefited from this type of regulation. In order for this type of regulation to remain effective, the potential to earn returns above the cost of capital is critical as a means to attract investment and drive the right behaviours for the benefit of consumers in the long term. As we have articulated previously and in this response, a comprehensive study of the consumer's willingness to pay will help move RIIO forward in a way that should clearly link value and costs to consumers. The visibility and understanding of network performance relative to the value earned by consumers will establish a clear linkage of returns that are good value for consumers. The introduction of RIIO Accounts, simple and clear performance reporting, and an evidenced based justification for the willingness to pay would help RIIO-1 through to RIIO-2.

In terms of the level and distribution of returns for network operators, we believe Ofgem needs to ensure that RIIO-2 is configured in a way which allows high performing companies to achieve returns in excess of the cost of capital. We do not believe that any form of league table across networks is appropriate given it would result in consumers paying substantially less than they were willing to pay for the level of service they are receiving. Absolute incentive targets as set in RIIO-1 is more appropriate, and the fact that networks are able to perform well across the board simply illustrates that RIIO-1 is achieving its objectives of driving improved performance for the consumer while fairly rewarding networks.

As part of the level of the cost of capital and calibrating the range of returns that can be earned by networks, Ofgem must factor in a more robust and comprehensive measure of the level of risk to ensure a fair and comparable estimate of returns. RIIO-2 should build upon the consumer-based incentives in RIIO-1 as well as encouraging companies to submit well-rounded business plans. Such a framework should drive value for customers and should ensure that networks receive a fair return based on their performance.

Question 10.
How can we minimise the scope for forecasting errors?

In relation to forecasting errors either in totex allowances or for financial parameters, in the absence of a substantially shorter price control (which we do not advocate for), Ofgem would need to effectively utilise uncertainty mechanisms. SSEN supports the existing structure of an eight year price control, with the potential for a targeted mid-period review, and the range of comprehensive and well defined uncertainty mechanisms. For example, in RIIO-T1, the Strategic Wider Works (SWWs) uncertainty mechanism has enabled a substantial degree of investment through a rigorous process while avoiding setting ex-ante totex allowances for projects which may significantly differ in scope or may not proceed at all. Additionally in RIIO-ED1, the uncertainty mechanisms for submarine cables, rail electrification and the new energy solution on Shetland have provided a platform for SSEN to manage risks and for Ofgem to consider more robust data and evidence in setting allowances.

Separate from totex related uncertainty mechanisms, we believe there is a significant degree of forecasting accuracy that has been introduced in RIIO for financial parameters, namely the cost of debt indexation mechanisms. We believe that these mechanisms have been robustly set on the basis of detailed evidence and analysis.

To mitigate over-providing or mis-forecasting of financial parameters, Ofgem must consider current and long-run historical market conditions when setting the cost of equity. For the cost of debt, the mechanism/index

designed for RIIO needs to appropriately reflect the tenor of existing debt, market conditions and the incentives set for raising financing. For example, using a shorter index period may encourage networks to raise financing over a shorter period which encourages a riskier financing profile on the maturity of debt and hence, higher cost of equity.

Question 11.
What constitutes a fair return for a regulated monopoly network company, and how can we ensure that returns remain legitimate in the eyes of stakeholders?

A fair return should constitute recovery of cost of capital for all companies, with an additional return above the cost of capital for those networks that deliver targets for consumers. As we have set out in this response, Ofgem must establish and justify a clear linkage between the consumers' willingness to pay and the level of service they receive translated into justified incentive rates. This will ensure that returns are fair in the eyes of stakeholders and avoid the ongoing debate around performance across regulated networks.

We do not advocate for a league table form of distributing incentives/penalties to networks given each network has a clear set of outputs and targets to deliver, unlike in an unregulated market. The nature of the price control process stimulates competition and sets the levels of standards and the amount consumers pay for those standards. It is entirely reasonable to expect networks to deliver those standards and hence earn returns above the cost of capital. In any other non-regulated industry, several companies will offer similar levels of quality and value to consumers, thereby providing consumers with plenty of substitutes to choose from. If regulated networks are able to deliver the quality of service to consumers as determined by the price control, then it is entirely reasonable that they should earn fair returns. This concept should form part of the energy literacy development noted above.

Therefore, establishing an environment which encourages competition and rewards companies who are providing a better service should be legitimate in the eyes of consumers as this is what they are used to seeing in competitive markets.

Question 12.
What factors do you think are relevant for assessing and setting the cost of capital so it properly reflects the risks faced by companies?

The cost of capital discourse over RIIO-1 evolved from point estimates to a debate around the appropriate benchmark or indexation method. All components of the cost of capital must be considered individually and collectively bearing in mind the industry sector's profile and risks. We do not support the read across of the cost of capital from other regulated industries as a means to justify the cost of capital for RIIO-ED1, T1 or GD1. We note that Ofwat is undertaking PR19 and have indicated its range for the cost of equity which we do not believe Ofgem can or should be adopting without an appropriate and detailed evidence based focused on Regulated Energy Networks and the risks they face. We have outlined our summary view on each of the key components on the cost of capital below:

* For the **cost of debt**, where the mechanism for indexation has proved an effective approach to allowing efficiently incurred funding while mirroring wider market conditions. We are supportive of developing the cost of debt mechanism for RIIO-2 as appropriate for the outlook for that particular sector, for example, in RIIO-T1 SHE Transmission has undertaken significant capital investment whereby the mechanism used for the cost of debt is reflective of that profile of funding and wider market conditions. This approach benefited consumers by reducing the cost of debt allowance from 2.9% at the start of RIIO-T1 to 1.5% by the mid-point,

conversely it would have protected SHE Transmission's financeability had interest rates increased over the period of funding requirements.

