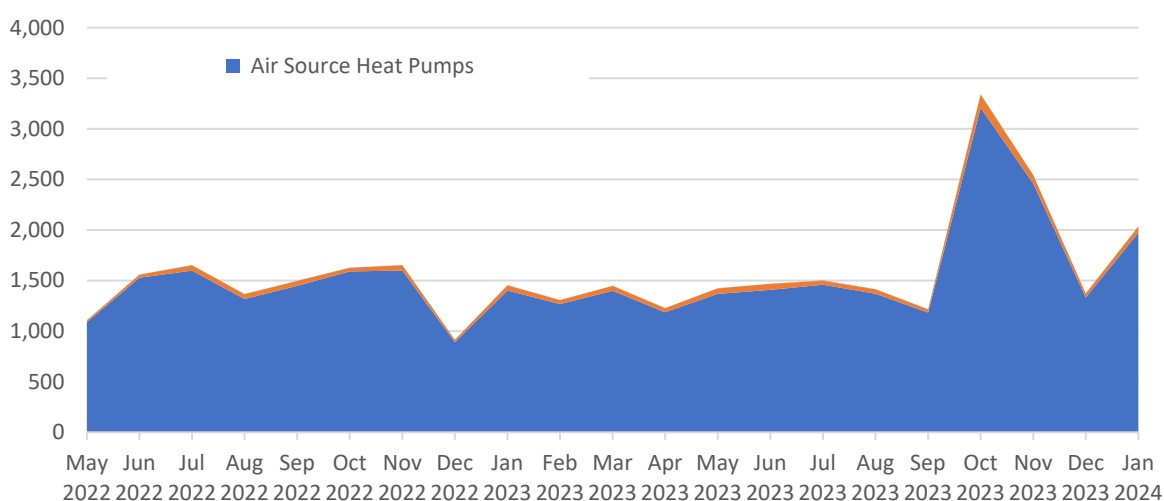


## SGN Response to Specific GD Annex Questions

### 1. SGN's observations on the SSMC Section 1. Introduction

- 1.1. As set out in our response to the SSMC Overview Document the natural gas network continues to play a major role in delivering energy to the UK economy and we anticipate that this will continue to be the case for decades to come. All the time there is a customer on our network then we need to deliver gas safely and reliably through all the pipes that lead to that customer in a safe and resilient manner and to maintain the high levels of service that our customers have come to expect from us.
- 1.2. Ofgem set out<sup>1</sup> that natural gas demand is expected to decline under all the FES gas scenarios and the RESP will have key role in supporting this transition at the distribution level. We agree, that if the UK is to meet its binding commitments to delivering the 2050 net zero targets there will need to be a transformation in the way in which energy is delivered to domestic customers and commercial and industrial customers across our network.
- 1.3. There is significant uncertainty surrounding the speed and the extent to which transformation will take place and the technologies that it will involve. As it stands, heat pump uptake rates remain very low and, even after a significant increase in support values, applications for heat pump vouchers have fallen back to historical averages<sup>2</sup>.

**Figure GDA1: Heat pump voucher applications received by month and type.**



- 1.4. This indicates that there is currently a very high level of customer stickiness with heating their home through natural gas and the delivery of natural gas through the gas network. It is our view that there is no clear route for decarbonisation that is acceptable and attractive to the majority of customers.

<sup>1</sup> RIIO-3 Sector Specific Methodology Consultation – Gas annex document para 1.9.

<sup>2</sup> DESNZ [Boiler Upgrade Scheme](#) January Statistics

- 1.5. As such we disagree with the Ofgem's emphasis on government policy on the "*overall balance of repurposing, decommissioning and retaining of natural gas assets, as well as the speed and timing of any changes*"<sup>3</sup>. It is our view that this balance will be determined by both domestic and industrial customers and their willingness to adopt a new technology.
- 1.6. At the moment the evidence does not suggest a compelling alternative technology. This may arise and government policy may be supportive of a rapid uptake, so the impact is significant, but the probability currently is low.
- 1.7. Irrespective of the scenario being undertaken we need to maintain investment in safety and resilience all the time that customers are on the network, and the network is energised. Our core safety related investment programme that we will present in our RIIO-3 plan will be focused on maintaining on safety and reliability.

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<sup>3</sup> RIIO-3 Sector Specific Methodology Consultation, GD Annex 1.10, pg. 7.

	SSMCQ & No.	Position	Key Message
GDQ1	What are your views on our proposal to remove the shrinkage ODI-R as a separate output?	Mostly Agree	We broadly agree with Ofgem's proposals to remove the ODI-R on the basis that this is included within the proposed reforms for the Annual Environmental Report (AER), it is important for the shrinkage metric to be visible and to have a level of consistency in measurement to readily compare across networks.
GDQ2	What are your thoughts on the options we have set out for the shrinkage ODI-F and on the design of this incentive?	Agree	We agree that the Shrinkage ODI-F should be reformed and strongly support the development of Option 2 'Remove the Shrinkage ODI-F and replace with UIOLI Allowance' which will allow the deployment of more effective technologies that reduce methane leakage.
GDQ3	If we provide baseline funding or a UIOLI allowance for shrinkage, can you provide examples of initiatives that could be funded, indicative cost, and why these activities would not go ahead without specific price control funding?	View	We provide an initial list of 4 projects that would be appropriate for funding in RIIO-3 through a UIOLI allowance that deliver primarily environmental benefits and limited (if any) financial efficiency benefits. As such, if the projects were not funded explicitly, it is unlikely that they would progress. These types of projects have been raised and discussed by our ISG who are supportive of our efforts.
GDQ4	If the Digital Platform for Leakage Analytics is rolled out to all GDNs in RIIO-3, what would be the indicative cost and timescales for this?	View	DPLA is a promising innovation, however, it is still early in the development and innovation phase (it is SIF Beta Phase) as such we think it is too early to have any confidence in the anticipated costs and benefits. It is also too early to anticipate the likely timeline for deployment and integration.
GDQ5	If up to 20% hydrogen is blended into the distribution network, what would be the impact on operational practices and shrinkage?	View	If 20% Hydrogen was blended into the distribution network, it is expected that this may have a positive impact on emissions from leakage. Initial estimates show that if all throughput of natural gas was replaced by 100% hydrogen in the existing networks, emissions may reduce by at least 79.3% when comparing the indirect Global Warming Potential (GWP) of hydrogen leakage compared to the direct GWP of methane leakage. Any blend of hydrogen will reduce emissions from leakage. In terms of operational impact through the introduction of Hydrogen blending, this is currently being reviewed by the HyDeploy project. The project will outline the impact on current operational process, procedure, equipment, assets, and future skill set within the gas distribution network.
GDQ6	What are your views on the options we have laid out for the heat policy re-opener, including whether this should be combined with other RIIO-3 net zero mechanisms?	View	We agree that it is important to have a reopener that covers potential changes as set out under the heat policy reopener, given the specific and potential material nature of this reopener we would suggest that it should be kept separate.
GDQ7	What are your views on our proposed approach for managing uncertain costs relating to regional energy strategic planning?	View	It is important to separate the costs of engaging with the Regional Energy Strategic Planners (RESP) and the cost of new and distinct projects that arise from the RESP. We agree that there are unlikely to be new and distinct projects arising from the RESP during RIIO-3. There will be a significant additional cost of engagement and support as the RESP becomes established, as well as additional engagement with local authorities.
GDQ8	What are your views on our proposal to remove the Commercial fleet electric vehicle PCD in RIIO-3?	Agree	It is our view that the commercial fleet electric vehicle PCD remains a valuable incentive to support the deployment of electric and zero carbon vehicles in RIIO-3 and should be retained.
GDQ9	What are your views on our proposal to remove SGN's bespoke Biomethane improved access rollout PCD in RIIO-3?	Agree	The biomethane improved access roll out has been a successful mechanism to demonstrate and build operational knowledge to improve biomethane deployment. In RIIO-3 it should be permitted under the Net Zero and Reopener Development Fund Use it or lose it (NZARD UIOLI) and Net Zero pre-construction work and small net project re-opener (NZASP).

GDQ10	What are your views on our proposal to remove SGN's bespoke remote pressure management PCD in RIIO-3?	Agree	The remote pressure management PCD was successful in demonstrating the use of remote pressure management in our network and is in the process of being deployed. These costs could be appropriately covered under the NZARD UIOLI and the NZASP, otherwise they should be separately funded through an updated PCD.
GDQ11	What are your views on our proposal to remove SGN's bespoke Gas escape reduction PCD in RIIO-3?	Agree	The Gas Escape Reduction PCD has been utilised in RIIO-2 to commence roll-out and embedding of innovative kit that not only reduces methane emissions on gas escapes but also provides a safe environment for the public and for our operatives when intervening on gas escapes. Whilst we are assessing the scale of the deployment in RIIO-3, SGN would expect these costs to be recovered under an extended NZARD UIOLI and the NZASP, if not they should be separately funded through an updated PCD.
GDQ12	What are your views on our proposal to remove SGN's bespoke Intermediate pressure reconfigurations PCD in RIIO-3?	Agree	Intermediate Pressure (IP) Reconfigurations is on schedule to be successfully completed during RIIO-2 these were unique jobs that would not have been funded appropriately within the benchmarking process. These jobs are now finished and the PCD can be closed.
GDQ13	What are your views on our proposal to remove Cadent's bespoke HyNet Front End Engineering Design PCD in RIIO-3?	Agree	In principle if the project is completed then the PCD should be closed and removed. It would be helpful to understand the experience of using the PCD for this type of project and whether it should be replicated for similar projects in RIIO-3.
GDQ14	What are your views on the benefits of repex that we have identified, how well the repex programme is currently working, and what evidence we should consider as part of the joint repex review?	Agree	We support the views put forward by Ofgem that the continuation of the repex programme as it stands given its importance for safety and environmental benefits. We think that the option value that it creates for transporting hydrogen as a method to decarbonise heat should also be considered as a part of the joint repex review.
GDQ15	Do you consider there to be alternative approaches that could deliver mandatory repex at least cost to the consumer whilst maintaining the legislative safety standards?	View	The mandatory repex programme has been deployed at least cost to the consumer whilst maintaining legislative safety standards by supporting innovation, this has delivered significant consumer benefits during RIIO-1 which have carried into RIIO-2.
GDQ16	What are your views on our proposal to keep the HSE policy re-opener, but to reduce its use to a single trigger?	Mostly Agree	We agree that the HSE policy reopener should be retained, particularly as the HSE Policy resulting from the joint repex review may not come in time for the SSMD. Regardless of timing it is our view that the HSE policy reopener should be broadened to any HSE policy that we have to comply with and not limited to Repex.
GDQ17	What are your views on the design of the Tier 1 mains decommissioned PCD?	View	We disagree with the conclusion that there have been no issues identified. There are significant challenges in the efficient delivery of Repex that need to be considered in RIIO-3. This needs to take into consideration the changes in the complexity of work that will be undertaken as we come to the end of the repex programme and how these risks may vary according to licence area. We have set out our characterisation of complexity and potential resolutions, we recognise however that resolving these challenges will require constructive working groups with dedicated time and a level of transparency on both costs of delivery and the outputs delivered.
GDQ18	What are your views on the proposed design of the Tier 1 services PCD?	Mostly Agree	We support the continued use of the Tier 1 services PCD. However, the cap / collar approach to the PCD is no longer appropriate as we come to the end of the programme of work and should be removed as this creates a risk that the networks will be underfunded for work that would need to be delivered in RIIO-3 to deliver against the HSE safety target. In addition, the prevalence of longer services necessitates a dual rate in RIIO-3.
GDQ19	What are your views on the design of the Tier 2A mains and services replacement volume driver?	Agree	We agree with Ofgem in the continued use of the Tier 2A mains and services replacement volume driver.

