



St Lawrence House
Station Approach
Horley
Surrey
RH6 9HJ

Ofgem
By email to fwp@ofgem.gov.uk

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Ofgem Future Work Programme consultation 2022/23

SGN welcomes the opportunity to respond to Ofgem's Forward Work Programme consultation¹. As you may be aware, SGN manage the network that distributes natural and green gas to homes and businesses across Scotland and the South of England. We deliver a safe, secure and reliable gas supply to 5.9 million customers through 74,000km of pipeline.

We appreciate the visibility that the Forward Work Programme provides and our opportunity to feed into it. In our response below we have directly referenced the programme points we believe are appropriate to ourselves. We believe, however, that there is significant work and thinking to be done on three areas, which perhaps need greater amplification in your Forward Work Programme:

1. How the gas industry is likely to evolve alongside the electricity sector, given that in Ofgem electricity has had greater focus in recent times.
2. The shape of RIIO-3 and future regulation to support Net Zero. The shorter duration of the regulatory period provides an opportunity to build on lessons-learnt from RIIO-2 business plan submission process. Given the shorter price control period it is also important that work is started early and with full visibility on potential areas of change.
3. Future gas policy is an area that requires a key focus in the next couple of years. Critical evidence needs to be provided to enable effective policy decision making and it is important that Ofgem and networks work together to deliver this in a timely and efficient manner.

As reflected in Ofgem's Strategic Change Programmes, the actions taken now will be critical to future energy systems. As such, SGN is already implementing ambitious low carbon projects and targets, to create a meaningful glide path towards a net zero energy system.

Should you require any further information with regards to our response then please do not hesitate to contact me at david.handley@sgn.co.uk

Yours faithfully,

David Handley
Head of Regulation (SGN)

¹ [Ofgem FWP consultation 2022/23](#)

Point 1: Enduring Priorities

Customer service continues to be at the heart of our activities, with the protection of vulnerable customers remaining a top priority. Now that we have started RIIO-GD2 we intend to build further on our success, with ambitious plans to maintain our industry-leading customer service performance in customer satisfaction and complaint handling by minimising disruption as we maintain and repair our network. We have consistently achieved over 9-out-of-10 for customer satisfaction score relating to households and will seek to maintain this position throughout this price control.

Furthermore, we intend to maximise the impact of the new Vulnerability and Carbon Monoxide Allowance to deliver the greatest social impact, by actively partnering in our communities to support 250,000 households in vulnerable circumstances to use energy safely, efficiently and affordably.

We are committed to lifting customers in our community out of fuel poverty, investing in ways to identify those most at risk of living in a cold, unhealthy and unaffordable home. Natural gas has a critical role as a safe and cost-effective energy source for such customers. Our focus is providing those most impacted households with a holistic programme of measures to support their move out of fuel poverty, and our commitment to deliver 18,000 funded connections to fuel poor homes to reduce the cost to heat is ambitious across the sector. More broadly, we would wish to ensure that the development of the updated Warm Home Discount scheme is supportive of our continued efforts in lifting customers out of fuel poverty.

Data, and the smart use of data, is vital in identifying and supporting customers in vulnerable situations and forms a key aspect of Ofgem's Vulnerability Strategy. As such, we are committed to a joined-up approach using a single Priority Services Register across all utilities, as this represents the most effective way of safeguarding those in need from both an affordability perspective and at times of immediate need, for example during a gas, electricity or water supply interruption or emergency evacuation.

Codes and licencing are also identified under the list of enduring priorities. The importance of codes and licencing should be stressed. For the gas sector in particular, licence changes and code modifications necessary to facilitate net zero are a critical enabler to the hydrogen pathway and it is very important that the teams reviewing these code changes have the capacity to evaluate and respond to these proposed modifications in a timely manner and given appropriate feedback if modifications aren't progressed.

We also recognise the importance of heat networks and the appropriate regulatory regime to facilitate the least cost, sustainable regulatory framework that works for all stakeholders as an important area for regulatory development.

Finally, we note there are significant organisational changes being implemented within Ofgem, for gas distribution networks the most notable change is the bringing together of the onshore electricity distribution and transmission with the gas distribution and transmission into an onshore operational network. We are concerned that there is a risk that gas networks will be squeezed by a greater focus on electricity and that there will be an associated decline in operational knowledge and experience. If this did occur, then we have a concern that it could lead to a deterioration in the quality of regulatory decision making.