Ofgem should consider all evidence relating to debt issuance costs and the "halo effect", which was widely debated during RIIO-ED1. Allowances should be calibrated on an industry wide basis (on average) unless full justification is available for deviation from these levels. This should avoid rewarding companies with a high cost of debt versus penalising those companies with a low cost of debt (as was the case in RIIO-ED1) unless truly justified from a financeability perspective.

* The **cost of equity** continues to be a matter debated broadly across regulated industries which is unlikely to diminish. We would like to emphasise that while the cost of equity is a key component, it is actually the smaller of the two components of the cost of capital yet continues to absorb a substantial amount of time and debate publicly. We advocate a consultation and evidence based discussion around how we appropriately handle the cost of equity estimates and ensure the level determined during RIIO-2 is justified and fair. The key principles that we believe should be central to any work on the cost of equity are as follows:

1. Long term market evidence must be central to any estimate – Networks invest over the long term and so do investors, therefore their return expectations are based over the long term. Ofgem must seek to mirror this approach as these network businesses are not considered liquid assets in their own right for investors. Any reliance on contemporary evidence or attempt to forecast levels of expected return will introduce estimation/forecast errors which must be avoided.

2. Any estimate must be reflective of the risk of RIIO-2 – The approach to determining the appropriate measure of risk for networks in RIIO-1 was relatively immature and we believe that as part of RIIO-2 the measure of risk must be more comprehensively developed. Any conclusion on the cost of equity will be substantially based on the perceived level of risk through the appropriate measure of risk (more than likely Beta for the CAPM). We believe the view of risk must consider other elements such as the political and regulatory risk bearing in mind the structure of RIIO-2, uncertainties, and the quasi-regulated aspects that may exist.

3. Macro-economic circumstances must be viewed carefully – The current low interest rate environment and low bond yields imply a near zero risk free rate. As such the reliance on such data over an eight year price control gives rise to estimation/forecasting errors and the macro-economic circumstances must be considered accordingly.

The level of **notional gearing** for RIIO-2 across sectors should reflect the calibration of the range of returns based on incentives/penalties and risks. We are supportive of adopting an investment grade credit rating requirement for networks to protect consumers and ensure responsible management of companies financial structure. However, the calibration of the level of notional gearing should be based on the Business Plan submissions and a robust assessment of the range of scenarios that may impact on the financeability of companies.

As we have set out above, the level of risk and financeability metrics are key components in setting the appropriate cost of capital and as such each element must be considered individually and collectively bearing in mind the whole price control settlement and framework.

Question 13.
Can we improve our methods for the indexation of the costs of debt and equity?

As we have set out in our response to question 12, the indexation mechanism for the cost of debt allowance was appropriately calibrated across RIIO-1 sectors. We believe this approach to calibration and adjustment is fair and reflective of Business Plans, regulatory framework, relative risk and market conditions.

We are however cautious about introducing an indexation method for the cost of equity and believe a substantial amount of evidence and analysis will be required to ensure any mechanism is fair and robust. Given the debate around the methodology for point estimates for the cost of equity, we are unsure whether establishing a methodology unchallenged is indeed feasible. We are supportive of work to develop any new and acceptable approaches to determining a more acceptable and robust measure of the cost of equity and hope that Ofgem engages thoroughly throughout the RIIO-2 period. We are concerned at statements in the open letter that "returns will be lower" and the read across from other price control sectors as a means to draw those conclusions especially without any evidence or consultation on these broad conclusions. We welcome engagement and hope these statements are not intended to indicate Ofgem's conclusions prior to the start of RIIO-2.

We have outlined our view on inflation below in the appropriate question.

Question 14.
Are there specific amendments to any core aspects of financeability that we should be considering in light of performance during RIIO-1 and the change in the financial environment?

SSEN believes that the key aspects of financeability are around appropriate scenario testing of the broader price control elements considering totex allowances, expenditure, uncertainty mechanisms, incentives and penalty calibration and the financial metrics such as the cost of capital (including gearing), asset lives, and capitalisation rates. For example, for RIIO-T1, SHE Transmission adopted a capitalisation rate of 90% instead of a capital: operating cost split of 98% to support our financeability metrics, as well as adopting a transitional period on asset lives over two price controls instead of one.

We also propose that Ofgem considers driving or incentivising behaviour that may encourage financing risks to be taken such as shorter term financing through reducing the rolling indexation period on the cost of debt allowance and the impact that may have during periods of capital market uncertainty/volatility.