GDQ20	What are your views on the design of the London medium pressure PCD (Cadent North London only)?	Agree	We agree with Ofgem's approach to maintain the London medium pressure PCD to support delivery of important projects across price control periods. It should be noted that SGN anticipate submitting a similar PCD for our South London medium pressure network in RIIO-3.
GDQ21	What are your views on our proposal to retain the diversions and loss of development claims re-opener in RIIO-3, and whether all the cost areas are still uncertain in RIIO-3?	Agree	We agree with Ofgem's proposal to retain the diversions and loss of development claims re-opener in RIIO-3. The costs associated with the re-opener still remain uncertain, as does the volume of work that we are currently seeing within our networks.
GDQ22	What are your thoughts on our proposal to continue the emergency response time LO and whether the target should be set monthly, quarterly or annually?	Agree	SGN agrees with the proposal to retain the emergency response time licence obligation (LO). We think the current LO is established and well understood. We recognise concerns that an annual average may be too high level and mask within year variations, however we think that this can be addressed with reporting on monthly performance in the annual RRP.
GDQ23	What are your views on our proposal to remove the Tier 1 iron stubs re-opener in RIIO-3 and our approach for the costs to be included in the baseline allowances?	Mostly Agree	We agree with Ofgem's proposal to remove the Tier 1 iron stubs re-opener in RIIO-3. However, we are concerned that the cost base is not sufficiently robust for benchmarking purposes and propose that a review of the unit cost data quality should establish whether a technical assessment is preferable.
GDQ24	What are your views on our proposal to remove the Capital projects PCD in RIIO-3?	Disagree	We disagree with the proposal to remove the Capital projects PCD in RIIO-3. It is our view that the Capital Projects PCD provides transparency for customers that major projects that are funded are delivered in a timely manner. We expect to continue these types of projects in RIIO-3.
GDQ25	What are your views on our proposal to remove the Gas holder demolitions PCD in RIIO-3?	Agree	We agree in principle with Ofgem's proposals to remove the Gas holder demolitions PCD within RIIO-3 as we are not forecasting this type of workload to be completed within the price control period. However, it should be noted that SGN still operate to gas holders in our SIUs and these need to be considered separately when they require demolition.
GDQ26	What are your views on our proposal to remove the Multiple Occupancy Buildings safety re-opener in RIIO-3?	Disagree	We disagree with the proposal to remove the Multi Occupancy Building safety re-opener for RIIO-3 as there is not enough evidence to understand the drivers associated with this workload.
GDQ27	What are your views on our proposal to remove NGN's bespoke job completion lead-time including re-instatement ODI-R in RIIO-3?	N/A	No specific views on this question
GDQ28	What are your views on our proposed position on the role of GDNs in relation to vulnerability, and how can they support a just transition to net zero?	Agree	We agree with Ofgem's views that GDN's have an important role to play in helping consumers in vulnerable situations, to support a just transition and in particular with regard to fuel poverty and carbon monoxide (CO) risks.
GDQ29	What are your views on our proposal for GDNs to develop individual and joint-GDN vulnerability strategies?	Agree	We agree with Ofgem's proposal to develop both individual and joint-GDN vulnerability strategies, this approach would align GDN's in key areas and support sharing of best practises whilst acknowledging that there are also regional nuances and requirements that to be understood and progressed by each GDN.
GDQ30	Do you agree with our proposal to retain the RIIO-2 vulnerability minimum standards is sufficient to ensure customers in vulnerable situations are protected and treated fairly?	Agree	We agree with Ofgem's proposals to retain the RIIO-2 vulnerability minimum standards, and we believe these are sufficient to ensuring customers in vulnerable situations are protected and treated fairly.
GDQ31	What are your views on our proposal to retain the use of the VCMA UIOLI	Agree	SGN strongly support the retaining the use of the VCMA UIOLI allowance. The reason for this is that it provides greater transparency of the funding provided the benefits

	allowance, on the alternative option to incentivise vulnerability through an ODI-F, and on which activities to support vulnerability could be funded through baseline allowances?		realised, and a stability in funding that is not available under an ODI-F but highly valued by our third sector partners. The support for retaining the use of the VCMA UIOLI allowance is also shared and fully supported by our ISG, and we are also seeing this highlighted as a priority through our wider stakeholder engagement programme.
GDQ32	At what level should VCMA funding be set to ensure its effectiveness and sustainability, and what percentage should be ringfenced for collaborative projects?	View	SGN's views are that VCMA funding in RIIO-3 should be maintained at RIIO-2 levels considering the reallocation of FPNES levels were reallocated (i.e., anticipated level or £171m). We have received support on our views of maintaining RIIO-2 levels of funding from our ISG, this will also be tested further through our stakeholder engagement programme. We support the continued ringfencing for collaborative projects at 25%.
GDQ33	How should VCMA funding be allocated to ensure maximum impact for consumers in vulnerable situations?	View	We support the allocation of funding according to need and are currently engaged in research about how this may be delivered most effectively.
GDQ34	How can learnings from VCMA projects better inform the GDNs' organisational approaches to consumer vulnerability?	View	We continue to work closely with our Vulnerability Steering Group and our Safe and Warm partnership network to better inform our approach to addressing consumer vulnerability. It is our view that these initiatives support a better approach to addressing consumer vulnerability.
GDQ35	What are your views on the options we've set out to incentivise customer satisfaction during RIIO-2?	Agree	We agree with Ofgem's proposals to maintain the RIIO-2 incentive for customer satisfaction into RIIO-3 as it works well and drives stronger performance across all networks, however, would caution against significant changes in the risk profile or incentive strength.
GDQ36	What are your views on how the complaints metric can ensure customers' complaints are resolved quickly and effectively?	Mostly Agree	SGN's supports the continuation of a metric scoring system, it incentivises performance improvement and encourages the right behaviours with a real emphasis on day one resolution, we would however recommend a review of the current design of the metric to allow for a fairer measurement across all GDNs.
GDQ37	What changes, if any, are required to the GSOPs?	View	Following a full review for RIIO-2, we are broadly comfortable with the overall set-up for GSOPs. We would however strongly recommend that the payment cap which was in place for RIIO-1 for GSOP 1 (failure to supply gas) should be reinstated for RIIO-3, or clearer guidance is necessary on when to it is reasonable to stop payments.
GDQ38	What are your views on our proposed options for the unplanned interruption ODI-F?	View	<p>The structure of the ODI-F has not worked as intended in RIIO-2. As a minimum it is important to separate MOB and non-MOB measures of unplanned interruptions. It is our view that this penalty incentive is no longer required as the high GSOP payments for failure to supply gas already provides a strong penalty and incentive to reconnect unplanned interruptions as quickly as possible.</p> <p>If the decision is to retain the penalty, then we broadly agree with Option 3 (separate performance measures) with an additional waiver in place when networks have used all available means to reduce the unplanned interruptions but are prevented from doing so due to uncontrollable, external factors such as planning and other constraints.</p>
GDQ39	What are your views on the options we have set out for the Collaborative Streetworks ODI-F?	View	SGN's perspective is that the collaborative streetworks incentive has been a successful incentive that has been deployed in RIIO-3 to the benefit of consumers in the London Area. It is our view that there is an opportunity to re-calibrate the incentive and look for opportunities to extend it in RIIO-3.
GDQ40	What are your views on whether the new, large load connections re-opener is still needed in RIIO-3?	View	It is SGN's view that the large load connections re-opener should be retained for RIIO-3 as there is still uncertainty around both the costs and the volume of network reinforcements required by law due to large industrial loads.
GDQ41	What are your views on whether the specified streetworks costs re-opener is still needed in RIIO-3?	View	SGN's view is that the streetworks costs re-opener is still required in RIIO-3. The current structure in RIIO-2 allows for costs that are out of our control, including but not limited to lane rental schemes, new permit schemes, changes to legislation, and

			any other requirements from public bodies or authorities that cannot be easily forecast from the start of the price control period.
GDQ42	What are your views on our proposal to remove the Fuel Poor Network Extension Scheme in RIIO-3?	Mostly Agree	We agree in principle with Ofgem's proposals to remove the Fuel Poor Network Extension Scheme (FPNES) in RIIO-3, however our view is that this should continue to be re-purposed and included within the VCMA thus allowing Networks the opportunity to do more for Fuel Poor customers.
GDQ43	What are your views on our proposal to remove the consumer vulnerability ODI-R in RIIO-3?	Agree	We agree with Ofgem's proposal to remove the consumer vulnerability ODI-R in RIIO-3 and report annually within the VCMA annual report.
GDQ44	How can the annual VCMA event be improved?	View	SGN agrees that the VCMA Annual Showcase should remain a requirement of the VCMA and should continue in RIIO-3.
GDQ45	What are your views on our proposal to remove the DLCA, and do you see any challenges that might arise if it were to be removed?	Agree	SGN agrees with Ofgem's proposal to remove the DLCA from RIIO-3.
GDQ46	What are your views on our proposal to remove the domestic connections volume driver? If you think it should be retained, what changes do you recommend for its design?	Mostly Agree	SGN agrees in principle with Ofgem's proposal to remove the domestic connections volume driver from RIIO-3. On the basis that the DLCA is removed entirely, and the full connection cost becomes directly chargeable to the customer. However, we are of the view that this may require legislative change so until that change is enacted a volume driver should be maintained.
GDQ47	What are your views on our proposal to remove the smart metering rollout costs re-opener in RIIO-3?	Agree	In line with the timings for the current framework to end in Dec 2025, we agree with Ofgem's approach to remove the smart metering rollout costs re-opener.
GDQ48	Should personalising welfare services continue to be supported under RIIO-3 and, if so, how should it be funded?	View	SGN's views are that the personalising welfare services PCD introduced for Cadent in RIIO-2 should be retained in RIIO-3 and made available for other GDN's to deliver further work against for the benefit of a wider group of consumers.
GDQ49	What are your views on our proposal to remove Cadent's bespoke High-rise building plans ODI-R from RIIO-3?	N/A	We do not have a view on this specific ODI-R.
GDQ50	What are your views on the potential advantages of using multiple totex regression models in RIIO-3?	Agree	SGN supports the use of multiple totex regression models in RIIO-3. This is because regression models only ever provide an approximation of modelled costs. Modelled costs from a single model can be distorted through a small sample size and other assumptions made (adjustments to data, choice of estimation technique); a single model can also create perverse incentives which distort outcomes. A multiple model approach will aid in reducing the risk of being reliant on a single approach to determine cost efficiency for networks with different regional, operational, and engineering configurations.
GDQ51	What alternative cost drivers and model specifications would you propose for early testing?	View	It is SGN's view that it is too early to be specific about cost drivers and model specifications and all areas should remain open. Areas that we would consider for early testing includes exogenous focused cost drivers, dynamic CSV approaches and MEAV driver improvements. Ofgem have not mentioned the efficiency challenge of models within the SSMC, which was a highly contentious issue within RIIO-2 and as such we believe it is important to discuss the issue. It is important that the key principles for setting an efficiency challenge are set up front to ensure transparency in approach.
GDQ52	What are your views on the potential of middle-up modelling in RIIO-3?	Agree	Middle-up modelling provides a valuable point of reference to cross check results and cost drivers. We recognise middle-up models have been challenging to define, therefore we put forward that new approaches such as PCA and factor analysis should be considered to help determine statistical relationships.



