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Ofgem draft Forward Work Programme 2020-22

Ofgem Decarbonisation Programme Action Plan

SSE PLC welcomes the opportunity to provide our views on Ofgem's draft Forward Work Programme (FWP) 2020-22.

The recent publication of Ofgem's Decarbonisation Programme Action Plan has been presented and discussed together with the FWP at this year's Ofgem Energy of the Future conferences. We recognise Ofgem's prioritisation of activities has shifted focus compared with last year's FWP of 2019-21. We note that decarbonisation is now at the fore of Ofgem's new Strategic Narrative, alongside the enabling of competition, innovation and protecting consumers as its three key strategic objectives. We support Ofgem's approach to reframe and reprioritise its proposed activities to best achieve these core aims. As such, we would support the NIC's recommendation that Ofgem's statutory remit be formally revised to incorporate a net zero objective in order to reflect the prioritisation of decarbonisation in the energy sector and ensure appropriate weighting is given relative to Ofgem's other objectives and duties.

Similar to Ofgem, SSE has renewed its vision and business strategy to rise to the challenge of climate change and innovate to drive the essential transformation to a net zero carbon economy. Last year we launched our four Sustainability Goals for 2030, committing to:

- reduce the carbon intensity of the electricity we generate by 50%;
- build electricity network flexibility and infrastructure to accommodate 10 million electric vehicles;
- treble our renewable energy output;
- champion Fair Tax and a real Living Wage in the UK and Ireland.

Our Sustainability Goals are aligned with the UN's global goals for sustainable development, and we are proud to utilise our businesses to help develop a more sustainable world and a fairer, more prosperous society. We look forward to working with Ofgem and other stakeholders in these endeavours over the coming years.

As such, we suggest the following proposed activities from Ofgem's draft FWP 2020-2022 should take priority in the immediate future:

- Timely and coordinated decision making by Ofgem in multiple areas including: network charges, access arrangements, whole system coordination including the role of DSO, and the role of regional and national plans in future energy scenarios.
- A considered approach by Ofgem should also be taken to strategic investment to ensure efficient planning and coordination of activities (particularly through RIIO-2, urgently in the case of transmission) based on future energy scenarios, appropriate investment decisions and the best outcome for existing and future consumers, stakeholders and network companies.
- Analysis by Ofgem of both market and network issues that may prevent investment in low carbon technologies, and direction as to how such issues could be overcome, including:
 - o Consideration of the continued relevance of the fundamental principles underpinning existing transmission charges given the profound changes in technology and location necessary in the future generation mix;
 - o The need to support a degree of anticipatory investment in network infrastructure to facilitate decarbonisation;
 - o Review the potential impact of the changing balance in generation economics to ensure a reliable signal exists to promote investment in all of the assets required to achieve net zero.

Finally, we note with interest the signalling by Ofgem both in the FWP and in its Decarbonisation Programme Action Plan of an intention to adapt its approach to decision-making to reflect the change in focus required to meet the challenges ahead. Ofgem's establishment of a Net Zero Advisory Group of key sector stakeholders to advise its Board is a welcome development in that regard and we look forward to understanding how that Group will be set up and operated in practice and to discussing how SSE can best contribute to that process.

A detailed response to key activities proposed in the Ofgem FWP is included in Annex A attached.

We would be happy to meet Ofgem to further discuss our response in more detail.

Yours faithfully

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ANNEX A

Ofgem strategic objective 1: Enabling competition and innovation which drive down prices and result in new products and services

Summary of SSE's views:

- Significant demands are being placed on industry to implement concurrent, large-scale and complex change on ambitious timescales.
- The RIIO-2 framework must:
 - contain appropriate uncertainty mechanisms and incentives to allow networks to facilitate a path to net zero;
 - recognise the risk for network companies associated with future challenges; and
 - provide for variations at local level where they are demonstrably stakeholder-led.
- Anticipatory investment will be required now to meet net zero policy objectives.
- Ofgem decision-making will need to be more agile and coordinated to secure the best outcomes for existing and future consumers.
- Clarity is needed in relation to NGESO's proposed new policy advocacy role.
- The further extension of competition during RIIO-2 should only be considered where it can be clearly demonstrated that it does not compromise the security and operation of the GB critical national infrastructure and provides better value to consumers.
- The fundamental principles underpinning electricity transmission charges, including locational elements, need to be reassessed in the context of the transition to net zero and maintaining incentives to invest in existing and new generation.

Retail market change

We are generally supportive of Ofgem's intention to promote innovation in business models, products and services in this market, and promotion of safe access and sharing of data, as part of progress toward a net zero carbon economy by 2050. Any changes must be equitable, with particular consideration of the potential impact of system and policy costs on consumers.

Faster more reliable switching (go-live Jul-Sep 2021)

Preparations and engagement with the Switching Programme are well underway and a high priority for suppliers. In relation to the go-live date, confidence is required by industry that this date is not at risk of movement to minimise the risk that the industry incurs significant levels of avoidable expenditure. We would also reiterate (as we did last year in our response to the draft FWP 2019-21) that Ofgem remains cognisant of the significant demands being placed upon the industry by the concurrent implementation of several large scale, complex, and interdependent activities (i.e. smart rollout, switching programme, market-wide half hourly settlement) in similarly ambitious timescales. This requires careful planning, risk

assessment and efficient programme management in order to best realise the benefits to consumers, competition and innovation.

Network Price Control Design, Development and Implementation

In order to facilitate delivery of wider policy objectives in RIIO-2, we believe the framework and Ofgem's approach to decision making must be far more agile, recognising wider benefits and risks, over the short, medium and long term, and ensuring decisions are made in a timely manner.