We do however, acknowledge that Ofgem may be required to set out its proposal/position on asset lives particularly following the CMA determination on RIIO-ED1 although we believe that 45 years is the correct asset life based on the average technical life of assets. When setting the capitalisation rates by networks, Ofgem should consider company business plans and the split of historical expenditure. For both of these items the impact on consumer bills across generations will be a key consideration to ensure intergenerational equity. Therefore although we advocate considering several aspects on financeability, Ofgem has to consider the impact on wider consumers across generations as an additional element.

Question 15.
Should we consider moving to CPIH (or another inflation index) and how should we put into effect any change to ensure it is present value neutral for investors?

We continue to support the use of RPI as the preferable means of inflation index for the RIIO-2. Items that support RPI as a more appropriate measure are as follows:

* A large proportion of borrowings in energy networks is index linked to RPI and does not reach maturity until after RIIO-2. This financing must be adequately funded through allowances.

* In the absence of a mature CPIH capital market, it is significantly difficult to establish an appropriate indexation mechanism for the cost of debt as has been done using RPI. There are methodologies which could be developed to address the gap between CPIH and RPI as a means to establish an appropriate cost of debt index mechanism, however, this will introduce estimation/forecast errors - something which Ofgem must seek to avoid where possible.

* The introduction of CPIH as an index would result in an increase in the real cost of capital which in the short term (over RIIO-2) would result in an increase in costs to consumers overall. There are mechanisms to address the transition which we have seen in Ofwat, but again this is another complication to the regulatory framework alongside potential forecasting/estimation errors, thereby compounding the potential adverse affect on consumers and networks.

Therefore the selection of inflation measure has an impact on the real cost of capital and also real price effects and, as such, this requires significant consultation, research and an integrated assessment of the most appropriate measure. The effect on consumer bills in the near-term of a change in inflationary measure to CPIH is not certain and hence, this would introduce uncertainty to the RIIO-2 price control.

Question 16.
Do you think there are sufficient benefits in aligning the electricity price controls to offset the disadvantages we have outlined?

We believe that Ofgem has accurately identified the costs that would be incurred should there be a move to align the electricity distribution and transmission price controls. We do not believe that the potential benefits claimed necessarily require alignment. Rather, transmission and distribution operators are increasingly cooperating on whole system issues. It is not clear that the costs of alignment are justified.

Whilst we understand the rationale for considering whether alignment is appropriate, we would argue that timing is not a panacea to consistency. Furthermore, change is not a one off issue. Change from flexibility will run well into 2020s and will not be completed in advance of RIIO-ED2 start. We welcome the acknowledgement that in a 'rapidly evolving environment' preserving a network's ability to respond in an 'agile' manner is important.

We must also be careful not to over think and over sell the change ahead. Without knowing how, what, when, how much we would be irresponsible to suggest that a consumer's network experience is going to look dramatically different. Reliability is already high, safety is high, costs are lower than historic levels.

Question 17.
Are there any other realignment options we should consider?

We are not aware of any other alignment of price control frameworks that would deliver benefits such that the additional costs imposed would be justified. As above, we believe that alignment is not a necessary condition for operators to cooperate on whole system issues.

Question 18.
What amendments to the RIIO framework, if any, should we consider in supporting companies to make full use of smart alternatives to traditional network investment?

The totex approach and efficiency incentive have already encouraged significant adoption of alternative, innovative, sustainable solutions. During RIIO-T1 this has been focussed on new technologies and flexible connections. Adoption of these approaches has delivered additional capacity for connections – allowing more generators to connect, or allowing generators to connect sooner; and, avoided upgrades to existing networks or addition of new lines – reducing the visual and environmental impact of transmission infrastructure as well as deferring or in some cases removing the need for conventional reinforcement, helping keep costs down for customers.

Under this framework we have delivered developments such as the Bhlaraidh Beinneun connection which used ACCC - a higher voltage lower sag reconductoring method in place of new lines, to deliver the capacity required by the two wind farms early, at reduced cost and with reduced visual and environmental impact.

The totex framework has also enabled collaboration between the TO, SO and DNO which has facilitated the implementation of smart alternatives such as active network management at Coire Na Cloiche that could save customers £9 million by avoiding a GSP upgrade; and shared connections at Speyside which allowed a low carbon generator to connect in a transmission constrained area without reinforcement of the transmission network. Whole system planning is central to recognising these opportunities and delivering these outcomes.

This same framework has the potential to encourage further use of smart alternatives to meet the needs of our customers in the next price control. The totex approach supports evidence based whole system totex cost benefit analysis that identifies where services are the more economical solution than traditional reinforcement. To ensure that solutions meet the needs of customers, communities and affected stakeholders, cost benefit analysis must include socio-economic factors (including the environmental impact). The current RIIO framework provides the flexibility for smart alternatives to be adopted. This adoption will increase and diversify as availability of flexible services such as demand side response or storage solutions increases and as markets for these solutions mature.

Our involvement in the ENA Open Networks project will help ensure that the development of the Distribution System Operator delivers the interfaces required to maximise these opportunities.

One of our foremost requirements as a TO, in collaboration with the SO, is ensuring security of supply for our customers. As our network changes further operational challenges are being recognised, particularly as intermittent renewable energy replaces traditional thermal plant. While services provided by the market can meet some of these needs, the RIIO framework must maintain flexibility in the approach to be adopted, ensuring that there are mechanisms for the installation of infrastructure solutions where these are more economical than operational solutions. In summary we believe the totex approach allows this and combined with a continued focus on outputs will provide this flexibility.