GDQ53	What are your views on the potential of disaggregated modelling in RIIO-3?	Agree	Disaggregated modelling would be an incredibly useful approach within the RIIO-3 toolkit to aid transparency of determining cost efficiency, for example by considering more intuitive cost comparator techniques such as unit rate analysis.
GDQ54	In your view, what is the most suitable configuration of cost activities for middle-up or disaggregated modelling, that once combined, could form a complete bottom-up assessment of totex?	View	As far as initial thinking is concerned, we believe initial focus should be around defining the key principles that might be used to determine the most suitable configuration. It is too early in the process to determine the most suitable configuration of cost activities.
GDQ55	What do you think would be appropriate criteria for determining cost exclusions for RIIO-3?	View	Cost exclusions are important area to support a robust modelling suite. The criteria for exclusion should be established early in the process and be consistently applied across networks. Areas such as cyber, data and digitalisation - where there is not an effective cost driver - are additional areas where exclusions might be warranted.
GDQ56	What are your views on the modelling treatment of workload adjustments for RIIO-3?	View	As per the principles discussed in GDQ55, any normalisation should be made with consistency at both the cost and driver level. Ofgem's approach to adjusting workload in line with any cost normalisations must ensure that a fair and transparent view of cost efficiency can be obtained.
GDQ57	What are your views on the approach to regional factors for RIIO-3?	Mostly Agree	Regional factors are an especially important adjustment to the cost assessment and need to be taken into account when considering the costs of efficiently operating according to regional characteristics that constrain ways of working compared to the national average. In RIIO-2 the adjustments were insufficient and there were significant negative impacts in the outcomes against the Southern regions, the first years of RIIO-2 have shown the agreed workloads in the southern network are not deliverable within the allowances awarded.
GDQ58	What are your views on the approach to company-specific factors for RIIO-3?	Agree	As with regional factor normalisations, the use of company-specific factors is important to ensure the fair assessment of cost efficiency across companies. It is especially important to have clarity on the adjustments made and the reasoning behind them.
GDQ59	In your view, which cost areas will require separate technical assessment in RIIO-3?	View	For costs that are excluded from the main suite of cost assessment we believe it is important that Ofgem carries out a separate review to determine if expenditure is efficient. By definition, the costs removed from the main suite of cost assessment are unique and lacking in historical comparator points, requiring specific technical assessment.
GDQ60	What are your views on alternative technical assessment approaches for RIIO-3?	View	SGN's preference would be for Ofgem to adopt a similar approach to alternative technical assessment as at RIIO-2, i.e., conducting that assessment on a qualitative and quantitative basis using expert and engineering reviews. By having a clear decision set ex ante this helped to reduce risk within the price control. We would not support DIWE as a process of ex-post assessment except in exceptional circumstances when project risk makes ex-ante allowance setting challenging.
GDQ61	In your view, which cost areas will require separate non-regression analysis and benchmarking in RIIO-3?	View	As linked with previous questions we believe separate non-regression analysis is a useful approach within the modelling toolkit to help assess costs that are removed from the main cost modelling approach. We agree with the areas Ofgem have identified to utilise non-regression analysis.
GDQ62	Which separately assessed cost activities from RIIO-2 could potentially be included in totex benchmarking in RIIO-3?	View	The separately assessed cost activities from RIIO-2 that Ofgem set were appropriate for the price control and appear likely to continue to be appropriate to be assessed separately going forward.
GDQ63	What are your views on retaining the RIIO-2 pass-through cost items for RIIO-3?	View	The existing pass-through costs as listed under para 5.72 are appropriate to carry forward into RIIO-3. It is important to add to this list the cost of delivering the Joint Office services, the cost of supporting the RESP, and we would like to review the



			current lack of consistency between Electricity Distribution and Gas Distribution in regard to business rates.
GDQ64	What are your views on suitable approaches to the disaggregation of totex allowances for RIIO-3?	View	Disaggregation of allowances is a crucial step of the cost assessment process, and particularly important when aligned to specific PCDs and Volume Drivers. At RIIO-2, the process was not as robust as it should have been, and we welcome engagement with Ofgem to implement a process during the determination stages.
GDQ65	In your view what are the high-priority areas of reporting inconsistency between GDNs within the RIIO-2 BPDTs and RRP, and how can these be addressed for RIIO-3?	View	Networks are invariably different across GB, this alongside RIGs that are at times non-prescriptive can cause reporting inconsistencies across networks. Areas of main focus for Ofgem should be on repairs to report ratios (if Ofgem continues to use reports as a proxy for repair costs), the construction of the repex synthetic particularly at banding level and application of indirect costs.
GDQ66	We invite views on current reporting requirements and reporting structure at the cost activity level and how this may be adapted to better suit RIIO-3 and related development of BPDTs.	View	While the current reporting requirements provides a great deal of information to Ofgem, how the information is utilised within the cost efficiency setting needs to be understood better. A key principle identified through the FSNR process was about streamlining, yet a large element of the data collected within the RRP and BPDTs are not utilised.

## 2. SGN's response to questions within the SSMC Section 2. Infrastructure fit for a low carbon transition to net zero

### GDQ1. What are your views on our proposal to remove the shrinkage ODI-R as a separate output?

- 2.1. We broadly agree with Ofgem's proposals to remove the ODI-R on the basis that this is included within the proposed reforms for the Annual Environmental Report (AER), it is important for the shrinkage metric to be visible and to have a level of consistency in measurement to readily compare across networks.

#### Remove shrinkage ODI-R

- 2.2. We broadly agree with the proposal to remove the shrinkage ODI-R on the basis that it is assumed GDNs will still be required to calculate total annual Shrinkage and Leakage volumes in the same manner, only this will now be reported solely through the Annual Environmental Report (AER).
- 2.3. It is also assumed that reporting in the AER will remain the same as in RIIO-2, i.e.:
- Volumes of gas from each element of the leakage calculation in GWh
  - Proportion of leakage in the overall shrinkage volumes, and
  - Volumes of shrinkage associated with Own Use Gas (OUG) and Theft of Gas (ToG) in GWh
- 2.4. If these assumptions are correct, SGN see no detriment with the proposed removal of the Shrinkage ODI-R in RIIO-3. Continued reporting through the AER will mean the focus and drive to maximise annual reductions in shrinkage volumes will remain.
- 2.5. One point for clarification would be that we currently report total Shrinkage and Leakage volumes in GWh for RRP whilst the for the AER, we report the same volumes converted to tCO<sub>2</sub>e we think both metrics are important and that the AER need to reflect shrinkage and leakage in both GWh and tCO<sub>2</sub>e.

#### Measuring Shrinkage

- 2.6. It is broadly recognised that the Shrinkage and Leakage model (SLM) is a theoretical model and not an exact measure of shrinkage. However, because it has significant commercial ramifications on how costs are allocated to different parties it is important there is a level of consistency and agreed process of change.
- 2.7. We also fully recognise the potential benefits associated with improving the measurement of shrinkage and leakage so that actual interventions, such as our remote pressure management project currently being deployed in RIIO-2, can be more accurately assessed in terms of their actual impacts.
- 2.8. We fully support projects that improve the accuracy of measuring shrinkage and have been working collaboratively on the Digital Platform for Leakage Analytics (DPLA) project. However, we would caution the pace at which this can be deployed as a replacement for the SLM due to the commercial considerations set out above.
- 2.9. The DPLA project is an important potential improvement, and we may need to run the DPLA and the SLM in parallel for a period of time due to the commercial considerations set out above.

## GDQ2. What are your thoughts on the options we have set out for the shrinkage ODI-F and on the design of this incentive?

- 2.10. **We agree that the Shrinkage ODI-F should be reformed and strongly support the development of Option 2 'Remove the Shrinkage ODI-F and replace with UIOLI Allowance' which will allow the deployment of more effective technologies that reduce methane leakage.**

- 2.11. We have set out our views on each of the options below;

### **Option 1: Retain the RIIO-2 Incentive in RIIO-3**

- 2.12. SGN do not support retaining the current incentive mechanism into RIIO-3, particularly with continued incentivisation of Gas Conditioning in its current form. There are many negative consequences to retaining this outmoded technology on networks with rapidly diminishing metallic mains population, with very few tangible benefits to the environment or our customers.
- 2.13. It is our view that expansion of the programme in this area would be expensive and deliver limited (if any) actual emissions reduction, whilst causing increasing amounts of operational issues on PE dominant systems. SGN are of the opinion that rolling over the RIIO-2 incentive without addressing the Gas Conditioning issue would encourage networks to undertake inappropriate actions to avoid future penalties.
- 2.14. If Ofgem are minded to continue to incentivise Gas Conditioning in RIIO-3, SGN feel it is imperative to re-baseline the GDNs to enable them to streamline the programme to ensure that only areas that may still benefit from MEG injection, i.e., areas of high lead yarn jointed iron mains population, remain within the RIIO-3 programme and any PE heavy systems can be removed without the threat of instant penalty.
- 2.15. SGN would also point out that following significant investment in efficient pressure management systems over the past 20 years, there is little scope for further improvement in Average System Pressures (ASP). SGN have consistently delivered industry leading low average system pressures but feel the current incentive does not recognise or value this historical and continued effort.
- 2.16. In summary, SGN feel that the incentive in its current form, considering only Average System Pressures and Gas Conditioning, creates an environment entirely focused on areas with little scope for improvement, and stifles investment into other elements of leakage, for example Above Ground Installation Leakage and Venting, that could potentially yield more productive results, making it problematic to justify new and innovative projects.
- 2.17. If the current incentive mechanism were to remain in place for RIIO-3 however, SGN would support maintaining the current asymmetric Deadband around baseline LDZ ASPs. We feel that this provides a suitable level of protection against windfall gains and losses due to factors out-with GDN control. We would also suggest that the cap/collar mechanism set at 0.25% of ABR should also remain in place.

### **Option 2: Remove the Shrinkage ODI-F and replace with UIOLI Allowance**

- 2.18. Abolishing the current incentive and replace it with UIOLI allowances (potentially through the Net Zero and Re-Opener Development Fund (NZARD) UIOLI mechanism) is in principle a welcome change that SGN would support.
- 2.19. In the assessment of option 2 Ofgem states that there is currently no '*clear view of whether there are sufficient projects in this area to justify using a UIOLI*'. It is SGN's view that there are sufficient projects. As an example, in RIIO-2 SGN were granted a remote pressure management PCD, as a part of the licence condition we submitted a report in Dec 2021 to update the potential savings and the associated cost. The costs had increase significantly compared to the original anticipated value, however the CBA still showed significant environmental value. We agreed with Ofgem that the target roll-out should be reduced, but roll out to 265 sites would reduce emissions by 3,600tCO<sub>2</sub>e/yr. We think this technology could be rolled out to significantly more sites in RIIO-3.

- 2.20. This is one example, our response to question GDQ3 gives further examples and demonstrate that there are sufficient projects in this area that could be deployed under a UIOLI mechanism, however, the size of the UIOLI should be sized appropriately for the scale of investment potential identified by the networks within their business plan. It is our view that the projects should be evidence by an CBA that demonstrated the environmental benefits being achieved and the level of confidence in those savings (recognising as with the example above that innovation projects may need to be re-assessed as information becomes more accurate).
- 2.21. Ofgem also question whether these activities should be more suited to be funded through baseline allowances. It is SGN's view that baseline funding is not appropriate and less transparent. There is no appropriate driver to account for the company specific differences for these types of projects in the benchmarking model and the sums involved are significant (£5-£10m), without an appropriate driver these projects will be shown as an 'inefficiency' and the costs will be removed through the benchmarking process.
- 2.22. In the absence of an appropriate driver in the benchmarking model, the only appropriate method to include the costs in baseline allowances, is for a separate technical assessment of the projects and costs to be undertaken. This will place more burden on Ofgem in the assessment of the business plans and delivery of the outcomes will be less transparent for customers.
- 2.23. Finally, a UIOLI mechanism would allow projects to be deployed as the evidence improves rather than based on evidence at a single point of time, this facilitates the deployment of innovative technologies.

#### **Option 3: Implement a Penalty Only ODI-F (based on total Shrinkage volumes inc. Repex)**

- 2.24. There are many elements that combine to produce annual Shrinkage and Leakage volumes, some of which can be significantly impacted by unforeseen factors out-with GDN control, such as mild or severe winter periods, or high volume 3rd party damage to our assets. These factors cannot be forecast with any degree of accuracy, making a penalty only ODI-F based on overall Shrinkage volumes, forecast years in advance, subject to considerable uncertainty and insecurity.
- 2.25. Secondly the better the network performs at reducing the shrinkage and leakage volumes the higher risk it is exposed to from an unforeseen event. This is because an unforeseen event will have a lower relative impact on a poorly performing or a large network where the impact will be average away, than on a high performing or small network where the is not the volume to average out the impact.
- 2.26. Finally, as set out in our response to Option 1 the shrinkage and leakage model is an important tool for allocating commercial costs across the industry, we do not consider it to be sufficiently robust to measure actual improvements from the full range of measures we may adopt to reduced emissions, and the measures the model does capture are increasingly either fully deployed, or of limited environmental benefit. As such whilst we recognise the attractiveness in principle of being able to set 'stretching performance targets' to ensure 'continued shrinkage reduction beyond the required threshold' we do not think that SLM is sufficiently robust to do achieve this.
- 2.27. Accordingly, we do not consider this option to promote agile and innovative shrinkage reduction projects and activities, and there remains a significant risk that GDNs could be penalised for the correct behaviours due to reasons beyond their control and reduce the risk of penalty by implementing solutions with limited benefit.