The regulatory framework and funding arrangements for RIIO-2 and future price controls must allow network companies to invest in an efficient and timely manner in order to best serve current and future customers' and stakeholders' needs and deliver value for money. Developing and improving core services such as network reliability, customer service, quicker and more efficient connections, protection of vulnerable customers and improving efficiency are essential to our strategy. However, we are also mindful of new, wider and ambitious policy objectives such as facilitating delivery of the UK Government's net zero carbon emissions which will present new challenges in these core areas. Given the scale and pace of change required, we urge Ofgem to ensure the right balance is struck between "lowering costs to consumers" and allowing networks to continue to provide high quality services. This includes digitalisation, the transition to DSO for Distribution Network Owners and ensuring networks can enable the transition to a low-carbon economy reaching net-zero targets. It is important that the RIIO-2 framework contains appropriate uncertainty mechanisms and incentives in order to allow networks to accommodate net zero targets including potential future connection of low carbon technologies.

Ofgem also acknowledges that RIIO-1 has delivered material benefits for network customers. We believe these benefits have been made possible by the RIIO framework and we understand the pressure to ensure future settlements deliver fair returns and greater value for money for current and future customers. It is important to note that 'lower cost' and 'lowest cost' are not identical – we should collectively be aiming for the lowest efficient cost over the medium term to deliver policy priorities. In delivering policy objectives such as the net zero targets, it should be recognised that costs will not necessarily always reduce. Further, a degree of anticipatory investment will be necessary to facilitate a path to net zero, requiring investment now to reduce total costs over the medium-long-term.

Our concern is that current proposals for RIIO-2 lean towards a framework which blunts existing incentives and fails to recognise risk associated with future challenges in a desire to secure predictable outcomes. With significantly weakened incentives on outcomes and efficiency, combined with unprecedented low base allowances and returns, the proposed RIIO-2 methodology risks undermining progress made to date and taking a step back to rate-of-return regulation. We do not believe this is in consumers' or wider stakeholders' interests.

SSE Networks' stakeholder feedback highlights common themes and priorities around facilitating decarbonisation, ensuring affordability, reducing environmental impact,

supporting vulnerable customers, and developing a sustainable, flexible network. This is in tandem with Committee on Climate Change recommendations, Scottish and UK government aims and targets for growth in the renewables sector alongside the decarbonisation of heat and transport and commitment to net zero. While they are common themes, it is also essential to note that networks are not homogeneous and the specific wants, needs and relative priorities of their local customer base is likely to vary. If RIIO-2 is to be truly stakeholder led, the price control settlement must recognise and provide for this variation where it can be evidenced and justified. If Ofgem disagrees with proposals presented within networks' respective RIIO-2 Business Plans, then the requirement on Ofgem to justify an alternative approach should be equivalent. It is paramount that stakeholders have the right to understand why their needs will not be met, otherwise the process risks significantly undermining stakeholder confidence. The stakeholder voice, including as expressed through the User Group and Customer Engagement Group should also play a material role in the assessment of RIIO-2 Business Plans.

We note also that markets are not always capable of delivering at lower cost than regulated entities and where third parties are not licensed e.g. as with Distribution, Transmission or Gas Network Operators; this can create increased risk as Ofgem does not have the same power to take enforcement action where parties fail to provide services and do not maintain equal quality standards (including regulations, codes and policy). We recommend a clear process is implemented at distribution level to fully assess (i) where there is most opportunity for competition and (ii) new entrants to the market, confirming they have the necessary resources in place over the short, medium and long term to provide and maintain services to customers and to ensure there is a safety net in place to protect customers of failed companies in an equitable way.

We also welcome proposals which give consumers a stronger voice in the price control process. We remain concerned that there are a number of significant policy decisions that need to be coordinated to ensure the most efficient outcome for consumers, stakeholders and network companies. Particular areas of focus include network charges, access arrangements, whole system coordination including the role of DSO, and the role of regional and national plans in future energy scenarios. Timely and coordinated decisions are required in all these areas to ensure efficient investment decisions and to avoid unintended consequences.

Energy System Operations

We welcome Ofgem's plans to embark on a strategic review of how system operation is undertaken across the electricity and gas networks. This should include interactions between Transmission and Distribution and provide clarity around roles and responsibilities whilst ensuring that costs for actions taken within one energy source or network for the benefit of another energy source or network are appropriately reflected on the correct parties. We also recognise the importance of data sharing as raised by Ofgem in the FWP; our network companies have made significant progress in this area under RIIO-1, publishing information to help stakeholders plan where to connect and provide flexibility services. Work in this area

continues to progress. In our responses to previous Ofgem consultations, including “Position paper on Distribution System Operation” and “RIIO-ED2 Open Letter”, we have set out our views on how the functions of a DSO going forward clearly align with those of a DNO and will help to deliver efficiency in the development and operation of the electricity distribution network. A clear and timely policy decision is required from Ofgem with regards to roles and responsibilities going forward and the associated regulatory framework to ensure Business Plans can be developed on this basis, delivering efficiency and maximum value for consumers.

We are actively engaging with National Grid Energy System Operator (NGESO) during the development of its RIIO-2 Business Plan. Overall, we are encouraged by NGESO’s business plan to deliver the net zero targets and its ambition to adapt its current services and operations. However, we believe the above areas require further engagement and collective development by stakeholders. We will continue to engage with the NGESO throughout the RIIO-2 business planning process and beyond.