Question 19.
Given the uncertainty around demand for network services, how much of an issue might asset stranding be and how should this risk be dealt with?

In the last ten years SHE Transmission has delivered a doubling of renewable energy capacity on our network. At the outset, there was significant uncertainty about the scale of this requirement. The current RIIO framework was designed to address this significant uncertainty in the demand for network services. The significant uncertainty around generation development in RIIO-T1 meant that our range of outcomes for the period was generation growth between 2-7GW and a totex of £3-5bn.

Asset stranding is a risk in any development where the need is uncertain and the best way to tackle this is, as far as possible, to reduce the uncertainty. The use of scenarios allows us to consider the viable potential

outcomes and to test our plans and investments against these. This informs our investment decisions and allows us to identify least regret options and to consider where alternative approaches such as active network management can reduce the risk of asset stranding.

While the SO's suite of system planning documents including the Future Energy Scenarios, Electricity Ten Year Statement and Network Options Assessment provide an essential guide in this, we have recognised that developments on our networks do not fit a GB standard. Within the north of Scotland, the majority of our Grid Supply Points (GSPs) are exporting due to the significant renewable generation (50% of which was embedded on the distribution network in 2015), with a few net import GSPs in our urban areas. To address this, we are developing localised future energy scenarios with increased granularity in the assumptions based on our local knowledge, which will allow us to best meet customers' needs.

We are currently developing these localised scenarios, based on adjustments to the SO's credible and robust FES scenarios, and will use the insight that they provide to inform our plans for the next price control. This should allow us to identify the range of potential requirements on our network and to identify the least regret investments. It should also allow us to identify where alternative flexible and temporary solutions may be suitable, for example where a capacity requirement is temporary or only occurs in the more extreme scenarios.

With regards to near term investment, customer, community and affected stakeholder engagement, and collaboration with the SO and DNO are a central aspect of our planning and development approach. Regional dashboards are regularly updated to capture changes and developments that will affect our investment plans. This regional approach captures whole system development and has already led to investment deferral to reduce the risk of stranded assets.

While the localisation agenda and the development of the DSO has been considered by some parties to raise the risk of stranding transmission assets, the continued requirement for bulk energy flows that a low carbon energy system necessitates makes this an unlikely outcome. Rather the development of the DSO should reduce the risk of asset stranding as increased balancing and constraint management at the distribution level reduces the need for transmission capacity to accommodate local distribution peaks.

These long term and short term approaches are being delivered within the current RIIO framework to address asset stranding risk. During the first half of this price control the RIIO framework has been flexible enough to accommodate significant uncertainty through uncertainty mechanisms. While we do expect further change in RIIO-2, we believe that this can be accommodated through considered, well calibrated uncertainty mechanisms.

Question 20.
How do we need to adapt the RIIO framework, and the uncertainty mechanisms in particular, to deal with this uncertainty?

We believe the RIIO framework is a reliable model in which to deliver the ever changing demands of this industry. RIIO-2 will present different uncertainties to that experienced in RIIO-1 primarily driven by the emerging technologies and the way in which consumers will use our networks. This change will happen across GB but in different ways and therefore a uniform change to the framework would not be appropriate as one size definitely does not reflect all, we are different companies and this should be taken into account. At this stage we cannot be absolutely certain of what lessons can be gleaned from RIIO-1 or what RIIO-2 will become but what we do know is that the existing RIIO framework provides a strong platform to enable companies to address the challenges they face.

RIIO-1 established a broad range of appropriate regulatory uncertainty mechanisms to handle risks and uncertainties and these have worked well for the consumer and regulator. We believe to date these have been particularly effective in addressing uncertainty and as long as these uncertainty mechanisms are well defined, robustly designed and clearly set out in the licence guidance then this approach should be central to RIIO-2.

Question 21.
Is an eight-year price control period with built-in uncertainty mechanisms still appropriate given the greater range of plausible future scenarios?

Yes. SSEN has found that the eight year duration of the RIIO-1 price control has enabled us to attract investment to support an extensive programme of network investment of the sort that would have been more challenging (regulatory risks would have been more significant) under a price control with a shorter duration. We believe that an eight year price control whilst retaining well designed uncertainty mechanisms is critical to ensure we can accommodate the challenges ahead.

Shorter price controls could exacerbate wider industry challenges as recognised clearly in the BEIS Industrial Strategy green paper and thus put the stability of our networks at risk. We are already facing a skills challenge, whilst the UK's exit from the EU could further disrupt our ability to attract highly skilled staff. It may also have a significant impact more broadly on our supply chain. An eight year price control would provide us with some stability over this period. By being able to commit to longer term relationships we can provide the absolute best in terms of a skilled workforce and supply chain procurement efficiencies. A shorter price control aligned with other economic factors could result in a shift of skilled workers and investment away from the energy industry. In the water industry, the height of the 2009 recession coincided with the closing of the AMP5 and opening of the AMP6 framework periods, creating a period of stasis that saw many projects put on hold or dropped. The water industry is now reinvesting in infrastructure to meet AMP6 requirements – only to find that many of the skilled engineers have transferred to other sectors. The highways sector is also experiencing skills gaps as a direct result of the recession, when graduate recruitment dropped sharply, causing a shortage of skilled engineers. Now infrastructure investment is rising and the best graduates are in short supply meaning that in the absence of available permanent staff - the highways industry like many others are relying on expensive contractor support to shore up engineering teams.