#### **Option 4: Combination of Options 2 and 3 (Penalty Only ODI-F with UIOLI Allowances)**

- 2.28. For the reasons set out in option 3 we do not think that option 4 is an appropriate solution. Furthermore, it would be particularly challenging to calibrate the point at which any penalty should be payable given that many of the technologies that are still pre-commercial and there is a higher level of uncertainty surrounding their costs, benefits, and the ease of deployment.

GDQ3. If we provide baseline funding or a UIOLI allowance for shrinkage, can you provide examples of initiatives that could be funded, indicative cost, and why these activities would not go ahead without specific price control funding?

- 2.29. **We provide an initial list of 4 projects that would be appropriate for funding in RIIO-3 through a UIOLI allowance that deliver primarily environmental benefits and limited (if any) financial efficiency benefits. As such, if the projects were not funded explicitly, it is unlikely that they would progress. These types of projects have been raised and discussed by our ISG who are supportive of our efforts.**
- 2.30. Below is a list of potential shrinkage reduction projects that could be funded through a UIOLI mechanism in RIIO-3. These projects are examples that are currently in development phase, therefore the costs and scope are likely to change prior to business plan submission.

**Project 1 – Remote Pressure Management in South London**

- 2.31. The integrated South London low-pressure network has traditionally seen DG pressures adjusted manually to a seasonal peak pressure to meet varying annual customer demand. This project would allow efficient daily pressure management to be introduced to approx. 230 District Governors, maximising reductions in fugitive emissions in the region of an additional 1.4 GWh/annum (or approx. 1,750 tCO<sub>2</sub>e/annum), with indicative costs at £6.3m.

**Project 2 – Remote Pressure Management in South-East LDZ**

- 2.32. This proposed project would look to install the pressure management system on circa 120 DGs across South-East low-pressure systems. The vast majority of sites within these highly urbanised locations are below-ground units, presenting a variety of engineering and logistical challenges. We feel these can be overcome with the experience gained from the ongoing RIIO-2 project. It is forecast that an additional 0.75GWh/annum of leakage reduction could be achieved on completion of the project (or approx. 910 tCO<sub>2</sub>e/annum), with indicative costs at £1.4m.

**Project 3 – Methane Monitoring Technology (20% Coverage/Annum)**

- 2.33. One of the technologies under consideration by DPLA is vehicle mounted methane detection technology. Methane emissions measurement and data driven leakage abatement strategies are employed by many GDNs globally. SGN have recently engaged with one provider of such services on a pilot project to survey 450km of distribution mains in South London, utilising a methane detection vehicle to drive pre-determined routes and highlight any instances of methane volumes over and above background levels, alongside specific locations of the sources.
- 2.34. One project that may fall into this category in RIIO-3, is an expansion of this pilot project to enable SGN to accurately survey the entire network (Scotland and Southern), within the five year price control period. This would equate to surveying approximately 14,400km of mains per annum.

**Project 4 – Intelligent Gas Grid (IGG) Implementation**

- 2.35. Intelligent Gas Grid (IGG) is another RIIO-2 SIF project which may warrant wider implementation through RIIO-3. IGG is looking to introduce Artificial Intelligence (AI) and Machine Learning (ML) techniques to the remote pressure management installations at our District Governor stations, to:
- Accurately predict daily consumer demand and set efficient, low pressures to meet this demand, limiting periods of over-pressurisation and reducing leakage.
  - Investigate whether pressure anomalies detected in low-pressure systems can be an indicator of issues elsewhere within the network.

- Enable Bio-Methane plants to inject into the Medium Pressure system all year round, even at periods of low demand, through efficient manipulation of PRS outlet pressures.

2.36. As with DPLA, IGG is currently in the early stages of the SIF Beta Phase development, and as such accurate costings and timelines for implementation are still unknown.

2.37. The projects detailed above have the potential to significantly reduce leakage and environmental emissions, and in some cases, dramatically change the way GDNs detect, measure, and calculate shrinkage and leakage, bringing enormous benefits to the consumer. Unfortunately, the current ODI-F and the options listed in GDQ2 for proposed RIIO-3 incentives, do not provide the potential for value for money for the consumer, to enable these to be implemented without specific price control funding mechanisms such as the UIOLI allowance for shrinkage projects.

#### GDQ4. If the Digital Platform for Leakage Analytics is rolled out to all GDNs in RIIO-GD3, what would be the indicative cost and timescales for this?

2.38. **DPLA is a promising innovation, however, it is still early in the development and innovation phase (it is SIF Beta Phase) as such we think it is too early to have any confidence in the anticipated costs and benefits. It is also too early to anticipate the likely timeline for deployment and integration.**

2.39. DPLA has the potential to transform how the industry detects, records, and reports environmental emissions in the future. Whilst costs, timelines for implementation, and specifics related to individual outputs cannot be identified at this early stage, SGN are of the opinion that regulatory determinations for RIIO-3 related to Shrinkage should be flexible, accessible, and recognise the potential requirement for swift adoption of emerging technological advancements.

2.40. Outputs from DPLA may open pathways for leakage and shrinkage reduction in areas not available to GDNs through the current methodology, such as Above Ground Installation (AGI) Leakage and Venting, and Own Use Gas, yet this may not be confirmed until RIIO-3 determinations have been set. Any new investment in emerging technologies uncovered through DPLA to address these areas, or indeed the funding to enable a transformation away from the SLM, would require suitable uncertainty mechanisms to be in place, and available to GDNs, within the price control period.

2.41. As stated in response to GDQ3 above (Project 3), periodic methane monitoring technology is currently being deployed in the UK by Cadent Gas, and SGN have also recently commissioned a small pilot study with one of the technology providers. The response above details the likely scale of a potential RIIO-3 project to survey SGNs entire network over the price control period.

2.42. SGN would appeal to the Regulator to consider the fluid environment in which shrinkage reduction related activities currently sit and allow this to inform any associated regulatory decisions.

#### GDQ5. If up to 20% hydrogen is blended into the distribution network, what would be the impact on operational practices and shrinkage?

- 2.43. **If 20% Hydrogen was blended into the distribution network, it is expected that this may have a positive impact on emissions from leakage. Initial estimates show that if all throughput of natural gas was replaced by 100% hydrogen in the existing networks, emissions may reduce by at least 79.3% when comparing the indirect Global Warming Potential (GWP) of hydrogen leakage compared to the direct GWP of methane leakage. Any blend of hydrogen will reduce emissions from leakage. In terms of operational impact through the introduction of Hydrogen blending, this is currently being reviewed by the HyDeploy project. The project will outline the impact on current operational process, procedure, equipment, assets, and future skill-set within the gas distribution network.**
- 2.44. System blending affords benefits in terms of stimulating and de-risking the scaling of blue and green hydrogen production, acting as a strategic enabler supporting electrolytic production and for assisting in balancing supply and demand, which is particularly useful for industrial decarbonisation. However, considerations on operational practices will need to be considered and are currently being reviewed under HyDeploy project.
- 2.45. As part of the delivery of a network fit for blending, the GDNs have developed a programme of work with a view to acceptance of first NEAs for blending in early 2026. The programme looks at key workstreams for change, split over safety evidence, operational readiness, market frameworks and project pipeline.
- 2.46. Most significantly, the Operational Readiness workstream, which looks to deliver a plan for change across standards, policies and procedures, training, asset readiness as well as system upgrades. Changes to network operating pressures as well as direct leakage model impacts will be defined in this workstream.
- 2.47. The impact on network operating pressures is likely to be negligible in the short term with blends capped at circa 5%. However, the additional pressure headroom to ensure security of supply, if required, will be subject to the frequency and seasonal timing of feed in and, under an offtaker of last resort scenario, would need consideration from annual recorded data.
- 2.48. Currently, the view is that all pipe materials are suitable for <7bar distribution of blends of up to 20% hydrogen (work is ongoing in this area and we are waiting on outcomes from the HyDeploy project).
- 2.49. The proportion of unidentified gas attributable to leakage is quantified by the shrinkage and leakage model (SLM), which infers leakage based on historical leakage testing matched to asset records and annual throughput and network pressures. The SLM does not measure leakage dynamically and is based on a constant flow of natural gas. It therefore does not offer a reliable solution to accurately quantify leakage from a network transporting a varying blend of natural gas and hydrogen.
- 2.50. SGN's recently completed NIA project; Leakage Management in the Energy System Transition, investigated the accuracy of the SLM for estimating natural gas leakage and its suitability in the system transition to hydrogen. The report concluded that the SLM is likely overestimating leakage in a number of areas, which would require validation. The report also, at a high level, estimated that if all throughput of natural gas was replaced by 100% hydrogen in the existing networks, emissions would reduce by at least 79.3%, when comparing the indirect GWP of hydrogen leakage compared to the direct GWP of methane leakage. Any blend of hydrogen will reduce emissions from leakage, but the SLM is not currently capable of quantifying accurately what would be a more dynamic system in terms of gas composition would be.



## GDQ6. What are your views on the options we have laid out for the heat policy re-opener, including whether this should be combined with other RIIO-3 net zero mechanisms?

- 2.51. **We agree that it is important to have a reopener that covers potential changes as set out under the heat policy reopener, given the specific and potential material nature of this reopener we would suggest that it should be kept separate.**
- 2.52. Our view would be to keep the Heat Policy Re-opener mechanism separate from the other net zero-related uncertainty mechanisms. Due to the specific nature of the trigger activities, it is useful to have a separate mechanism to ensure allowances that are funded are allocated and managed appropriately to deliver the outcomes for these specific areas.
- 2.53. The alternative of combining with the net zero reopener, would potentially be quite challenging as the net zero reopener is overly broad and because it is so broad it is to be triggered by the authority rather than the licence holder. This will increase the operational complexity of the price control as networks will need to make a case for a reopener to be established and there will be a significant uncertainty about whether this will be granted or not which could delay expenditure.
- 2.54. Regarding the inclusion of new obligations for GDNs to promote the energy efficiency amongst gas consumers, we think that it is appropriate to continue its inclusion. There will be a general election prior to the price control coming into effect and the government's policy may change. Given the challenges of delivering energy efficiency measures this may be a route that an incoming government may choose to adopt. We would also recommend making it less specific to a change in the act.
- 2.55. In addition, there may be a requirement to amend the trigger points around connection charging arrangement for distributed entry connections to include the introduction of hydrogen blending activities into the network.

## GDQ7. What are your views on our proposed approach for managing uncertain costs relating to regional energy strategic planning?

- 2.56. **It is important to separate the costs of engaging with the Regional Energy Strategic Planners (RESP) and the cost of new and distinct projects that arise from the RESP. We agree that there are unlikely to be new and distinct projects arising from the RESP during RIIO-3. There will be a significant additional cost of engagement and support as the RESP becomes established, as well as additional engagement with local authorities.**
- 2.57. The establishment of the RESPs across GB will lead to an increase in operational costs and resource requirements for networks throughout RIIO-3 and may lead to significant project costs either towards the end of RIIO-3 or during the following price control period.

- 2.58. The RESPs are unlikely to be in place in time for RIIO-3, therefore more emphasis and engagement will be required between the GDN's and local authorities in the interim period prior to RESP's being established. The additional cost associated with this must be considered and further guidance from Ofgem would be helpful.
- 2.59. The ongoing operational costs and resource requirements is necessary to effectively engage with and support accurate decision making by the RESP, to meet the ambitions of the RESP. Aligning with proposed boundaries defined in the Ofgem document, Future of local energy institutions and governance<sup>4</sup>, with 2 areas in Scotland and 6 in our Southern network area there will be a material impact and dedicated resource requirement to provide appropriate representation, evidence and internal analysis to deliver effective engagement with the RESP is undertaken.
- 2.60. It is our view that whilst the RESPs are being established and the amount of workload is unclear then these operational requirements should be funded through the Net Zero UIOLI, through dedicated baseline funding (i.e., not put through the regression model) or as a passthrough cost. It should however be recognised that at the moment it is very unclear the workload that will be required as a result of the RESP. We would therefore support an adjustment mechanism to the funding should workloads be significantly higher.
- 2.61. If there are discrete project requirements supported by the RESP, it is SGN's view that these could be accommodated through both the Net Zero pre-construction work and small net project re-opener (NZASP) and the Net Zero Reopener (NZRO).
- 2.62. As we move towards a more integrated energy system, supplied from a diverse range of renewable and low carbon sources, the need to ensure a coordinated approach towards investment, operation, and the impact this has on consumers is increasingly important. The whole system approach to this is essential in delivering solutions that support decarbonisation, ensure security of supply, and deliver at the most efficient cost to consumers.
- 2.63. It is important to recognise that there are different requirements for electricity and gas networks. For gas networks, the decarbonisation pathway remains uncertain until the UK governments policy decision on hydrogen is made in 2026, and it is anticipated that the decision will not be clear-cut, and uncertainty will remain. It will be important to improve that clarity whilst defining how whole system trade-offs may materialise in RIIO-3.
- 2.64. Scenarios and forecasts are crucial in terms of guiding thinking for the role of the RESP, but they are tools to aid decision making. Establishing a set of agreed leading and lagging indicators will help guide forecasting and reduce the risk of incorrect investments.
- 2.65. It is fundamental when looking at the whole energy system that the RESPs make use of the correct tools that are available, and to understand the appropriate direction of travel to plan for a successful, coordinated outcome. The RESP needs to work closely with the GDNs during RIIO-3 and incorporate the

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<sup>4</sup> <https://www.ofgem.gov.uk/sites/default/files/2023-11/Future%20of%20local%20energy%20institutions%20and%20governance%20decision.pdf>

GDNs demand forecasts within any analysis as the only source of an accurate, detailed, and informed assessment of the GDNs demand requirements for the price control period.