We are particularly encouraged by the NGESO’s proposals to work with all stakeholders in **advocating for net zero in energy policy**. As the GB ESO it is in an ideal position to co-ordinate and facilitate industry engagement to enable collective advice from the industry on energy policy. We note that the responsibility of developing policy remains with the UK Government. The policy areas having an impact on delivering the net zero targets could range from industry practices such as network charging and queue management to contributing to GB wide policy issues such as transport and heat decarbonisation. Being stakeholder-led in this approach will require transparency from NGESO on policy priorities for net zero. During the development of our business plan, stakeholders highlighted the important role of networks in advocating for net zero. For SHE-Transmission this includes representing a North of Scotland and islands perspective. We will engage with the GB ESO to ensure our stakeholders’ views are represented. We would welcome clarity from NGESO on its proposed role and responsibilities in this new policy advocacy role including how it will approach the ‘trade-offs’ of stakeholders’ views.

Value for Money for Network Projects

We continue to believe that, as a responsible transmission and distribution owner, we are best placed to deliver an economic and efficient network to the benefit of consumers. Co-ordinating the delivery of several projects can often help lead to the most efficient solution. Maintenance and careful operational management of the network during development of new assets or reinforcement of existing areas of network, is integral to ensuring it remains safe and secure for customers, the public, and of course for those that operate and work on it. Early stage planning and coordination of maintenance with other capital investment projects, aligning with optimal operational conditions, leads to additional benefits through economies of scale in resourcing and minimisation of network disruption.

Recognising the important role for third party providers and the competitive market in striving for cost efficiency, we have and will continue to work closely with our supply chain to achieve this. We are subject to laws that require competitive procurement of our capital investment and associated works, goods and services above minimum value thresholds. In addition, we apply a risk/value matrix to our procurement activities which fall under these minimum value thresholds, ensuring we competitively procure in a variety of ways to ensure, even at lower values, our expenditure is as efficient as it can be.

The further extension of competition during RIIO-2 should only be considered where it can be clearly demonstrated that it does not compromise the security and operation of GB's critical national electricity infrastructure and provides better value to consumers. In order to understand whether the extension of competition has the potential to benefit consumers, there is an obligation to proceed on an evidence-based framework with all relevant factors taken into consideration. The process of passing primary legislation (such as that granting Ofgem the ability to competitively appoint transmission licensees) would provide the necessary scrutiny required to examine all relevant evidence to provide Ofgem with clear guidance on how to exercise its powers to extend competition, such that it is clear that customers will benefit. Our views on this are consistent for the proposed extension of competition across all energy sectors.

Many of the challenges we will face during the RIIO-2 period are similar to those we have addressed over the past ten years. By building upon our experience, we are well placed to manage these challenges and so deliver cost-effective outcomes that keep down the energy bill.

We note that the NGESO's Early Competition Plan will be submitted to Ofgem in February 2021; our network companies are actively engaging with it as it explores potential early competition models which could be introduced in RIIO-2. Though the consideration of competition models for network investment is not currently limited in any way, we welcome Ofgem's stipulations, in its recent Open Letter, that any model developed by the NGESO should be able to operate with and without Competitively Appointed Transmission Owner (CATO) legislation, and that in order to compete for the delivery of network solutions, parties will need to hold the required licence. It is also important to ensure that any CATO entities are parties to, and fully compliant with, the existing industry codes (such as the STC, Grid Code and CUSC) as well as the Network Codes (such as the DCC, HVDC, SOGL and ERNC). We consider this is fundamental for developing true competition whilst maintaining the safety and integrity of critical national infrastructure.

Review the fundamental principles of transmission charging

A decade has passed since the start of Project TransmiT and the energy industry has changed considerably in that time. Whilst SSE has generally been very supportive of the direction of travel in Ofgem's current reviews of access and residual charging methodologies, it is clear that legislating for net zero marks a paradigm shift in UK energy policy.

As part of Ofgem's work to articulate and facilitate a viable path to net zero, SSE considers that it is now time to reassess the fundamental principles underpinning electricity transmission charges. In particular, it is clear that low carbon generation will seek to preferentially locate in areas with the best renewable resource but this is clearly undermined by the strong locational signal in the structure of existing transmission charges. Further, the difficulty for developers in assessing the future level of TNUoS charges – which is driven by future and unforeseeable changes in the generation mix in relevant network zones – results in a significant commercial risk which may either delay or prevent investment in the generation mix able to meet carbon reduction targets at the most efficient cost.

The locational element of transmission charges will make less sense as the UK transitions towards an energy mix increasingly dominated by investment in offshore wind. Current work to review the OFTO regime – and early consideration of the scope for offshore grid to support the transition to zero carbon – demonstrate the need for a thorough review of transmission charges. This will be vital to maintain the level of investment in existing and new generation required to deliver carbon reduction targets over the coming decades.

Review “end of revenue-stream” issues relating to OFTO licences

While we appreciate that Ofgem will be reviewing ‘end of revenue stream’ issues in 2021, it is our view that this work should be brought forward to 2020. Although the ‘end of life’ for the first assets regulated under the OFTO regime is 2033, operators are now entering the period when assessments regarding the future of their generation assets, must be undertaken. Having some certainty over the regulated possibilities will be imperative to ensure that operators are able to make properly informed decisions *now* regarding maintenance and investment in the longer-term future of existing assets.

Ofgem strategic objective 2: Protecting consumers, especially the vulnerable, stamping out sharp practice and ensuring fair treatment

Summary of SSE's views:

- Ofgem must remain mindful of the differences between the domestic and microbusiness markets.
- Central oversight of TPIs (by Ofgem) is the only way to ensure efficient outcomes are achieved for customers.
- Clarity regarding risks, roles and responsibilities of all parties is needed to help network companies deliver the required outcomes for consumers.
- The current regulatory framework for black start remains appropriate, however we are concerned that there could be a loss of GB gas storage as an unintended consequence of changes to the gas transmission charging regime.
- To avoid distorting competition, interconnectors and traditional generation and NTS and DN connected gas generation need to be treated equally.
- Consumers and industry need to be protected from the industry cost of avoidable supplier failure.

- Detailed methodologies need to be provided well in advance of RIIO-1 close-out to ensure a seamless process with RIIO-2.