If the wider industry adopts a cohesive approach to long-term term recruitment planning and job certainty then that will enable companies to develop a robust network and pipeline of talent, exploring skills transfer between industries, promoting inclusion and career development to attract and retain talent; enabling the industry to tackle the issues laid out by BEIS and be in a strong position to build, develop and return our engineering sector as a centre of excellence worldwide to fuel the Industrial Strategy.

The eight year duration has enabled us to make considerable investments in our staff and supply chain, driving innovation and supporting them as they learn to design and build equipment that meets our safety and resilience requirements. Through this investment, we have been able to build strategic relationships that yield significant efficiency savings that we pass on to customers through reduced costs. Similarly, through being able to commit credibly to longer term contracts with our larger suppliers we are able to negotiate better terms, including where they have to make investments specific to our needs, ultimately to the benefit of our customers.

In summary, we support the principle of longer price controls such as the current eight years for RIIO-1. If designed with the appropriate mechanisms then these price controls can bring greater certainty for networks in that they can plan more efficiently to provide a robust service for customers. This is in the interest of consumers as networks can focus upon delivery, efficiency and the consumer over the long-term, rather than

adjusting drivers more frequently through prolonged price control reviews. As aforementioned, networks businesses are long-term businesses, and therefore, a reasonably long price control period fits well with the networks business model. If there is a large range of plausible future scenarios under consideration, a robust uncertainty mechanism should support this length of price control.

Question 22.
What improvements should be made to the assessment of Business Plans?

Ofgem should develop an evidence based and balanced approach to the assessment of Business Plans, reflecting the balance of affordability, security of supply and carbon reduction. This assessment should include the consideration of the following elements:

* Cost Assessment – Undertaking an efficiency assessment should continue to consider the differences between regions and networks. Also, Ofgem should avoid making adjustments based on methodologies or theories which are not supported by a detailed justification, as was the case for the Smart Grid Benefits applied during the RIIO-ED1 price control, which was overturned for NPG by the CMA.

* Outputs – Consideration of outputs proposed by networks and the related uncertainty mechanisms (bearing in mind the balance of risk) should be an element considered by Ofgem. Any means to request ex-ante allowances despite significant uncertainty would be an area that causes concern.

* Incentive targets – This should be considered as part of company's Business Plans based on stakeholder engagement.

* The balance of risks – The risk of Business Plans and the balance of sharing between networks and consumers is an element that should be reflected in the assessment by Ofgem.

Additionally, we continue to support the use and strengthening of the IQI incentive mechanism of encouraging high quality Business Plans. We believe this is an efficient way to balance the information asymmetry and reward networks for well justified and robust business plans.

Question 23.
Should we give further consideration to companies' historic performance against their Business Plans?

Historic performance is one indicator which should be taken into account when assessing company Business Plans as past performance can inform future expectations. However, Ofgem should be careful not to place too much reliance on past performance as, based on changing energy market conditions, future performance has the potential to follow a different trend from past performance.

Therefore, although past performance is a good indicator for Ofgem to take note of, consideration of historic performance should not be focussed on solely. Ofgem should also take into account networks' plans for the coming price control period, whether the make up of the price control will incentivise networks to perform differently to the way in which they have previously and the overall environment which networks will face in the coming RIIO-2 period. If Ofgem places too much reliance on previous price control performance in assessing business plans, Ofgem is weakening the IQI/Fast Track incentive for RIIO-2 by placing too much weight on historic performance.

Question 24.

Should we determine the revenues an "efficient" network company requires before seeking information from the companies themselves?

No. It is SSEN's strong view that Ofgem's assessment of Business Plans should be evidence based and comprehensive. Ofgem should not seek to prejudge the outputs that any network's stakeholder base might want and need.

Question 25.
What has an eight-year price control period allowed network companies to accomplish or plan for that would not have occurred under a shorter price control period?

We are a strong supporter of the eight year price control period for RIIO-1. The regulatory certainty it has provided has enabled us to take a longer term view of our investment strategy and to complement this with investment in deeper relations with customers, communities and affected stakeholders than would have been possible with significantly reduced durations.

Large capital projects take, typically, at least two years to scope and secure regulatory approval ahead of construction starting, including Ofgem's Strategic Wider Works assessment (with larger projects possibly taking even longer before construction begins). Ofgem's own approach to assessing new large capital projects under SWW would require considerable streamlining were the price control to be shortened, as the time remaining within the price control to plan, scope and then complete construction projects would almost always span price control periods.

With certainty over the eight years, we could plan for projects to be scoped, developed and completed within the current price control period, providing a greater level of certainty for investors. We can invest in innovation, rather than adopting the tried and tested approaches common where price controls are shorter. Where projects have to span price controls there is much greater uncertainty as to regulatory treatment, increasing risks to investors and increasing the returns they are likely to require before investments are funded (increasing the cost of capital).