- 2.66. We believe that for gas networks it is important to establish the route to decarbonisation prior to focusing on whole system solutions. We accept that this may be different for electricity networks where there is an immediate regulatory challenge to define the interactions between networks and system operators. The reason we consider the focus on the decarbonisation pathway is appropriate for gas networks is that this will define the scale of the challenge for electricity networks. We must ensure investment in the gas networks through the RIIO-3 period to ensure connectivity of thinking to enable and maintain security of supply across the energy systems.

## RIIO-GD2 outputs and UMs proposed for removal

### GDQ8. What are your views on our proposal to remove the Commercial fleet electric vehicle PCD in RIIO-GD3?

- 2.67. **It is our view that the commercial fleet electric vehicle PCD remains a valuable incentive to support the deployment of electric and zero carbon vehicles in RIIO-3 and should be retained.**
- 2.68. Due to supply chain issues across all vehicle providers to date in RIIO-3, networks have been concentrating on sourcing vehicles irrespective of whether they are electric or not. Due to market constraints, there has been a much lower than anticipated rate of development of commercial EVs than assumed at the time of our RIIO-2 business plan submission. As a result, the deployment numbers are significantly below where we hoped they would be when we set ambitious targets in RIIO-2, reducing our ability to utilise this PCD within the period.
- 2.69. As the PCD is set up as a volume driver, the funds are returned to the customer, and we have adjusted our forecasts to ensure that we do not over collect as quickly as possible.
- 2.70. As market constraints have limited uptake, we have not yet established a clear operational model that enables our front line services (emergency, repair, and maintenance) to utilise EVs and there is a risk that by withdrawing the PCD then the upfront capital expenditure will become a significant barrier to their deployment within future price control periods. This would put pressure on our ability to achieve our EAP, causing a barrier to potential wider societal benefits through the reduction of scope 1 emissions.

### GDQ9. What are your views on our proposal to remove SGN's bespoke Biomethane improved access rollout PCD in RIIO-GD3?

- 2.71. **The biomethane improved access roll out has been a successful mechanism to demonstrate and build operational knowledge to improve biomethane deployment. In RIIO-3 it should be permitted under the**

**Net Zero and Reopener Development Fund Use it or lose it (NZARD UIOLI) and Net Zero pre-construction work and small net project re-opener (NZASP).**

- 2.72. We support the Ofgem position to remove the SGN Biomethane Improved Access Roll-out PCD from the RIIO-3 price control, on the basis that the RIIO-2 project outputs will provide a practical knowledge base and specification for future biomethane blending projects.
- 2.73. The currently identified RIIO-2 PCD projects, which will largely utilise the propane reduction/blending technology as a means to deliver the PCD outputs, were selected on the basis of delivering maximum benefits in relation to propane reduction and the sites' compatibility with the current blending technologies.
- 2.74. With the current RIIO-2 PCD, which requires SGN to implement ten projects across the Scotland and Southern Licensed areas, the current approach has identified the vast majority of currently connected sites which are compatible with current biomethane blending technology. Advancements in the technology may allow further sites to benefit from blending, also and in addition, any new sites connecting to the SGN network throughout the remainder of RIIO-2 and into RIIO-3 may potentially be compatible.
- 2.75. Any further biomethane projects which request and are compatible with blending requirements will benefit from the learning and operational experience gained from the current price control deliverable project.

**GDQ10. What are your views on our proposal to remove SGN's bespoke remote pressure management PCD in RIIO-GD3?**

- 2.76. **The remote pressure management PCD was successful in demonstrating the use of remote pressure management in our network and is in the process of being deployed. These costs could be appropriately covered under the NZARD UIOLI and the NZASP, otherwise they should be separately funded through an updated PCD.**
- 2.77. The PCD in RIIO-2 was extremely valuable in taking a project from very promising innovation through to commercially deployable technology that we are now in the process of deploying. During the process, the cost increased significantly but we were also able to demonstrate that the CO2 savings were significantly higher than anticipated. So, the overall assessment of their economic benefit improved.
- 2.78. As we set out in our response GDQ2 and GDQ3 above, there are significant environment benefits associated with this technology. It is our view that these can be accommodated within the Net Zero and Reopener Development Fund Use it or lose it (NZARD UIOLI) and Net Zero pre-construction work and small net project re-opener (NZASP) which would enable wider rollout to other networks and bring significant value to more consumers and stakeholders.
- 2.79. If these structures are not in place or the funding is limited, then we would recommend the current PCD licence condition is updated for similar projects that we will deliver in RIIO-3, and that the PCD should be widened to enable other networks to roll-out this particular innovation within their networks. Without

direct funding either through the PCD or the UIOLI then it is very unlikely that they projects will progress in RIIO-3 as the majority of the benefits are environmental rather than financial benefits.

### GDQ11. What are your views on our proposal to remove SGN's bespoke Gas escape reduction PCD in RIIO-GD3?

- 2.80. **The Gas Escape Reduction PCD has been utilised in RIIO-2 to commence roll-out and embedding of innovative kit that not only reduces methane emissions on gas escapes but also provides a safe environment for the public and for our operatives when intervening on gas escapes. Whilst we are assessing the scale of the deployment in RIIO-3 SGN would expect these costs to be recovered under an extended NZARD UIOLI and the NZASP, if not they should be separately funded through an updated PCD.**
- 2.81. If there is a decision to remove the bespoke gas escape reduction PCD then it is our view that it should be funded through Net Zero and Reopener Development Fund Use it or lose it (NZARD UIOLI) and Net Zero pre-construction work and small net project re-opener (NZASP).
- 2.82. In RIIO-2 we have progressed with the PCD as follows:

#### **Stent Bag**

- Southern Operations: 5 full kits and “trial” roll out completed. Personnel have been trained and although only in year 3 of RIIO-3, the kit has been used on numerous occasions, providing a safe environment for the public, a safe environment for our operatives to perform remedial work, and a reduction in gas release on at number of jobs.
- Scotland Operations: 2 full kits and “trial” roll out completed, Personnel have been trained. Focus now on trial roll out to expand the benefits of providing a safe environment for the public, a safe environment for our operatives to perform remedial work, and a reduction in gas release on escapes.

#### **HVGET – High Volume Gas Escape Toolbox**

- Southern Operations: 4 full kits and “trial” roll out completed. Personnel have been trained. Focus now on trial roll out to expand the benefits of providing a safe environment for the public, a safe environment for our operatives to perform remedial work, and a reduction in gas release on escapes.
- Scotland Operations; 1 full kits and training of personnel commenced, focus on implementation for the next phase in Scotland to ensure wider use on the Network.

- 2.83. We would recommend either updating the current PCD licence condition, or including an explicit provision to cover these activities in the NZARD UIOLI with extended funding to ensure that these types of projects can continue to bring the benefits realised in RIIO-2 through to RIIO-3. Our preference would be that the current PCD licence condition is updated to include funding to facilitate the rollout of innovations in RIIO-3, this would build on the knowledge and experience developed in RIIO-2 and would enable the continuation of methane emissions reduction from gas escapes during RIIO-3.
- 2.84. We have commenced stakeholder engagement which has shown early support for this approach, and without direct funding either through the PCD or the UIOLI then it is very unlikely that the projects will progress in RIIO-3 as the majority of the benefits are environmental rather than financial benefits.

## GDQ12. What are your views on our proposal to remove SGN's bespoke Intermediate pressure reconfigurations PCD in RIIO-GD3?

- 2.85. **Intermediate Pressure (IP) Reconfigurations is on schedule to be successfully completed during RIIO-2; these were unique jobs that would not have been funded appropriately within the benchmarking process. These jobs are now finished and the PCD can be closed.**
- 2.86. The IP reconfigurations PCD was identified at the start of RIIO-2 to resolve a legacy issue where intermediate pressure gas supply was taken to up to the domestic customer property building line. These were unique to our Scotland network and would not be constructed in such a way now given current safety standards. On completion SGN will have remediated all 515 IP steel supplies.
- 2.87. As this workload had a unique set of characteristics that was unique to the area, there was no appropriate driver in the benchmarking model. As a result, it was correct and appropriate to separate out them out into a separate PCD. With these projects now complete the PCD can be closed.
- 2.88. In RIIO-3, there may be other programmes of work that have a unique set of characteristics, are unique in terms of the geographical location or have unique attributes that impact their cost of delivery. These programmes of work are not reflected appropriately within the benchmarking model process as they lack an appropriate costs driver. Accordingly, it is important that a PCD or equivalent is available in RIIO-3 to fund programmes of work that have similar unique qualities and characteristics.

## GDQ13. What are your views on our proposal to remove Cadent's bespoke HyNet Front End Engineering Design PCD in RIIO-GD3?

- 2.89. **In principle if the project is completed then the PCD should be closed and removed. It would be helpful to understand the experience of using the PCD for this type of project and whether it should be replicated for similar projects in RIIO-3.**
- 2.90. We agree with Ofgem's position that the funding for Cadent's HyNet FEED study under a PCD should be removed if the study has been completed within the RIIO-2 timeframe.
- 2.91. The use of a PCD for this type of study could be replicated across other networks during RIIO-3 for similar projects. Our own strategic hydrogen pipelines in Scotland and Southern networks will require to transition to full FEED in RIIO-3 to facilitate the decarbonisation of existing natural gas consumers to a low carbon alternative energy source, with or without the demand for heat.
- 2.92. The allocation of funding under a PCD would prove to be a useful mechanism to progress these projects to a detailed design stage to facilitate construction, where known outcomes can be defined and delivered within a prescribed timescale.

### 3. SGN's response to questions within the SSMC Section 3. Secure and resilient supplies

#### Proposed RIIO-GD3 specific outputs and uncertainty mechanisms

- 3.1. We agree the importance of investing to maintain safety through the RIIO-3 period. Gas networks do not fail safe in the way that electricity does, and as such we must keep investing to maintain the levels of safety that our customer demand and expect.
- 3.2. Whilst there is no specific question on the application of reopener thresholds, there should be a discussion on the appropriate level of materiality threshold and whether there should be a materiality threshold applied as the design of the reopeners is confirm.

#### GDQ14. What are your views on the benefits of repex that we have identified, how well the repex programme is currently working, and what evidence we should consider as part of the joint repex review?

- 3.3. **We support the views put forward by Ofgem that the continuation of the repex programme as it stands given its importance for safety and environmental benefits. We think that the option value that it creates for transporting hydrogen as a method to decarbonise heat should also be considered as a part of the joint repex review.**
- 3.4. We also acknowledge the conclusions of the DESNZ review and the recognition of the importance and benefits of the Repex programme, as far as it applies to Tier 1.
- 3.5. We understand that a review is underway by HSE, being undertaken by the Science Division, and await their findings.
- 3.6. We must also acknowledge that we have seen a significant increase in Iron mains failures in our network over the last two years.
- 3.7. Additionally, we have conducted our own industry led reviews, both from a technical<sup>5</sup> and socioeconomic<sup>6</sup> perspective. Both of these studies have concluded with relevant findings written up into reports have been finalised and provided to Ofgem, HSE and DESNZ.
- 3.8. From the technical study, which looked a number of outcome scenario's from stopping the programme to continuing and including Tier 2, Tier 3, and Steel mains, unsurprisingly found that if we were to stop mains replacement, the number of mains failures will start to increase. The scale of this increase had not been previously forecasted and with this study we have forecast that network failures would increase by

<sup>5</sup> DNV, Deterioration prediction and replacement scenario analysis for GD3 mains and services, Nov 23

<sup>6</sup> Baringa, Iron main Replacement Cost Benefit Analysis, Nov 23



at least 50% from the levels currently seen. Conversely, if we were to continue replacing Tier 1 iron mains, and the connected services, that the number of failures would decrease by at least 60% from current levels by the time the programme completes in 2032.