Protecting Domestic and Microbusiness Consumers (MBCs)

We agree that customers should be appropriately protected when engaging with any market. However, we would encourage Ofgem to remain cognisant of the differences between the domestic and microbusiness markets when assessing whether these are operating effectively. The markets should be considered by Ofgem on their own merits in order to avoid any unintended consequences. In taking time to understand the non-domestic market, we think it is important that Ofgem takes into account a wide range of factors when determining whether MBCs can access a 'competitive retail market' – for example, Ofgem note that “consumer outcomes are driven by more than just price” and this includes consumer behaviour¹. Within its State of the Energy Market report, Ofgem notes that 53% of domestic customers are on a default tariff. This is significantly above the equivalent levels in the non-domestic market overall (25%), or, specifically, for the smallest microbusiness consumers (35% gas, 38% electricity).

In addition, it is important to consider that microbusiness consumers already have access to adequate levels of consumer protection – an overarching licence condition requiring that they are treated fairly, supported by dedicated rules to cover key interactions and enhanced by complementary regulations (e.g. Business Protection from Misleading Marketing Regulations, Gas and Electricity (Consumer Complaints Handling Standards) Regulations etc). Further consideration may need to be given to the needs and protection of microbusiness consumers who choose to engage with companies who are not regulated under the current regime, e.g. Third Party Intermediaries (TPIs). We would welcome further powers being provided to Ofgem to ensure it is capable of protecting consumers who choose to engage in this manner. We recognise that central oversight of TPIs would require additional effort, but we believe this is the only way of ensuring effective customer outcomes are achieved. This was the view shared by several suppliers during the CMA investigation², the joint BEIS/Ofgem consultation on 'Flexible and responsive energy retail markets'³, and remains the view held by Citizens Advice⁴. We do not believe that placing additional obligations on suppliers would lead to improved consumer outcomes.

We fully support Ofgem's efforts in protecting consumers, especially those in vulnerable situations and believe there is more that networks businesses in particular can do in this area. Proposals in this area are being progressed through Ofgem Working Groups and further detail will be set out in Business Plans in response to stakeholder engagement. We note

¹ <https://www.ofgem.gov.uk/ofgem-publications/156758>

² <https://assets.publishing.service.gov.uk/media/576bccf740f0b652dd0000ba/appendix-17-4-third-party-intermediary-code-of-conduct-remedy-fr.pdf>

³ <https://www.ofgem.gov.uk/publications-and-updates/flexible-and-responsive-energy-retail-markets>

⁴ <https://www.citizensadvice.org.uk/Global/CitizensAdvice/Energy/Citizens%20Advice%20-%20Closing%20the%20protection%20gap.pdf>

Ofgem's proposals in this area to make greater use of principle based regulation (via the proposed introduction of a "vulnerability principle" for gas and network companies). Sufficient clarity regarding the risks, roles and responsibilities of all parties must be provided in the licence if network companies are to deliver the required outcomes.

According to the National Audit Office's report on Electricity Networks⁵ published in 2020, the amount of electricity which flows through networks will double by 2050 as we deliver the UK Government's net zero ambitions. While better use of data, AI and innovative or flexible solutions will help avoid or defer the need for traditional network investment in some cases, there will still be a cost associated with accommodating an increased amount of low carbon technologies and Electric Vehicles (EVs) connecting to the network. How to mitigate this impact on the most vulnerable and fuel poor customers requires research and analysis; efficiently incurred network costs should be recovered through charging mechanisms which support this. Clearly given the scale and pace of future challenges careful consideration will need to be given to value for money, customer willingness and ability to pay, and affordability. We expect details to justify projects to be set out in Business Plans as part of the Investment Decision Pack, supported by stakeholder engagement and Cost Benefit Analysis. However, we note that to date, the results of this analysis, particularly around Customer Value Proposition and Social Return on Investment is not necessarily directly comparable between companies. We would urge Ofgem to focus on coordination and development of guidance and methodologies in this area to ensure all consumers benefit.

Black start

SSE agrees that the continued regulation of black start is needed to ensure that GB consumers have the right level of protection; Ofgem's plan to assess the cost incurred by NGESO is welcome. As noted in SHE-Transmission's response to NGESO's RIIO-2 Business Plan roles and responsibilities between networks and the GB ESO must be agreed. We believe that the current regulatory framework for determining the allowed revenue derived from Black Start, that NGESO may recover each year, remains appropriate. As such, we maintain that there is no need for any further obligations to be placed upon generators in GB than exist within the current Network Codes and the associated GB terms and conditions for system restoration services. On 3 April 2019, NGESO submitted methodologies⁶ to satisfy its obligations under the regulatory framework and Ofgem considered these to meet the requirements and determined them to be approved. We believe these existing standards should continue to apply. Placing any additional restoration obligations on certain generators, especially if not appropriately remunerated, will have a detrimental (and distortionary) effect on some GB market participants; which could, in extremis, lead to plant curtailing (or closing?) which could exacerbate the situation further.

The recent Business Plan submissions from the relevant transmission owners focused on the future investment that will be needed to mitigate the likelihood of a black start event. We

⁵ <https://www.nao.org.uk/report/electricity-networks/>

⁶ <https://www.nationalgrideso.com/balancing-services/system-security-services/black-start>

are prepared for the direction in this area which we expect from Ofgem and the UK Government in due course.