Point 3: Future of Retail

The energy retail sector has experienced significant challenges recently, with multiple market exits and ongoing supplier volatility. This situation resulted from a combination of sustained high gas wholesale prices and supplier losses linked to under capitalisation and price volatility. Network operators are willing to assist Ofgem, in taking the steps we believe are necessary to protect consumers and restore confidence in the market. Restoring market confidence through a stable and fully responsive retail market is what all involved should be striving to achieve and that the risk of supply failures should be dealt with at source. We are concerned that there is an increasing risk of solutions adding complexity and unanticipated consequences particularly when they have been developed 'at pace' and without the normal policy development, consultation process and impact assessment.

The processes that have been put in place to accommodate the ongoing supplier volatility have, for the most part, worked well. As we move forward however SGN would like to highlight the importance of maintaining network financial resilience when it comes to any further supplier challenges, such as those associated with companies in special administration.

Point 4: Low Carbon Infrastructure

While there is a high degree of industry confidence in the potential of a low carbon infrastructure, it is crucial that energy policy and regulation strategy is shaped to facilitate growth in the biomethane market alongside that of hydrogen. Furthermore, while the ambition must be to move towards a low carbon and net zero future, the incumbent role of natural gas as a safe and cost-effective energy source should not be compromised. On this basis we would highlight that our existing transportation assets are subject to clear legislative requirements, such as set out in PSR, and irrespective of the level of demand, as a prudent operator, we must ensure the continued safety and reliability of these pipe assets which will continue to be subject to age related deterioration. This will equally apply to all network assets, not just the distribution pipes and will require continued investment.

Future Gas Policy

The next few years will be critical in making real progress in defining the role that hydrogen may play in the future energy transition, and to consider and develop the regulatory/industry mechanisms that will be needed to enable this option for customers. We welcome some of the flexible mechanisms that have been implemented in the RIIO-2 framework and recognise the need to work closely with Ofgem on utilising these mechanisms to develop hydrogen rapidly over the next few years.

The UK Government Heat Policy decision scheduled for 2026 will have major implications for the gas industry and the future role of the gas network in energy delivery. To support heat policy decisions, we have set out a portfolio of work to deliver compelling evidence for enduring utilisation of the gas network in the form of a net zero pathway to decarbonisation. Our pathway to decarbonisation and overall strategy is designed around a major system transformation away from natural gas to 100% hydrogen gas, which is the only credible pathway that could deliver net zero in full as an end state. This industry leading strategy was outlined in our RIIO-GD2 business plan submission and forms the basis for the national hydrogen programme, and Gas Goes Green movement.

The Future Gas Policy identifies the need to focus on iron mains replacement, depreciation of the gas infrastructure and regional approaches to 'first move' hydrogen areas. We agree that these are important areas for policy definition and debate.

- **Iron mains replacement.** It is very important that the HSE is central within these discussions and that they include an appropriate focus on methane emission reduction. For these reasons we believe that any review of replacement policy should also be extended out to steel mains and services as well as Iron. Due to the different characteristics in the manner in which they deteriorate over time, methane emissions from steel mains are generally higher than from iron.
- **Depreciation of gas infrastructure.** Whilst we support the debate on the appropriate depreciation policy, it is important that any policy decision is firmly considered and linked to the policy decision on the decarbonisation of heat, therefore Ofgem may wish to consider whether this activity should be undertaken later in GD2.
- **First move hydrogen areas.** We agree that this is an important area of focus and to identify the practical customer implications of such a move and how we protect the most vulnerable and fuel poor customers. The first move hydrogen areas are critical to achieving customer acceptability of later stage moves to hydrogen and hydrogen decarbonisation pathway.

Hydrogen

We agree that supporting the government in developing an evidence base on which to base their policy decisions on the future of gas is critical. SGN continue to work with Ofgem, national governments and stakeholders to identify areas where the evidence base needs to be improved, to work with stakeholders and other networks to deliver that evidence base, and to work with Ofgem and stakeholders to identify and resolve regulatory barriers to hydrogen development.

SGN also remains focussed on developing hydrogen as a viable net zero energy source, with our Aberdeen Vision demonstrating the commercial viability of hydrogen blending, and our H100 project, the first of its kind, taking hydrogen into 300 homes from 2022, providing zero-carbon fuel for heating and cooking. These projects represent key steps in our Gas Goes Green programme, developed in collaboration with the other Gas Distribution Networks, to inform critical decisions in relation to the future of heat, and to deliver the world's first zero carbon gas grid. The programme has shown that a pathway which combines low carbon gases such as biomethane and hydrogen could save £13bn per annum out to 2050, in comparison with the alternative option of full electrification.