The eight year control has made it feasible to make the necessary investment in the development of the NOMs methodology. As Ofgem is aware, this remains an unresolved matter and, as yet, it remains uncertain that the implementation will be complete even by the end of RIIO-T1. This project would simply not have been feasible in a shorter price control period.

With certainty over a longer period we have been able to invest in local engagement, building stronger ties with local communities, often in remote areas of Scotland where it can take several hours to drive from the nearest major town or city. These local relationships are of vital importance in ensuring that our stakeholders are provided with opportunities to engage in person over proposals to build infrastructure across what are often environmentally sensitive areas.

Question 26.
How well has the IQI and efficiency incentive worked in revealing efficient costs through the Business Plan process and encouraging efficiency throughout the price control period?

IQI has worked well in reducing the information asymmetry gap. This has encouraged companies to present lean, efficient business plans which, in turn, benefits consumers. Strengthening this incentive is something that should be considered by Ofgem as a means to employ effective incentive based regulation from the outset of the price control.

Question 27.
What alternative approaches could we consider to encourage companies to give us high quality information that minimises the damage from their information advantage?

The key factor in providing high quality cost information for us is to make sure that any cost metrics are provided at a level that doesn't involve an unnecessary administration burden (and avoids unnecessary costs). In providing this information there needs to be a clear understanding of the metrics that are being provided; this is especially relevant for large capital schemes. There needs to be a clear understanding of the stage that the project is at (e.g. our cost accuracy will vary according to the maturity of the project, this can change drastically through the development process) and the various project drivers (e.g. local factors). There also needs to be an understanding that an outputs led approach means there can be more than one way of delivering an output – as such this can lead to significant swings in cost forecasts.

We would welcome a working group to establish the value in the data that we are asked to provide. If we can get to a position that we understand what the data is used for or how it is applied then we can increase the value in the data submitted. This will lighten the demands and time that reporting takes to achieve.

We have expressed our opinion above, and believe strengthening of the IQI incentive achieves the objective Ofgem is seeking to address. We believe that the approach to evidenced based justified Business Plans alongside a strong IQI incentive and rewards/penalties for good/weak Business Plans are the most appropriate and effective mechanisms alongside the ongoing regulatory reporting obligations during RIIO-1.

Question 28.
What impact has the innovation stimulus had on driving innovation and changing the innovation culture?

The innovation stimulus has encouraged a significant increase in innovation activity by network companies. The majority of SSEN's large transmission innovation projects have been funded through the NIC, for example the HVDC test centre. This mechanism has provided justification for large scale investment in projects with long delivery timeframes and where benefits may not be seen within the current price control period. This is one of the main benefits of the stimulus, that it effectively acts as a within price control recovery mechanism for innovations that do not have an economic case within the period, and so would be difficult to justify without these mechanisms. By capturing these post-current price control needs, the mechanisms should also prevent the drop off in economically driven innovation activity that can occur at the end of a price control period.

In addition to enabling trials and research centrally delivered by our own innovation teams, the NIA and NIC have created certainty of the innovation need and the funding availability that has provided our supply chain with confidence in the intention of network companies to use innovative solutions. This has in turn encouraged them to innovate and invest in new technologies and to propose new solutions.

The nature of our business and its focus on reliability means that our natural tendency is towards lower risk later stage innovation that is near business as usual, for example first of its kind deployment. This can reduce or slow down the development of more fundamental or disruptive innovations. The innovation stimulus has provided a mechanism to encourage these early innovations with some of our projects involving technologies at a very early technology readiness level, for example, insulated cross arms and DC convertors. This is not innovation that we would carry out ourselves but the structures of the stimulus allow us to work with manufacturers and to stimulate their R&D activity while ensuring that there is a business need for the technology. This ensures development of technologies that will be applied on an economic basis in future price controls.

As recognised by Ofgem's network innovation review there is an increasing need for collaboration on the major industry challenges (such as HVDC); these will be identified in the joint innovation strategy. Collaborative projects will ensure cross industry support for the trials and solutions developed to address these challenges. Collaborative projects are inherently better suited to an allowance style mechanism focussed on the target challenge rather than a competitive mechanism that could see multiple parties funded for the same development work. Alongside the joint strategy, clearer incentives for BAU conversion and dissemination of learning across network companies will help to stimulate collaboration and uptake across the industry.

For wider innovation needs, a competitive mechanism can drive further cost savings and may still be appropriate for areas of innovation that vary between network companies. While we are supportive of third party involvement in the innovation mechanisms, it is vital that there continues to be a strong link with network companies that will act as the end user for many of the solutions being developed, to ensure that the funding remains focussed on solutions that benefit the networks and their customers.

As we progress on the low carbon transition, what may additionally be required is mechanisms that facilitate further collaboration between industries to share learning and best practices on relevant elements of our businesses (e.g. construction and asset management with other major infrastructure providers such as water, rail and telecommunications). Specific stimulus provided by Ofgem has enabled the development of innovations focussed on network challenges. Relying on funding from alternative sources would not have delivered the projects that the NIA and NIC have as the intent of the majority of R&D funding is to stimulate economic development, rather than to deliver benefits for customers.