Interconnector Policy and Infrastructure

SSE recognises interconnectors can contribute towards a balanced portfolio of energy sources that will enable the UK to ensure security of supply. We advocate that there is a need for interconnectors to be treated equally to forms of ‘traditional generation’, in that currently there is a discrepancy whereby interconnectors are not subject to the same charges as traditional generators but can access the same revenue streams; such as the Capacity Market; whilst also benefitting from a risk mitigating ‘cap and floor’ funding regime – this can distort competition by pushing domestic generation capacity out. We therefore support the work being done to enable direct foreign participation in capacity mechanisms to improve competition. Also, whilst interconnection offers access to additional generation capacity resources, questions arise over the carbon output given the imbalance in carbon prices between GB and interconnected markets. In order to reach the UK Government’s net zero targets, Ofgem must ensure that the primary source of the electricity used in GB is from renewable sources. To reassure stakeholders, Ofgem must consider ways to properly account for the carbon footprint of interconnected generation given its potential competitive advantage (due to the possibility of a lower cost of carbon).

Gas Flexibility

Flexible and efficient Combined Cycle Gas Turbines (CCGTs) have a critical role to play in the transition to a net zero world. They complement variable renewable generation and provide flexible and reliable capacity which can respond to changes in the market. They can also be decarbonised through the use of CCUS and hydrogen technologies. Given that CCGTs will be curtailed first in a gas emergency this creates two areas of concern. Firstly, that there will be insufficient electricity supplies if gas supplies are limited, and secondly, how should the industry manage the inequality between NTS connected CCGTs (whose interruption provides balancing insurance for the whole gas industry) and DN connected gas-fired generators that are immune from interruption due to gas supply curtailment. We request that Ofgem recognise these concerns and consider whether NTS connected CCGTs should be granted lower NTS charges (through a bigger interruptible discount) and protection against capacity mechanism penalties should a CCGT be interrupted in a gas emergency. It is important for Ofgem to help ensure the arrangements are fit for purpose and equitable given the different mix of generation now on the network.

Gas Storage

Changes to gas transmission charges under Uniform Network Code (UNC) Modification 0678A will increase costs for storage and increase financial losses. Storage net revenues are already insufficient to finance refurbishment of existing assets and may result in the closure of those assets; increased network costs will exacerbate this. The loss of further GB gas storage would have a detrimental impact on supply competition and increase costs to customers through increased National Balancing Point (NBP) gas costs and price volatility feeding into supplier risk premiums. Unfortunately, this will have a detrimental impact on

both gas and electricity security of supply and other users will pay higher charges to compensate for the missing revenue no longer paid by gas storage operators. We consider that larger discounts for gas storage would be preferable to what is proposed so as to mitigate any unintended consequences to customer costs. We discuss the gas charging review below and consider that an alternative UNC modification may be preferable to mitigate the risk of this unintended consequence for customer costs.

Competent Authority Regulation

We agree with the key milestones proposed for Competent Authority Regulation. We note however, that the improvement planning under Network Information Systems Directive (NISD) presently works to different timeframes to regulatory review periods and we would appreciate guidelines from Ofgem to enable alignment as we develop RIIO ED2 plans.

Monitoring, Compliance & Enforcement/ Retail Policy and Compliance

We agree it is important that Ofgem continues to monitor the health of individual energy suppliers particularly given the poor consumer outcomes being experienced by the recent volume of supplier failures. These have imposed significant avoidable costs on Industry and consumers. Additionally, it has had a detrimental impact on consumer confidence. We also welcome Ofgem's continued commitment to working with BEIS to consider possible changes to legislation implementing the Renewables Obligation Scheme. However, in conjunction with the Supplier Licensing Review proposals, we would encourage Ofgem to take action as early as possible when encountering evidence that a supplier is financially struggling – by, for example, utilising its information gathering powers to ensure it maintains an up to date view of a supplier's financial health. For example, the breach of an industry code credit requirement or non-payment of a bill relating to a regulatory obligation should prompt Ofgem to require suppliers to provide evidence of their ability to meet their other regulatory obligations, even where these payments do not fall due for several months (such as the RO) or, potentially, provide securitisation for the non-payment risk. We look forward to working further with Ofgem on the Supplier Licensing Review to protect consumers from the industry cost of avoidable supplier failure.

Wholesale and System Policy and Compliance – Ensuring continuing value for consumers

We note Ofgem's intention to close out existing price controls, considering whether adjustments need to be made to network allowed revenues, taking account of delivery of outputs. It is also important that full consideration is given to the detailed price control settlement, changing circumstances throughout the price control period, additional services delivered by licensees, and money returned to customers during the price control period through sharing factors. We would urge Ofgem to ensure detailed methodologies are provided well in advance of close out to ensure that the process is as seamless as possible, and that the regulatory settlement is not undermined in the process.

We support the development of effective policies that seek to ensure customer harm is minimised across the network and we will work with Ofgem on this accordingly.

We note that Ofgem's listed milestones recognises the electricity transmission price control being closed down in 2022. However, there is no mention of dates for publishing the RIIO T1 close out methodologies, which is essential to submitting evidence against allowed revenues and outputs delivered during the RIIO-1 price control period. We believe this should be included in Ofgem's FWP.

Ofgem strategic objective 3: Decarbonising to deliver a net zero economy at the lowest cost to consumers

Summary of SSE's views:

- Investment in a range of generation technologies will change the balance of economic drivers across the market and Ofgem will need to consider the impact of this in more detail.
- The energy policy and regulatory framework needs to ensure that both existing and new flexible sources of generation remain viable to facilitate efficient delivery of net zero targets.
- Ofgem could build further on its Decarbonisation Programme Action Plan by creating an environment that fosters anticipatory investment.
- Suppliers and network companies are working hard to overcome the many challenges associated with the smart meter programme and there are areas where Ofgem involvement is still needed. Successful market-wide half hourly settlement programme implementation is inextricably linked to smart meter rollout milestones.
- We support the introduction of better price signals to reduce market distortions and incentivise users connected to the distribution network to make more efficient investment and despatch signals.
- Coordination and timely reform is needed to ensure that whole system solutions are not inhibited.
- We support the development of a Heat Roadmap to provide a pathway to net zero. Timelines need to be carefully considered to ensure that efficient outcomes are delivered under the RIIO ED2 framework.
- We look forward to inputting to Ofgem's regulatory strategy on electric vehicles to support roll out and maximise the benefits to consumers.