- 3.9. These outcomes were reinforced by the economic analysis, which suggested that the Tier 1 programme was a good use of customers money, with a short payback of around 15 years when considering Safety, environmental and operational factors. We also know from our monetised risk analysis that this payback is likely to be further enhanced by consideration of additional benefits such as avoided fail to supply gas payments following a network failure (FSGs).
- 3.10. The economic case for greater replacement of larger diameter steel mains was also considered in this report. However, the case for replacement of Tier 2 and Tier 3 Iron mains was not as strong as it was for Tier 1 Iron mains. Whilst we acknowledge this conclusion, we must also recognise that this is for a broad sample of mains across the network. At an individual pipe level there will be engineering, customer and stakeholder considerations that need to be considered along with pipe specific deterioration factors that may mean that replacement is warranted. Early indications of Cost Benefit Analysis, using the NARM methodology, at this level of granularity suggest that there is a substantial length of Tier 2, and Tier 3 mains that are now economic to replace.
- 3.11. We also need to recognise that pipe replacement will need to continue as it is a duty in law under the pipeline safety regulations, regulation 13. This view is supported by the HSE who at a recent Gas Transporters Operational Safety Group (GTOSG) meeting confirmed that they deem Repex mandatory where integrity of the main has been compromised to comply with the law.

### GDQ15. Do you consider there to be alternative approaches that could deliver mandatory repex at least cost to the consumer whilst maintaining the legislative safety standards?

- 3.12. **The mandatory repex programme has been deployed at least cost to the consumer whilst maintaining legislative safety standards by supporting innovation, this has delivered significant consumer benefits during RIIO-1 which have carried into RIIO-2.**
- 3.13. It is important that we continue to deliver the repex programme in the most efficient manner. In GD1 we deployed CISBOT and other technologies to improve insertion techniques, these continue to be fully deployed by us and other networks through RIIO-2. The development phase, up to Technology Readiness Level 8 (TRL), of these technologies were supported through the NIA funding during GD1 and in GDPCR 1, with rollout and commercialisation, up to TRL9, supported directly by SGN.
- 3.14. In RIIO-2 the policy decision was made that the NIA should not be used to support innovations that contribute to productivity or operational efficiency. Rather, that the NIA should be used to support innovations that support the energy transition and for vulnerable customers. This has clearly focused attention on those areas of benefit, rather than on delivering innovations that may deliver mandatory repex at least cost.

- 3.15. Core innovation continues within the business, and we continue to actively search the market for innovations that we can adopt for the benefit of customers and the network, the pace of change has however reduced reflecting the change in focus of the NIA.

### GDQ16. What are your views on our proposal to keep the HSE policy re-opener, but to reduce its use to a single trigger?

- 3.16. **We agree that the HSE policy reopener should be retained, particularly as the HSE Policy resulting from the joint repex review may not come in time for the SSMD. Regardless of timing it is our view that the HSE policy reopener should be broadened to any HSE policy that we have to comply with and not limited to Repex.**
- 3.17. We think that it is important to recognise that HSE Policy changes as more information becomes available as a result of investigations and findings. This may lead to an overall improvement in safety outcomes for all our customers or may arrest an unexpected point of degradation that if not addressed could lead to a deterioration of safety outcomes.
- 3.18. It is important that networks are able to respond to these changes in a timely and effective manner regardless of what issues they relate to. During RIIO-2 there has been a significant focus on repex and the working time of front line staff. At any one time there will also be a number of investigations underway that may yield new findings that we need to respond to.
- 3.19. As a result, we think that it is important the licence should be broadened from *“(e)changes to a Repex Related HSE Policy Area that will materially impact Repex; or (f) Emergency And Repair Costs directly arising from statutory requirements relating to managing fatigue for shift workers enforced by the HSE.”* to *“(e) changes to a HSE Policy Area that will materially impact the cost of replacing assets or operating the network.”*

### GDQ17. What are your views on the design of the Tier 1 mains decommissioned PCD?

- 3.20. **We disagree with the conclusion that there have been no issues identified. There are significant challenges in the efficient delivery of Repex that need to be taken into account in RIIO-3. This needs to take into consideration the changes in the complexity of work that will be undertaken as we come to the end of the repex programme and how these risks may vary according to licence area. We have set out our characterisation of complexity and potential resolutions, we recognise however that resolving these challenges will require constructive working groups with dedicated time and a level of transparency on both costs of delivery and the outputs delivered.**
- 3.21. In para 3.27 Ofgem set out *“We have not identified any issues with the PCD and propose continuing this approach in RIIO-3”*. Whilst we agree with some of the changes made in the RIIO-2 final determination, such as the movement to a volume drive and the move away from ‘risk removed’ as an output measure, it is our view that a number of issues have already been identified that need to be addressed.

3.22. These concerns are regarding both the design of the PCD but also ensuring there is a suitable allowance calculated to enable networks to deliver the mandated workloads.

3.23. In the FSNR response SGN point out that it was clear from the challenges identified that the costs assessment process for efficient delivery costs in the Southern regions of England was unreasonable and deficient<sup>7</sup>.SGN go on to state<sup>8</sup>:

*“As we look forward to the next regulatory period, we anticipate that the regional challenges will become exacerbated by the remaining project types. As we progress towards the end of the IMRRP the projects become more challenging – more road crossing, shorter lengths, more traffic management conditions and greater levels of customer engagement. Whilst this will impact all networks there is a greater density of more challenging projects in the more densely populated areas and urban centres. These will start to dramatically impact costs towards the end of the IMRRP.*

*These challenges indicate that a simplistic approach to cost assessment of the repex programme is inappropriate.”*

3.24. SGN also pointed out that improvements should be made to:

*“Ensure that workload measurements are aligned with the costs. For example, by moving to repex decommissioning a large number of assumptions and best estimates had to be employed to convert unit rates which are agreed with the contractor according to lay, to a unit rate for decommissioning. Where possible workload measures should be aligned to underlying contract rates.”<sup>9</sup>*

3.25. At the time we thought that a 2-year roll-over may provide an opportunity for an ex-post technical assessment to establish clarity and transparency of the costs incurred<sup>10</sup>.

#### **The Repex challenge for RIIO-3**

3.26. Given these concerns that were raised both during both the FSNR consultation in two meetings between Ofgem and SGN (5<sup>th</sup> May 2023 and 1<sup>st</sup> June 2023) and in the response to the open letter we are concerned that Ofgem reached the conclusion that no issues have been identified. It remains our view that;

■ [REDACTED]

■ [REDACTED]

<sup>7</sup> 19.05.23 – SGN Response to FSNR Consultation Ofgem Confidential, pg. 4.

<sup>8</sup> 19.05.23 – SGN Response to FSNR Consultation Ofgem Confidential, pg. 20.

<sup>9</sup> 19.05.23 – SGN Response to FSNR Consultation Ofgem Confidential, pg. 40

<sup>10</sup> 19.05.23 – SGN Response to FSNR Consultation Ofgem Confidential, pg. 20.

[REDACTED]

- [REDACTED]

[REDACTED]

[REDACTED]

- [REDACTED]

- [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] contractor rates are based on lay lengths and do not quote for lengths of work decommissioned.

- 3.27. The repex programme has gone through a number of policy shifts since 2002 between which were reflected in GDPCR1, RIIO-1 and RIIO-2. The focus on pipe selection prioritisation using top-down risk prior to 2002 prevented the development of larger projects. We have prioritised a subset of these pipes with the highest risk for completion during the period and by the end of the RIIO-1 period we had reduced the risk of the iron mains remaining on our network by 51% in Scotland and 49% in our Southern region<sup>13</sup>. Innovation, good project design and better ways of working have helped reduce the cost for consumers. As we approach the end of the programme, however, there is a high portion of challenging work remaining that cannot be tackled through innovation, and a body of smaller projects created by changes in policy that need to be completed. This remaining Repex work will need to be carefully considered in the cost assessment working group and may require changes to both the way that we report data and the way in which we assess costs.
- 3.28. It is because of these concerns that we think there needs to be a substantial change to the way that the repex programme is assessed, and that not changing the methodology will lead to an inaccurate determination of allowances and risk undermining the financeability of the network by providing insufficient allowances to deliver against a HSE mandated deadline.
- 3.29. In the table below we have set out a series of complexity factors and their definition (these were discussed at the Cost Assessment Working Group<sup>14</sup>) where the complexity factors reduce the productivity of the teams that are working leading to higher contractor rates.

<sup>13</sup> RIIO-GD2 business plan appendix Replacement Expenditure Dec 2019 <https://www.sgn.co.uk/sites/default/files/media-entities/documents/2022-07/Appendix-019-SGN-Repex.pdf>

<sup>14</sup> RIIO-GD3 Cost Assessment Working Group 5: Repex Initial GD3 cost assessment considerations and BPDT development.

**Table GDA1 – Repex complexity Factor Definitions**

Complexity Factor	Potential Definition
Ductile Iron Mains	A form of Iron that is more difficult to work on than Cast/Spun. The specific challenge from a productivity basis is breaking out window to make the service connections, often this requires specialist equipment and a larger excavation.
Proximity to PVC	The Southern network has a population of Polyvinylchloride (PVC) mains that are classed as a non-standard material. Where our tier 1 mains are connected to or from PVC mains it poses an engineering challenge to deal with connections which are timelier to make and more expensive to do (parts).
Long Services	Where possible we would look to insert service (putting new PE pipe within an existing pipe) this is efficient and less disruptive. Long 28services are services from the mains to the property that are above the maximum length of insertion for a service (i.e., Long services are services from the mains to the property that are above the maximum length of insertion for a service (i.e., services with a length greater than 20m). Beyond this length a new service (open cut or mole) would be required.
High service density	Mains that have a high number of services connected (i.e., pipes with a service density of > 90 services per km) will be more time consuming than projects with lower service density. This factor effects the makeup of a replacement team (main layers to service layers) and the length that can be replaced in any working week.
Stranded assets (very small projects)	Mains that are isolated from the rest of the Iron Network (i.e., where there are less than 250m of other pipes that need to be replaced within a 500m radius). Whilst these were designed out where possible, a strict focus on the higher risk pipes in early years changes in the programme and new buildings bring iron mains within 30ms of a building (dynamic growth). The proportion of working time to setup and shutdown time in any given project is a key factor in the cost per kilometre of repex, shorter projects are less productive due to the low ratio of working time.
Cross road mains	Short lengths of Iron, often connected to Tier 2 or Tier 3 parent mains, but are not Subs as per RIGS definition, that cross, often heavily trafficked, roads. These assets have an atypical unit cost to decommission that is more like stubs decommissioning.
Single sided mains	Mains that feed customers on either side of the road, as opposed to having two mains that serve the street. One set of services will typically be shorter as the main is often found on one side of the street, the other set will be longer services and each one will cross the road. Often the longer services will need to be 'moled' across the road or open cut if other services (water, electricity etc) are present.
Risers	Mains that are in proximity to Multiple Occupancy Buildings and therefore need to incorporate the riser work within the job. This can be particularly onerous on time as there are a significant number of purge and re-lights that are necessary for the main replaced.
Stubs	Short lengths of Iron, less than 6 meters, which are connected to Tier 2 or Tier 3 parent mains that require remediation. The HSE has approved an exemption if the stub is short enough and not made of ductile iron, but this still requires a significant amount of high-cost work.
Sensitive locations (schools etc)	Tier 1 mains that are near sensitive locations that may have additional working restrictions put upon them, such as prescribed times that the work can go

Complexity Factor	Potential Definition
	ahead (e.g., school holidays) or long working hours to accelerate the work in that sensitive location. Locations include, but are not limited to: Schools, Hospitals, Police and Fire stations, Shopping centres and through roads.