Question 29.
Have the incentives inherent in the RIIO model encouraged network companies to be more innovative and what should we consider further?

The totex approach and efficiency incentive within the RIIO model has encouraged innovations that deliver efficiency improvements within the price control. This has encouraged significant innovation beyond the projects funded by the NIA and NIC stimulus.

Application of new technologies and approaches on projects within this price control period has delivered significant efficiency savings. These innovations have been delivered within the business by the planning and engineering teams based on their economic case and wider benefits. Examples such as the use of the ACCC (Monte Carlo) conductor on the Bhlaraidh Beinneun connection project which delivered the connection of the two wind farms early, at reduced cost, and with reduced visual and environmental impact demonstrate how these innovations are delivering value within the price control for us and for the customer.

The totex approach ensures that solutions that deliver value in reduced opex costs are not unrecognised due to a focus on capex. The application of composite poles and other innovative technologies in the Dorenell

project is an example of this type of innovation, also delivering on the some of the specific construction challenges inherent in delivering infrastructure projects in the difficult terrain common across our network area.

Some of the other incentives such as the Environmental Discretionary Reward and SF6 incentive have also driven innovation in these target areas. The Dynamic Line Rating and Fault Level Monitoring projects are looking to increase capacity for low carbon energy connections and some of the innovative active network management approaches being adopted are enabling renewable energy connections that would not have a needs case under traditional approaches, supporting the transition to a low carbon economy while reducing network investment. On SF6, the adoption of innovative leak detection and repair methods is improving performance and has enabled us to meet our challenging reduction target.

These wider incentives help to strengthen the case for non-technical innovations, such as the Sustainable Commercial Model project which looked at the wider economic benefits of our projects and captured our impact in terms of wider sustainability. Innovations in these areas will be increasingly important in the next price control as our cost benefit analysis must expand to consider wider sustainability in the best interests of customers, communities and affected stakeholders. We would be pleased to provide further details of these projects to help inform Ofgem's thinking on these issues.

A continued totex approach with performance incentives will continue to deliver these innovations. The longer the price control period, the longer term the innovations that can be delivered through a simple, in price control business case. For innovations that stretch beyond these time frames, some additional mechanism or stimulus continues to be required.

Question 30.
Do you agree that the scope of competition should be expanded in RIIO-2? What further role can competition play?

SSEN supports competition where it can be shown to reward innovation and encourage cost saving measures. We have supported Ofgem's work to secure the extension of competition in transmission through primary legislation. Competition is a complicated intervention that needs to be handled carefully if the full benefits to customers are to be delivered. In particular, competition should only be pursued where there is clear evidence that it will yield quantifiable benefits for relevant customers, communities and affected stakeholders. The critical nature of electricity networks should mean that Ofgem ensures that the implementation of competition is supported by an effective framework that is driven by evidence of benefits and provides opportunities for scrutiny and challenge from affected stakeholders.

In considering this question, we return to the question of balance in setting the objectives for RIIO- 2. Whilst competition can (under some conditions) create market conditions that leads to lower customer prices, it is only one of several public policy objectives that apply to the energy sector and care needs to be taken that the approach to competition is complementary with those other policy objectives, including the BEIS Industrial Strategy and the Treasury's work on the Critical National Infrastructure. We continue to hold the view that primary legislation is the best route for ensuring an appropriate underpinning for competition. Parliament should provide Ofgem with clear guidance on the conditions under which competition is the most appropriate means to further the interests of citizens and consumers.

Question 31.
Which elements add the most complexity and how do you think that these and the broader RIIO framework could be simplified?

Managing future uncertainty provides the greatest challenge and adds complexity in the development of the Business Plan, particularly where uncertainty is driven from external factors (e.g. government policy on connection of renewables, grid issue highlighted via the SO etc.). In RIIO-T1, uncertainty mechanisms are used to manage this complexity in two key areas:

* Strategic projects – the SWW uncertainty mechanism provides a vehicle for approving both project need and costs for large strategic projects, our view is this has worked well in RIIO-T1. The introduction of the annual NOA process and the associated complexity and rigour required to evaluate multiple solutions means that forecasting preconstruction expenditure on an individual scheme basis is extremely difficult. Our preference would be to provide preconstruction expenditure forecasts for each of the strategic transmission boundaries (rather than individual named schemes); this would provide flexibility to accommodate future changes and encourage development of the most economic and efficient solutions for strategic upgrades.

* Generation connections – predicting future generation volumes, particularly on a scheme by scheme basis, has been one of the key challenges in RIIO-T1. Our view is that the volume driver mechanism has provided an excellent platform to manage this level of uncertainty and has allowed efficient growth during RIIO-T1 as well as encouraging innovation across a number of areas.

Our view is the most effective way to simplify the RIIO framework moving forward is to ensure there are clear and well defined output requirements across each of the delivery categories. There should be full transparency on the benefits (and associated costs) that will be delivered to the end customers along with impact on wider stakeholders.

Our view is that clear articulation and understanding of local issues (e.g. generation scenarios, unit costs) would provide more transparency at a local level and assist in the ongoing management and communication of change throughout the price control.