Maintaining an appropriate signal to invest

Legislating for net zero is a watershed moment in UK energy policy. It is clear that meeting ambitious carbon reduction targets will require significant and ongoing investment in a range of generation technologies. This investment, however, will necessarily change the balance of economic drivers across the market. It is not yet clear what impact this change may have in the long run – SSE would therefore urge Ofgem to consider this potential impact in more detail. In particular, it is critical for the success of the UK transition to net zero that a clear signal is maintained to promote investment in the diverse range of generation and storage

technology required to maintain system security and reliability at acceptable levels in the decades to come.

Smart metering

We remain committed to maximising the benefits that the industry can achieve from the effective rollout of smart meters. However, it is important that Ofgem continues to acknowledge the work suppliers and network companies are undertaking to overcome the many challenges associated with this programme. In particular, we consider that there are factors that influence the decision to install a smart meter in the non-domestic market which are markedly different to those in the domestic market. Issues such as time taken to power-down and power-up again, and the associated risks around this (e.g. loss of power for a period of time, lost revenue etc.), as well as logistical issues (such as needing extra resource to accompany meter installers on sites) are problems that concern many non-domestic consumers. In the absence of a mandate on customers to accept smart meters, this contributes towards low customer interest in smart metering in the non-domestic sector.

We also believe there is a need for Ofgem to play a more pro-active approach in driving smart meter quality. Meter issues are adding to pre-existing customer apathy and damaging customer trust in smart meters functioning to deliver their promised benefits. In the absence of an Ofgem focus on this issue, we have identified an apparent lack of urgency in overcoming known manufacturer-related faults affecting, for example, firmware, meter pairing, billing or Wide Area Network (WAN) issues.

On market-wide settlement reform, SSE largely agrees with the programme and proposals, including the work that is currently being undertaken to develop the target operating model and to thoroughly understand the benefits of the reforms, prior to the full business case being published. However, with the very high number of potential activities in the FWP, we do have concerns over the timescale for the implementation of these reforms and would urge Ofgem to take this into account when arriving at a final decision. In order to implement the full solution of market-wide settlement reform successfully, it is necessary for there to be a high percentage of smart meters installed at domestic customer premises which can be accessed remotely by suppliers for the submission of settlement readings where the customer has either opted-in or not opted-out. Without such a critical mass being achieved, there is a danger that too much half hourly settlement data will be estimated on too little real data, which could lower the accuracy of electricity settlement, at least for some customers, compared to the accuracy levels being achieved under the current arrangements. Ofgem should ensure that the implementation timescale is aligned to the smart meter rollout milestones.

Energy Network Reforms

We welcome Ofgem's ongoing progress of its Access and Forward Looking Charges Significant Code Review and the considerations published in its Winter 2019 working paper⁷. We agree

⁷<https://www.ofgem.gov.uk/publications-and-updates/access-and-forward-looking-charges-significant-code-review-winter-2019-working-paper>

with Ofgem's assessment on the areas for reform and the principles Ofgem are proposing to apply. We agree that the current information and evidence so far does not show any leading options for change, but options exist to provide a range of improvements, from discrete, low change options to more ambitious, and potentially more cost-reflective harmonisation. We believe that changes to the rules, which underpin industry access to electricity networks and the charges faced for using the system, will go a long way in meeting the demands of the future energy system. As such we support the introduction of better price signals to reduce market distortions and incentivise users connected to the distribution network to make more efficient investment and dispatch decisions. However, there is a risk that Ofgem's proposed reforms could inhibit whole system operation if not developed in a coordinated manner across the industry. For example, if charging reforms do not create a level playing field across networks then the potential scope for whole system solutions will be reduced. In addition, Ofgem also need to consider the risk of potential unintended consequences from failure to properly assess the impact of proposed charging reform. For example, if it is too costly to connect in areas with increased potential for renewable energy this could slow down the penetration of renewables and pose a threat to net zero.

We note however that the length of time for determinations in these areas have made developers and certain stakeholders hesitant to invest, with some awaiting Ofgem's final proposals and decisions to progress with some projects. This could have a detrimental impact on delivery of net zero ambitions. We are also concerned that the timelines proposed by Ofgem for publishing decisions in this area pose a risk to DNOs and transmission companies in terms of being able to prepare and deliver robust and efficient Business Plans for RIIO-ED2, and ensuring the interaction in terms of delivering net zero are fully taken into account in a coordinated and efficient way. We need urgent clarity from Ofgem in this area in order to be able to determine efficient network investment requirements over the short, medium and long term.

Gas charging review

SSE raised a Postage Stamp Revenue Pricing Methodology (RPM) in its modification proposal for UNC 0678C⁸, because it is better suited to the GB network than the Capacity Weighted Distance (CWD) RPM and will result in less distortion to wholesale market prices. However, we disagree with Ofgem on its interpretation of Article 35 and the exclusion of an application of the Revenue Recovery Charge (RRC) to existing fixed price contracts. Combined with other conclusions from Ofgem's Minded to Decision, this means that none of the proposed UNC 0678-related modifications further the relevant Code objectives and all should be rejected. We welcome the opportunity to develop further modifications to include larger discounts for gas storage and a new shorthaul product to avoid the bypass of the NTS, which would increase costs for remaining customers.