There are two key strands to the pathway to decarbonisation; the safety, technical and practical evidence to demonstrate that the gas networks and associated infrastructure can distribute hydrogen and; how the hydrogen solution would be delivered in each region. The projects we have commenced in RIIO-GD2 and our participation in the BEIS Hydrogen Grid Research & Development Programme are designed to provide the underpinning evidence for each step on the pathway.

Our flagship H100 Fife project is a key national project within the pathway and BEIS's national hydrogen programme. Projects such as our North East Network and Industrial Cluster and Southampton Water are regional solutions/opportunities that map out how and where we could deliver net zero through the creation of regional hydrogen economies.

RIIO-3 Development

A five-year price control cycle is a short period of time in which to determine the policy changes that need to be implemented. There is a risk that policy is defined on short-term data before the policy changes implemented at the start of RIIO-GD2 have had an opportunity to become established and to be shown in the reporting data to be having an impact.

As such it is important the RII0-3 policy development happens in full dialogue with the networks and that networks have visibility of Ofgem's strategic intentions and expectations at an early stage so that they can be debated appropriately. It is also very important that a full project plan of the approach to GD3 is shared at an early stage and consulted upon to ensure that it is achievable. We would encourage Ofgem to start this early with an effective 'lessons-learnt' from the RII0-2 process to clarify where policy can be changed and adapted to achieve the best outcome. The policy on iron mains replacement is an example of a policy where any changes should be known prior to discussions on the development of the RII0-3 price controls.

Climate Resilience

It is important to recognise that climate resilience issues for gas networks are different to those for the electricity networks. Climate change resilience challenges include a growing inter-dependency on both electricity and mobile phone networks. Direct climate resilience issues for gas networks, tends to focus on flooding, river erosion, and landslips damaging assets. Indirect climate resilience issues for gas networks include the availability of cellular communications for communicating with critical assets in national and local gas supply emergency situations, this is a particular issue with the current plans to remove fixed copper line telecoms and associated low voltage electrical current.

Point 5: Full Chain Flexibility

We agree that the requirement for enhanced network flexibility, with smaller-scale, more localised generation becoming increasingly prevalent and a likely key characteristic of the future energy system. As such, we are working collaboratively with industry stakeholders to develop a whole systems approach to deliver affordable and zero carbon heat for our communities.

Gas remains a critical fuel in providing the baseline requirements not only for heating and cooking, but also in supporting the wider electricity network. For example, distribution networks continue to facilitate connections for increasing numbers of gas-fired electricity generators, which have been shown to be critical in supporting the electricity networks at times of system stress. Connection requests from CNG filling stations demonstrate the ongoing role of gas in the transition to decarbonising transport.

While we agree with the Forward Work Programme that the use of smart technology by consumers may shift an element of demand, the diurnal nature of particularly domestic heating and cooking load will always necessitate an energy system capable of reliably delivering peak demand. While we currently observe gas acting as the balancing energy source during variations, and shortfalls, in supply vs demand in the context of intermittent renewable generation, this role could be fulfilled by hydrogen in a future whole systems scenario.

Building a truly whole systems approach to energy management will require the immediate adoption of common practices across both gas and electricity to allow for the transition to a net zero carbon world where low carbon energy sources are developed and embedded. This will only be achieved through effective network planning and co-ordination by system operations required to deliver net zero at lowest cost.

For example, at present in the electricity market, localised low carbon energy sources are included in supply management and investment signalling, with DSOs taking into account the feed in tariff in their longer-term investment planning. In the gas market, investment signals are currently based on national offtakes and as such do not take into account localised generation. As localised generation

grows, low carbon sources such as biomethane are becoming proportionately significant in the overall gas mix, and their inclusion in supply management would further the efficiency of longer-term investment decisions. A consistent approach across electricity and gas to include localised generation would have a positive impact from a demand planning, charging and balancing perspective, with a varied energy mix reducing reliance on single energy sources and increasing the supply resilience of local areas, potentially softening the impact of demand at times of system stress.

It is very important that the resilience implications of this interdependency are recognised. We are concerned that the data flows that enable distribution gas networks to respond most effectively to the demands and expectations of peaking generators that provide system security to the electricity network may not be sufficient at a time of system stress.