Use of simpler terminology (with explanation and reference where necessary) across the Business Plans would assist in making the content more accessible for a wider range of stakeholders.

Question 32.
What improvements could be made to the format and presentation of the Business Plans?

We welcome Of gem's proposal to develop guidance for RIIO-2 Business Plans and in particular the proposal for a common methodology for justifying investment that is likely to provide long term benefits beyond the price control. Our view is the guidance should accommodate local issues and should avoid a 'one size fits all' approach; this is vital to ensure an efficient and co-ordinated approach and to avoid stifling innovation moving forward. It should be recognised there will be different business drivers and strategies across industries and sectors.

A key objective in the presentation and format of Business Plans should be to have a clear and simple structure which provides transparency between outputs and expenditure. A good starting point would be to ensure the use of consistent (and simplified) terminology throughout each of the Business Plans. Our view is that the Business Plans should only include essential information, thus avoiding embellishing with irrelevant information.

Question 33.
Should the plans be revised at any stage during the price control, for example annually?

The current RIIO-1 Business Plan deliverables are effectively re-cut and submitted as part of the annual RRP process. This takes account of the current best view and any changes to the baseline plan with adjusted forecasts and allowances taking into account uncertainty mechanisms. We are comfortable with this approach on the basis this level of reporting is required on a regular basis to provide reassurance of delivery against business plan commitments along with details on changes that have occurred.

We do, however, have concerns over the quantity and formats of the data required in the current annual reporting process and think there is opportunity to take a more efficient approach to reporting that will reduce burden on both the regulator and networks as well as providing transparency to customers and stakeholders on overall performance. Our view is there is opportunity to reduce the current reporting burden by setting out clear and straightforward performance metrics to measure and report on performance during the reporting period. These performance metrics could be shaped by consumer engagement as a result of understanding what is important to them.

Question 34.
Should we retain fast tracking and if so, for which sectors?

We believe that fast tracking is a powerful incentive and the incentive benefits should be retained to further encourage competitive aspirations of companies. However there are evidently lessons to be learned about the application of fast track during the RIIO-1 process, particularly in light of the likelihood of Ofgem's descision to fast track an operator being appealed to the CMA. A successful appeal would clearly mean that the significant costs incurred by the operator would be lost as they would be denied the potential benefits of fast tracking. It is SSEN's view that, while the reliance on fast tracking might not in itself be sufficeint, the incentive of being rewarded in some way for a high quality business plan should be retained. One means to doing this might be a clear distinction between "light touch" and "full scrutiny" following submission of the first Business Plan, with a strengthening of the rewards and penalties for Business Plan quality. Regardless, it is essential that Ofgem has sufficient time in the process to make justified, evidence based decisions, such that we can have confidence that appeals will be dismissed.

Question 35.
Do we collect the right information in the right format and are there better ways to monitor the performance of companies?

The current annual reporting process for networks is detailed and time consuming for all parties with the volume of data reported leading to significant time and resource including for data assurance activities. Our view is that we support the need for regular and transparent reporting but feel there is opportunity to monitor the performance of companies in a more effective manner taking account of the following:

* There should only be a requirement to report data that adds value to understanding of performance.

* There should be clear transparency between expenditure and outputs and understanding across all parties.

* Avoid collection and reporting of duplicate data across the reporting pack.

* Avoid collection of data in different formats, a prime example of this in RIIO-T1 is the requirement to report on unit cost break downs with different methodologies.

* Avoid changes in reporting requirements throughout the price control period, agree the approach up front.

* Regular reporting on agreed high level performance metrics providing opportunity to move away from full regulatory reporting on an annual basis.

Our key objective in this area is to work towards lightening the demands and time taken by the regulatory process whilst providing a more transparent and efficient means of reporting on the aspects of delivery that matter. A key factor in this would be development of good working relationships between the companies and Regulator to fully understand the requirements and therefore be able to provide the accurate data that the Regulator actually needs and that stakeholders will rely on.

Question 36.
What are your views on how the changing role of the electricity SO should be factored into the RIIO framework, including whether or not the electricity SO should have a separate price control?

It seems sensible that the SO should have a separate price control to NGET (TO) to deal with the unique operational challenges of an SO. We would question whether the SO can really be regarded as separate if still tied into the National Grid TO through a shared price control.

Question 37.
Do you agree with our broad stakeholder engagement approach set out above?

Yes. Going forward we would anticipate Ofgem adopting a transparent and open approach to engagement, including:

* Maintaining a comprehensive and up-to-date stakeholder engagement strategy for the development of RIIO-2 price controls.

* Engaging with a broad and inclusive range of relevant stakeholders. This specifically includes engaging with challenging or hard-to-reach stakeholders (e.g. community energy) who are often remote from London or Glasgow.

* Demonstrating what it is doing to act on/respond to input/feedback from stakeholders.

* Developing and increasing energy literacy as set out in our response to Q2.

As part of the facilitation role Ofgem could valuably play, we would encourage Ofgem to host and participate in a regular public event for all network companies to showcase how they are ensuring that the views of stakeholders, including hard to reach stakeholders are shaping their approach to RIIO-2.