- 3.30. Whilst the complexity factors set out in table above are not unique as individual incidents, the number of projects complexity factors is higher along with the number of projects with a combination of multiple points of complexity in a single project where their interdependencies make these projects particularly challenging.
- 3.31. This increased prevalence and compounding of complexity also impacts other costs, such as planning, project management, time spent per project, the impact of restricted hours, traffic management costs and parking bay suspensions. Whilst many of these costs will often be capture under the categories set out for streetworks costs in the RRP, as the complexity increases the historical impact of streetworks, and associated costs no longer become an appropriate guide to future costs.
- 3.32. Furthermore, there will be areas of costs that are associated with increased complexity that we do not think are adequately captured under the streetworks cost adjustment or through regional costs adjustments (such as the interaction between sparsity factors and the repx costs in Scotland). We therefore think that it is very important to do a review of adjustments and to ensure they are both comprehensive, clear and that there is no risk of double counting.
- 3.33. Finally, we consider there to be a highly regional aspect of complexity, more densely populated areas are more likely to have a conjunction of complexity factors due to the geographical characteristics.

#### Potential approaches to cost assessment

- 3.34. Given such complexity and the multiplicative impact of conjoining multiple complexity factors into a single view, this creates a significant challenge on the accurate assessment of efficient costs and the determination of the most robust forecast of costs. We have set out potential approaches below;
- **Ensuring suitable information collection within BPDts.** Within table GDA1 we highlight potential definitions for complex repx works. These definitions are required to be agreed with both companies and Ofgem to ensure the data can be reported in a consistent way within the RIIO-3 BPDts. This should be the basis to understand the differences in exposure to complex activities across networks, and as such will be important in order to accurately determine appropriate normalisation approaches that are required.
  - **Ex-Ante Technical Assessments.** Where projects are identified with characteristics of the project (or category of projects) that are clearly unique to the typical projects that have informed the benchmarking cost assessment process then these should be removed from the benchmarking cost assessment process and technically assessed with allowances awarded on the basis of an ex-ante cost assessment. This approach could equally be utilised for areas of grouped complexity, where if it is determined that a network is more exposed to a particular complexity factor then this specific cost and volume is separately technically assessed.
  - **Use of Volume Drivers.** When considering these complexity factors, we think that some of the complexity factors may be able to be managed through more defined unit rates within volume drivers (ductile iron, long services, high service density, crossroad mains and stubs for example). However,



utilising a volume driver will not be able to reflect the cumulative impact of costs increasing as more levels of complexity are introduced into a single project.

It is also important to note that the use of volume drivers needs to be carefully considered in terms of validating the allowances that are used and confirming the split between fixed and variable costs. One of the observations from RIIO-2 was that allowances that were produced as a result of creating volume drivers from a totex model disaggregation often led to distorted unit costs. Allowing time for these unit costs to be cross checked and validated through a technical assessment is important. We have also noted that large changes in volumes (such as connection volumes) can then distort cost recovery where there are significant fixed or overhead costs.

Where volume drivers are used it is important that any caps on delivery need to be removed. As we come to the end of the programme it is important that we are able to work at the pace necessary to close out the programme in an efficient manner delivery lengths should include dynamic growth (where iron mains that were previously further away than 30 meters have now been brought into range due to new construction).

- **New Cost Drivers:** We could look to establish new cost drivers that are more able to accurately reflect the costs within the cost assessment process. It would be important to build the data templates to enable these costs and workloads to be captured and this would require an early stage agreement on the categories of complexity to allow data collection. With the right level of data, we think in principle possible through more sophisticated statistical analysis, such as the use of clustering techniques, that we could maintain a benchmarking approach to cost assessment.
- **Alternative approaches:** We think that there are alternative approaches that could include characterising standardised archetypes of work that for different complexity levels or ex-post assessment or verification of costs incurred.

- 3.35. It may be that a combination of the techniques set out above are required to determine an appropriate efficient cost according to the type of work.
- 3.36. It is SGN's view that significant time needs to be dedicated to determining an efficient level of costs for delivering the remaining workload in RIIO-3 and the final years of Repex based on the project types that need to be completed. This process will require time to review outputs, identify differences and rectify errors, accordingly we need to set out a process that enables this and provides sufficient evidence and a level of transparency that helps all stakeholders reach the correct conclusion.
- 3.37. Given the importance of this as a point of cost assessment it is our view that failure to adopt an approach that sufficiently accounts for the specific challenges faced on the ground, including by different networks, despite the evidence of under-funding at RIIO-2, will result in outcomes that do not have regard to the interests of consumers, security and financeability, and which fail to ensure best practice, targeted regulation.

## GDQ18. What are your views on the proposed design of the Tier 1 services PCD?

- 3.38. **We support the continued use of the Tier 1 services PCD. However, the cap / collar approach to the PCD is no longer appropriate as we come to the end of the programme of work and should be removed as this creates a risk that the networks will be underfunded for work that would need to be delivered in RIIO-3 to deliver against the HSE safety target. In addition, the prevalence of longer services necessitates a dual rate in RIIO-3.**
- 3.39. In RIIO-2 a cap and a collar was placed around the number services that would be delivered according to the estimated number of services expected for the forecast length of tier 1 repex delivery. As we come to the end of repex programme, we must replace all services associated with the workload that needs to be delivered. As a result, we do not consider the cap and collar to be appropriate to maintain in RIIO-3.
- 3.40. Maintaining the cap and collar approach risks networks being underfunded for work that they would need to deliver in RIIO-3 in order to deliver the HSE safety target as, when we approach the end of the programme, all the work will need to be completed by 2032. SGN propose that the cap / collar is removed, and we utilise a straightforward volume driver on this workload.
- 3.41. As the tier 1 programme enters its last phase, we believe it would be appropriate to have a separate unit cost for longer services. Longer services are now more prevalent in the network as the mains that they are associated with typically have a lower risk score as the properties are further away from the main. As the programme has targeted higher risk mains, the remaining population has a higher than historical proportion of longer services.
- 3.42. These long services face significant cost increases as they cannot be replaced in a typical manner, where PE is inserted into the old steel service, as the smaller PE pipe would not maintain adequate pressure at the customers premises. The only alternative solution is a larger PE service pipe that would need to be open cut in the road, footpath and private land attracting a premium replacement cost. This can be further exacerbated when enhanced traffic management is required on the street.
- 3.43. We would therefore need an additional unit cost allowance for these longer services. Please refer to Table GDA1 above for a proposed definition of a long service. In addition, as per response to GDQ17, the allowances in the volume driver need to have unit rates that are deliverable, so should be technically assessed rather than the outcome of a regression.

## GDQ19. What are your views on the design of the Tier 2A mains and services replacement volume driver?

- 3.44. **We agree with Ofgem in the continued use of the Tier 2A mains and services replacement volume driver.**
- 3.45. Due to few of these workloads being completed so far in RIIO-2, careful consideration must be taken over the unit costs calculated for the work type. A change in risk scores or MRPS coefficients, for example as a result in the increase in failures of these main types, could lead to a considerable increase in workload under this volume driver.

## GDQ20. What are your views on the design of the London medium pressure PCD (Cadent North London only)?

- 3.46. **We agree with Ofgem's approach to maintain the London medium pressure PCD to support delivery of important projects across price control periods. It should be noted that SGN anticipate submitting a similar PCD for our South London medium pressure network in RIIO-3.**
- 3.47. We are not sufficiently close to the delivery of the Cadent North London medium pressure PCD to have a view on the project's progress and there is limited public information.
- 3.48. It is SGN's view that an understanding of the progress of the project to-date and how it has progressed relative to the baseline funding in RIIO-2 would be beneficial for future projects.
- 3.49. In RIIO-3 it is likely that SGN will submit a similar project to cover the South London Medium Pressure network as there has been a significant increase in the number of public reported escapes on this section of network. It would therefore be useful to understand how the Cadent PCD has performed and whether the PCD itself has improved confidence and transparency.

## GDQ21. What are your views on our proposal to retain the diversions and loss of development claims re-opener in RIIO-GD3, and whether all the cost areas are still uncertain in RIIO-GD3?

- 3.50. **We agree with Ofgem's proposal to retain the diversions and loss of development claims re-opener in RIIO-3. The costs associated with the re-opener still remain uncertain, as does the volume of work that we are currently seeing within our networks.**
- 3.51. Due to the bespoke nature of the works associated with the diversions and loss of development claims re-opener and the extreme uncertainty around the volume of workloads, the costs associated with this are not forecastable and will remain uncertain through to RIIO-3.
- 3.52. In the RIIO-2 period we have submitted a reopener claim to cover a number of different events where either extreme weather events have exposed direct safety considerations or where construction events have undermined the geological stability of a surrounding area and we have been unable to pursue the owners for costs or their insurers for costs. Examples include;
- **Cowdenhill Quarry.** A quarry encroached too close to a transmission pipeline and geotechnical assessment determined that the pipeline was at risk and necessitated a diversion. This has been subject to a protracted legal dispute.
  - **Meadowhill Quarry.** Torrential rain in August 2020 causes a washout and complete loss of the lateral and bedding support causing the full exposure (free spanning) of approximately 70m of high pressure pipeline.

- **Storm Babet.** In October 2023 torrential rain created flooding and washout incidents across Scotland. We have identified a number of known washouts and several more at risk crossings where we have not been able to access the site to complete a full assessment.
- **Loss of Development Claim.** Many of the Deeds of Servitude signed when the network was originally laid include a 'Loss of Development' provision to compensate the landowner for justifiable loss of profit from a development. The Reopener covers one such incident. We do not consider these examples to be unique to RIIO-2 and anticipate further similar examples in RIIO-3.

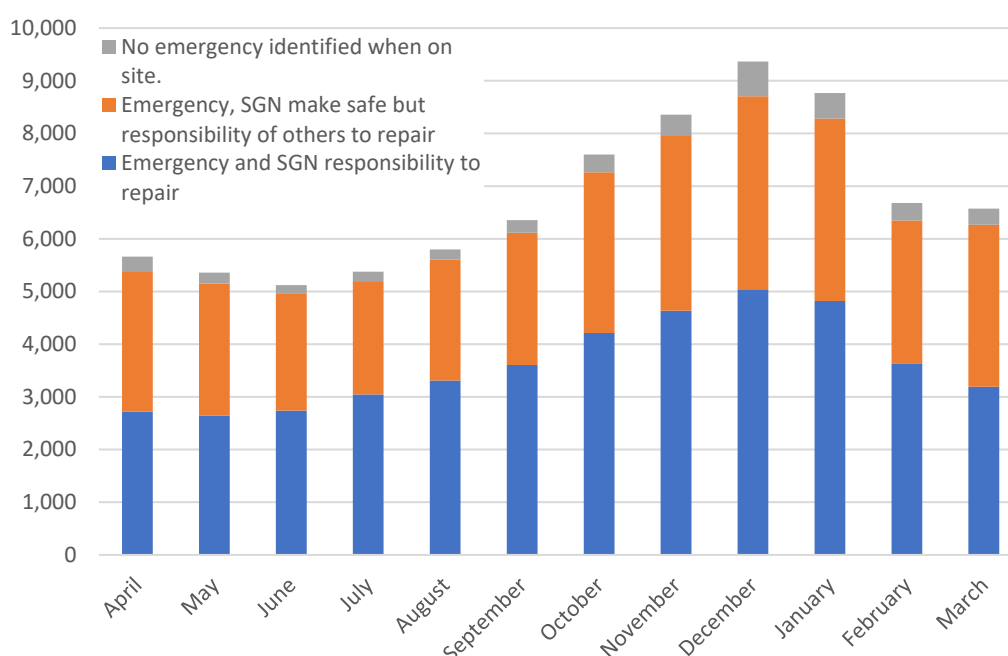
## GDQ22. What are your thoughts on our proposal to continue the emergency response time LO and whether the target should be set monthly, quarterly or annually?