Point 6: Data and Digitalisation

Data, and the smart use of data, is vital in identifying and supporting customers in vulnerable situations and forms a key aspect of Ofgem's Vulnerability Strategy. As such, we are committed to using a single Priority Services Register across all utilities, as this is most effective way of safeguarding those in need from both an affordability perspective and at times of immediate hardship, for example during a gas, electricity or water supply interruption or emergency evacuation.

While the coordinated use of data across industry and sectors will create further opportunities to deliver excellent customer service, it is important that the relevant storage and security procedures are in place to protect the information being held. As such, it is critical that organisations are given adequate flexibility to maintain pace with prevailing security requirements and are enabled to invest in anticipation of emerging and evolving risks, without restrictively rigid regulatory regimes.

We are supportive of the Ofgem Future Work Programme proposals in this area, however there are likely to be gaps in our funding, agreed as part of the current price control, that constrains the implementation of changes. SGN would encourage Ofgem, as part of the Future Work Programme, to come forward with proposals that would allow networks to access the funding necessary to fully support any proposals that come out of this developing work area.

Point 7: Energy Systems Governance

As reflected in the 2022/23 Forward Work Programme, the actions taken now will be critical to future energy systems. As such, SGN is already implementing ambitious low carbon projects and targets, to create a meaningful glide path towards a net zero energy system which capitalises on the high quality and reliable gas infrastructure already in place and delivers customers the best value future energy solutions.

We support the conclusion highlighted in the recent System Operator review that the "transition to net zero will fundamentally reform the physical and digital structure of the whole energy system and will require a much more integrated energy system" and, as such, we welcomed the opportunity to engage with the consideration and design of the potential future operating model.

We support the development of a future enhanced Gas System Operator (GSO) or Future System Operator (FSO) role, both of which would have the national oversight to facilitate the increasing cross-utility interactions and inform changes in demand requirements, for example managing the

relationships between gas and electricity networks in relation to gas-fired electricity generation plants. While clear definition of either role would be required, with certain activities being retained at a local level in order to create a comprehensive and informed operating model which takes into account the policy position in devolved territories, both roles would create the opportunity to further the industry's progress towards a whole systems future.

As noted in our earlier FSO response in establishing such an overarching organisation out of the current ESO there is a particular risk that electricity may be perceived to be the priority fuel source. For example, as the ESO is already established as a legally separate entity, the combination with gas may be viewed as an add-on rather than a cooperative body. Similarly, the ESO is likely to remain of higher financial value than the equivalent GSO, despite the latter delivering a greater volume of energy.

SGN believe it is important that the timescales associated with the review, and implementation of any new FSO arrangements, are complementary with the pace of change required to deliver those of the net zero transition.

Point 8: Transforming Ofgem

The Forward Work Programme makes clear that the move towards a low carbon and net zero future requires a major transformation of the energy sector. SGN believes that in order to effectively demonstrate the potential of our network to transport low carbon gases it will be crucial that energy policy and regulation strategy are shaped to facilitate growth in the biomethane market alongside that of hydrogen.

In particular, the role of Ofgem in managing industry subsidy schemes to continue facilitating access to gas-based solutions while supporting zero carbon energy sources throughout their transition to full market capability will be critical to ensuring the success and viability of a range of future energy sources, while preserving access and affordability for all. SGN has concerns that the supporting policies which facilitate access to a funded connection are looking to exclude first time gas central heating from 2022, limiting our ability to support vulnerable customers through the Fuel Poor Network Extension Scheme and limiting those customers from having the choice and access to the most effective interventions to reduce fuel poverty. Similarly, we have previously highlighted our concerns that the BEIS Green Gas Support Scheme will be insufficient to meet both our own targets as well as the Government's ambition of tripling biomethane capacity by 2030, and we remain hopeful that the scheme may be re-assessed.

Point 9: Reducing Burdens

We agree that this is an important area of focus and note that the reporting burden in RIIO-GD2 has increased substantially relative to that in RIIO-GD1. The levels of reporting increases the cost of network operation, and whilst we agree it is important that Ofgem has the information available to it to deliver high quality decision making, it is very important that reporting burden is proportional to the consumer benefits that it delivers. We remain concerned that data is collected in anticipation that it may be useful sometime in the future, the hidden cost of that should be recognised.