⁸ <https://www.gasgovernance.co.uk/0678>

Decarbonising Heat and Transport

Two areas where emissions reductions can be accelerated domestically by deployment of enabling infrastructure are industry and transport through EV charging and CCUS/hydrogen infrastructure. Together these sectors alone represented 44% of UK GHG emissions in 2018. SSE welcomes the new UK Government's commitment to additional funding for both EV charging and CCUS/hydrogen infrastructure.

However, SSE views the necessary enabling infrastructure to facilitate the take-up of low carbon opportunities in transport and industry as well as power generation can be largely deployed by using market frameworks to leverage private investment. With interest rates at historic lows the enabling infrastructure can be deployed cost-effectively, encouraging a decade of action needed to put the UK on a path to net zero whilst providing clean growth opportunities for UK industry.

SSE strongly agrees that decarbonising heat is a necessity for reaching the net zero targets, and as such SSE advocates that emissions reductions in electricity should be extended across the economy through an accelerated approach to electrification. However, given the challenges of decarbonising the UK's existing building stock, further work will be required to ensure this can be done in a cost-effective and least disruptive manner for households.

Without support low carbon heat technologies will struggle to compete from a CAPEX and end user charges perspective against traditional, higher carbon forms of heating which are already established (which have lower policy related costs). A combination of public incentives and policies are needed to accelerate electrification, and support the deployment at scale of immature low carbon heat technologies, such as heat pumps. An area which needs continued support is development of heat networks, and there should be a continuation of support to avoid a drop-off in the current installation rate. Heat network deployment costs could be reduced by reducing demand risk through de-risking mechanisms, and the medium-long term delivery of heat networks could be driven by demand guarantees reducing the Cost of Capital of these investments.

There is a need for early decisions from Ofgem to understand and build in to price controls the potential significant impact this has on electricity networks in RIIO-2.

SSE supports the development of a Heat Roadmap by Summer 2020, providing a pathway for heat to get to net zero. The Roadmap will provide a useful opportunity to communicate the UK's approach to decarbonise a hard-to-abate sector ahead of this year's COP26 meeting. Whilst the UK's experience is not universally replicable elsewhere given differences in building stock, heating systems and local climates, there will be some experiences that can be shared, and signal the UK's commitment to tackling climate change.

Transportation currently contributes significantly towards the UK carbon emissions and Electric Vehicles have a significant role to play to ensure the UK achieves its goal of achieving a net zero carbon economy by 2050. To ensure that the electrification of transport is a low

carbon option renewable technology must be the primary source of generation. In addition, transport end users need to review established practises and behaviours to allow energy optimisation. Stakeholders will need to be encouraged to cooperate in order to deliver novel solutions to speed up the efficient delivery of electrification of transport i.e. consideration of multiple usage for of charging points could reduce the number of required grid connections.

In addition to existing commitments from the new UK Government, the world's most extensive EV charging network could be deployed cost-effectively by: 1) Local bodies, transport authorities and electricity distribution networks Identifying and designating necessary charging requirements locally; 2) Assisting local bodies to tender for an extensive EV charging network; and 3) Introducing a deployment mechanism by distribution networks as a fallback option if tenders do not deliver the designated EV charging infrastructure.

People without off-street parking in urban areas and strategic points at the fringes of the rural transport network are two infrastructure gaps which could benefit from this approach. Without appropriate access to charging facilities at home, in transit and at their destination, there is a risk that we repeat the problems with the broadband rollout, resulting in insufficient coverage to enable drivers to have the confidence of sufficient access to charging facilities to ensure a timely switch to an EV.

Further coordination and cooperation from Ofgem and BEIS, as set out in the National Audit Office's recent report⁹, is needed to ensure a common and clear understanding of requirements. In particular, greater clarification is required in relation to heat policy as current timelines are inconsistent with RIIO ED2 timeframes and risk delivering inefficient outcomes.

Monitoring, compliance and enforcement (relating to heat networks)

We welcome the introduction of fair and proportionate regulation of heat as this provides good protection of consumers in a level playing field. However, appropriate thought must be given to ensuring the regime is sufficiently flexible and proportionate, whilst recognising the relatively nascent nature of the sector as well as the multiple business and operating models that currently exist. In addition, as recommended by the CMA in 2018, prospective buyers and tenants should have access to better information on heat networks in a property prior to signing contracts. Ofgem should work with stakeholders to ensure this level of transparency is normalised.

Flexibility to grid

Communal and district heating networks allied to heat pump technology have the potential to provide significant flexibility benefit to the electricity grid through their ability to store large volumes of energy in thermal stores and batteries.

⁹ <https://www.nao.org.uk/wp-content/uploads/2020/01/Electricity-networks.pdf>

Achieving Net Zero Through Wholesale Markets

SSE is fully supportive of Ofgem's intention to work towards a net zero economy at the lowest costs to customers, and we recognise the difficulty this may cause in continuing to provide consumers with a reliable source of energy. One of the key barriers to low carbon generation is the cost of development. It is important that there is accessible support which can stimulate investment in new low carbon flexible technologies, which includes low-carbon thermal generation and pumped storage. Equally, however it is vital that we do not lose focus on the need for existing flexible generation to remain viable.

An energy system built on renewables, complemented by progressively lower carbon flexible thermal generation provides a cost-effective approach to delivering timely emissions reductions while providing multiple benefits for UK plc. The Committee on Climate Change's analysis demonstrates that there is a key role for gas generation in a net zero world. To achieve this, there needs to be a firm long-term commitment to low-carbon technologies such as carbon capture and storage and hydrogen production/ generation, combined with a clear regulatory and legislative framework to support investment. Ofgem should work closely with BEIS to deliver a sustainable market framework for low-carbon thermal generation.

In addition, pumped storage offers security of supply to consumers while supporting the decarbonisation of electricity generation. Pumped storage also has the added benefit of offering demand side response and offers a facility to store energy for periods of high demand; this storage, critically, can be longer duration than existing battery technology. It does not carry political and regulatory risk from neighbouring countries. A cap and floor regime, for example, could offer a regulatory approach to provide developers with an incentive to identify efficient investment opportunities which are in consumer's interests, striking a balance between commercial incentives and risk mitigation by giving developers a level of certainty without full underwriting by consumers. Given the effectiveness of this mechanism in supporting investment in interconnectors, consideration should be given to development of a cap and floor regime suitable for storage. A regime that includes the development of pumped storage assets would not only support Ofgem's strategic objectives of decarbonisation and enabling competition and innovation.

As mentioned in our covering letter, SSE has announced our 2030 Sustainability Goals and a strong decarbonisation agenda within our business strategy. We are encouraged by Ofgem's publication of their Decarbonisation Action Plan, however we believe that Ofgem could build further on its Plan by creating an environment that fosters anticipatory investment. Anticipatory investment will facilitate the achievement of the UK Government's net zero targets and the changes required for longer-term stability as the network transitions. As such, large transmission projects should provide capacity for future renewable generation to develop, benefiting the UK in terms of low carbon generation, while reducing the wholesale price of electricity. We feel this area should be included in Ofgem's FWP, and related activity explored in greater depth in order to reflect the UK's decarbonisation goals and the future needs of consumers.

Renewable Energy and Social Scheme Administration

We agree that Ofgem should closely monitor suppliers to minimise risk of mutualisation of these costs. Any costs that arise should be shared equitably across the market.

Other comments:

Our Foundations

We agree that Ofgem should update its policy on energy supply licensees' company costs and revenue reporting, to ensure that it can effectively monitor profitability in the energy market. The market consisted far fewer suppliers when the rules were first introduced and have failed to keep pace with the changes in the supply market.

Detailed analysis undertaken by the Commission¹⁰ when introducing the Electricity Balancing Guidelines has shown significant saving (7%) can be achieved for end consumers if the contracting /market rules for the provision of balancing is done on the same basis for all providers of the products. Unfortunately, the current (and increasing) nature of having disparate products (often for the same thing, but 're-badged' and thus 'different') and associated divergence of contractual terms and conditions, between providers, for those same products means that costs for consumers are higher than they should be. We would encourage Ofgem to examine this area carefully and seek to ensure both a harmonisation of products as well as of the associated terms and conditions (including greater transparency around those contractual terms and conditions).

Data, Digital and Technology

We support Ofgem's proposals regarding agile teams to operate in a more decentralised way with joint decision making but would urge that this needs to be balanced with the benefits gained from previous experience and knowledge built up in specific areas. We also agree that central to this change is one "common factor" – "how we receive, retain, process and use data". While data and digital services will be fundamental to informative and improved decision making as we move towards more modern and interactive networks, it is important that arrangements are proportionate and focus on areas where we can deliver value for money at minimum cost. Consideration should also be given to potential barriers including the legal ability to share data. The current legislation governing the electricity industry is designed to encourage customers to share their data (personal and commercial) with network operators, safe in the knowledge that it will be kept confidential unless they consent to it being shared.

Customer information is not a defined term, but legislation suggests that it is a very wide category comprising all information that a network operator receives from a customer, such as: details of its generating plant, details of its site, potential demand side response, its intentions to use network capacity in future, current capacity needs, etc. This customer

¹⁰ <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52016SC0410&from=EN>

information is key for network operators to design, manage and futureproof their networks. However, in our opinion the legislation does not currently transfer ownership of that customer information to the network operators. This means, they simply hold that information and have the right to use it for network operation, but not for data sharing.

It is important that existing barriers are addressed and that the legislative framework for data sharing is in place before any changes are made, therefore, we have been recommending legislative and code changes where necessary, for example within the remit of the Open Networks Project in relation to the System Wide Resources Register. We urge Ofgem, in consultation with the Information Commissioner, to take a “top down” approach to this issue, to carry out a complete overhaul of the current electrical industry data sharing model and the legislation that governs it. In particular:

1. Section 105 of the Utilities Act which prevents most of the data sharing. It should be replaced, so that it starts with the presumption that all customer information is shared except for personal data or data specifically and reasonably marked by the customer as confidential.
2. DIN6 of the Distribution Code dealing with confidentiality is restrictive and unclear. It should also be replaced with the presumption that customer information is shared, except for personal data or data which the customer specifically and reasonably requires to be kept confidential.
3. Cyber security risk. Operators must be conscious of their duties under the Network and Information Systems Regulation 2018 and ensure that sharing of data does not introduce cyber security risk to the networks. Network operators will require a clear written and legally binding assurance that they will not be in breach of such regulation by sharing required data.
4. GDPR in data sharing. Customers must be informed of the benefits of the reduced confidentiality protections and be reassured that their personal data is not going to be compromised as a result (by, for example, the use of anonymisation and aggregation). This could be achieved by an industry wide information campaign so that data sharing is well received.
5. Ofgem should carry out a comprehensive review of all legislation, regulations, codes, etc. which may also require revision to ensure the change it desires is effective. Legislative change takes time and this delay needs to be factored into the timeframe within which Ofgem can reasonably require network operators to share data which is not their own.

Independent Distribution Network Operators (IDNOs)

We are disappointed that there is no mention of Independent Network Operators (IDNOs) in the draft FWP. We believe that IDNOs could, with the right framework, support regional and national decarbonisation. In addition, Ofgem in a consultation in 2018¹¹ noted that it intended to review issues in the IDNO market, taking account of the impact of both its

¹¹ https://www.ofgem.gov.uk/system/files/docs/2018/12/aidno_decision_-_final_version.pdf



Transmission Charging Review (TCR) and Access & Forward Looking Charges reforms on IDNOs. We would suggest that aspects of this review could be included in the FWP.