- 3.53. **SGN agrees with the proposal to retain the emergency response time licence obligation (LO). We think the current LO is established and well understood. We recognise concerns that an annual average may be too high level and mask within year variations, however we think that this can be addressed with reporting on monthly performance in the annual RRP.**
- 3.54. The 97% annual standard for attending public reported escapes is a long-standing target that is well understood across a range of industry stakeholders and customers. As networks we recognise that our objective is to reach every gas escape as quickly as possible and continually strive to do so. The 97% standard provides recognition that it is not always possible to do due to everyday events that may disrupt best intentions (such as traffic jams, breakdowns, appliance issues, other spurious jobs, etc).
- 3.55. As it stands the current measure appears to be working well and we do not see a compelling reason to suggest that either increasing the level or reducing the time interval that it is measured over, would have a material benefit for safety that would justify a licence-modification.
- 3.56. We would support the public reporting of monthly figures each year in the RRP as a reputational incentive to keep standards high through-out the year and similarly we would support reporting back to Ofgem should a given month fall below the 97% standard. However, increasing the 97% or increasingly the granularity by moving the LO from annual to monthly would not be proportionate, as it would significantly increase the risk that networks face of potential licence-breaches despite recording extremely high annual response-levels, particularly given climate change uncertainties.
- 3.57. When considering whether to change the licence obligations, it is important to note;
- **A large proportion of gas emergency calls are spurious.** Figure GDA3 shows a 3 year combined (Scotland and Southern Networks) average of the proportion of emergency calls according to the intervention that was required after the engineer reached site.
  - This shows the emergency call outs categorised between those where there is an emergency response and repair required (such as Upstream and Carbon Monoxide) and those call outs where there is an emergency response required from SGN but is the responsibility of others to intervene

and repair. These are exacerbated in colder months when those that are responsible to intervene (gas safe engineers and suppliers) are also experiencing high volumes of calls and spurious jobs will be directed to the GDN's.

- We are responsible for 43 – 52% of the interventions across the year, and not responsible for 39 – 45% of the interventions associated with emergency call-outs across the year. Of these 3-7% were false reads where no gas was found on site which we would deem as spurious. Of the interventions where we were not responsible for the repair a high proportion were spurious (i.e., boiler failures and frozen condensate pipes), these jobs have an impact on the ability of our emergency response teams to attend the actual emergencies that we are responsible for particularly within the colder weather.

**Figure GDA3: Breakdown of Emergency Responses (3 yr. average)<sup>15</sup>**



- **The proportion of spurious jobs increases during particularly cold snaps.** In our experience customer call centres do not provide the level of support to cover these cold periods or may not provide out of hours support. This drives customer toward the gas emergency line to try and resolve an issue irrespective of whether there is a gas emergency or not.
- **Smaller networks are more exposed to peakier demand profiles.** With smaller networks there is less opportunity to “statistically” recover within one month from a couple of days with a less than

<sup>15</sup> SGN Operational data

97% response rate, as there are lower workloads, and consequently – and fortunately – less emergency call-outs, to make up the statistical shortfall.

- **Networks with increased sparsity and more challenging terrains may find it more difficult to reach either higher targets of monthly / quarterly targets.** This is because of the distance that needs to be travelled to attend gas escapes and the greater resilience that you would require at the local level to deliver to a higher standard on a more granular lever. As a result, any change to the emergency response standards is likely to put further pressure on those areas that are already sparser, disproportionately punishing them to ‘statistically’ recover from a few challenging call-outs.
- **Achieving the 97% standard continually becomes more stretching as the volume of Publicly Reported Escapes (PREs) falls and the volume of allowable losses is reduced proportionally.** With fewer PREs, each job that is not reached in standard has a statistically more significant impact on the overall performance, making it harder to meet this standard of service (SOS). As Winter 2022/23 peak workload volumes demonstrated, the deviation between average and peak levels has increased. While, as Ofgem are aware, SGN has focused on recruiting additional staff to ensure we are fully prepared for winter periods, this inevitably increases the challenge of resourcing at appropriate levels to guarantee statistically high performance with short windows.

3.58. As above the 97% standard provides recognition that it is not always possible to attend all call-outs within the time-limit due to everyday events that may disrupt best intentions. Factors that may determine the ability to attend within the relevant target of 1 or 2 hours include:

- Peak daily workloads significantly higher than seasonal averages;
- PREs received in remote locations;
- Multiple reports in concentrated area and/or timeframe; and
- Travel disruption.

3.59. Whilst it is often the case that performance is generally higher in seasons with lower average workload, it should be noted that resource levels are already increased in the busier winter months. A change to the licence obligation to introduce a more frequent, in year reporting, would risk introducing significant additional costs and resourcing pressures to ensure compliance over condensed timeframes. SGN is fully committed to upholding the 97% standard and has resourced specifically with this standard in mind. However, SGN does not consider it is necessary or proportionate to change the licence requirement to a monthly obligation - noting that this could result in licence-breaches (with the risks that follows) by companies despite maintaining a very high level of overall performance and as a result of factors that are outside its control, particularly in the busiest winter months.

3.60. SGN would welcome the opportunity to discuss a streamlined reporting format for the emergency response time on a monthly or quarterly basis to improve transparency whilst retaining the licence obligation on an annual measurement against performance.

3.61. We would also request that more focus is placed by Ofgem on the high proportion of spurious jobs that the GDN's are currently dealing with, particularly in the colder months.

## RIIO-GD2 outputs and uncertainty mechanisms proposed for removal

### GDQ23. What are your views on our proposal to remove the Tier 1 iron stubs re-opener in RIIO-GD3 and our approach for the costs to be included in the baseline allowances?

- 3.62. **We agree with Ofgem's proposal to remove the Tier 1 iron stubs re-opener in RIIO-3. However, we are concerned that the cost base is not sufficiently robust for benchmarking purposes and propose that a review of the unit cost data quality should establish whether a technical assessment is preferable.**
- 3.63. The approach to managing Tier 1 stubs was highly uncertain heading into RIIO-2 and network proposals were in their infancy. The re-opener approach, in combination with 2 years' worth of upfront allowances, was a good example of how the uncertainty mechanisms can be used to protect customers and the network in terms of safety and reliability.
- 3.64. Whilst we do not believe there is a need for a separate uncertainty mechanism in RIIO-3 for Tier 1 stubs, we think it is important to assess the volume and quality of data for cost assessment purposes as we progress into RIIO-3. This would need to consider the number of stubs each network has (greater proportion in networks with higher levels of Tier 2 and 3), differences in records (some networks have better records than others due to historical differing local practices) and the fact that, per meter, stubs attract a substantial premium to decommission or remediate to make safe.
- 3.65. On this basis, we are concerned that the quality of the data may undermine a benchmarking approach and as such it may be preferable to undertake a separate technical assessment and on this basis that there may be merit in an approach using a PCD. This would and similar reporting structure used within RIIO-2, where networks are funded per the intervention.

### GDQ24. What are your views on our proposal to remove the Capital projects PCD in RIIO-GD3?

- 3.66. **We disagree with the proposal to remove the Capital projects PCD in RIIO-3. It is our view that the Capital Projects PCD provides transparency for customers that major projects that are funded are delivered in a timely manner. We expect to continue these types of projects in RIIO-3.**
- 3.67. This specific PCD will cease to be valid once RIIO-2 is complete. However, the PCD covers larger scale projects identified that were atypical in nature. In RIIO-3 we expect there to be similar projects and atypical work.
- 3.68. It would appear that with an established threshold, delimiting PCD from NARM, that networks can identify projects of this nature. There is a possibility of joining this with the Unit cost of risk (UCR) mechanism within the NARM output measurement structure, where projects that have particularly high or low UCR could be brought out into the Capital Projects PCD. We believe that this would provide the right level of transparency and flexibility for customers and network companies.



## GDQ25. What are your views on our proposal to remove the Gas holder demolitions PCD in RIIO-GD3?

- 3.69. **We agree in principle with Ofgem’s proposals to remove the Gas holder demolitions PCD within RIIO-3 as we are not forecasting this type of workload to be completed within the price control period. However, it should be noted that SGN still operate two gas holders in our SIUs and these need to be considered separately when they require demolition.**
- 3.70. We do not believe that there will be additional funding required within RIIO-3 for gasholder demolition. However, it is worth noting that SGN still operates two Gas holders in the Scottish independent undertakings (SIU) at both Campbelltown and Stornoway. When these two assets are no longer required, funding will be needed to demolish the gas holders in a safe and controlled manner and to ensure that risk associated with managing the land is mitigated and controlled.
- 3.71. We should also consider the most appropriate method to ensure allowance is in place to maintain the listed gasholder frames at Provan, Glasgow. This will require preliminary work, annual drone inspection surveys and allowance for any remedial works which are health and safety related.

## GDQ26. What are your views on our proposal to remove the Multiple Occupancy Buildings safety re-opener in RIIO-GD3?

- 3.72. **We disagree with the proposal to remove the Multi Occupancy Building safety re-opener for RIIO-3 as there is not enough evidence to understand the drivers associated with this workload.**
- 3.73. SGN’s view was that the RIIO-2 reopener for safety programmes on Multi Occupancy Buildings (MOBs) was too limited by being specific to buildings of 3-5 storeys only. The outcomes of the Hackitt inquiry, have been primarily focused on higher risk buildings and changes in Legislation and the need for building safety cases has been focused on those of a height 18m and above in England. We were therefore restricted in any opportunity to trigger this re-opener in RIIO-2 due to the definition of the re-opener.
- 3.74. Whilst we will be looking to include what we do know about in our baseline costs, however, there is still a lot of uncertainty in the area of MOBs. As the safety case requirements are still being embedded, engagement with building owners or responsible persons for the high-risk buildings is still in its very early stages, and therefore we do not yet have a good understanding of their expectations or requests upon us to support the safety of the building and any remedial actions that may be required.
- 3.75. There is also uncertainty in the area of commercial MOBs, which is currently being defined as Complex Distribution Systems (CDS). This is an asset group that all GDN’s have been working to identify in RIIO-2 and although work on these assets will form part of our baseline RIIO-3 proposals, there may still be ongoing work to identify the assets and associated interventions, therefore uncertainty will remain. In Summary, while the current RIIO-2 re-opener may not be applicable for RIIO-3, another form of re-opener for MOBs is likely to be needed.

GDQ27. What are your views on our proposal to remove NGN's bespoke job completion lead-time including re-instatement ODI-R in RIIO-GD3?

3.76. No specific views on this question

#### 4. SGN's response to questions within the SSMC Section 4. High quality of service from regulated firms

Proposed RIIO-GD3 specific outputs and uncertainty mechanisms

GDQ28. What are your views on our proposed position on the role of GDNs in relation to vulnerability, and how can they support a just transition to net zero?

- 4.1. **We agree with Ofgem's views that GDN's have an important role to play in helping consumers in vulnerable situations, to support a just transition and in particular with regard to fuel poverty and carbon monoxide (CO) risks.**
- 4.2. We agree that the GDNs have an important role to play in supporting consumers in vulnerable situations, particularly in relation to fuel poverty and carbon monoxide (CO) safety.
- 4.3. As we have set out in our annual report into the Vulnerability and Carbon Monoxide Allowance<sup>16</sup> in the first two years of RIIO-2 we have supported over 170,000 households with other 300,000 unique services. The services offered in the first two years of RIIO-2 generated an estimate social value of £14.2m. This is in addition to the 24 collaborative projects where SGN was the lead GDN in 63% of them.
- 4.4. In these projects the benefits realised have largely been delivered through our collaborative work with our project partners (such as not for profit organisations, charitable organisations, and local authorities. These metrics have increased significantly in year 3 and we continue to extend our reach out to significantly more organisations.
- 4.5. In the FSNR decision document Ofgem recognised that distribution networks have an important role in providing this protection and support. The roles set out in the FSNR decision document includes:
  - assisting those most at risk during outages
  - identifying consumers in vulnerable situations
  - taking measures to address vulnerability when responding to emergencies through customer service functions.

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<sup>16</sup> <https://www.sgn.co.uk/sites/default/files/media-entities/documents/2023-06/SGN-VCMA-Annual-Report-2023.pdf>

- providing support where they are best placed to those in fuel poverty and to those most at risk of being left behind in the transition to net zero.
- 4.6. The extension to include those most at risk of being left behind in the transition to net zero is an important step forward that we fully support, and it is important to work with our partner organisations to consider how we achieve this most effectively.
- 4.7. In determining the role of GDNs in supporting customer in vulnerable situations and those at risk of being left behind in the transition to net zero, it is important that as networks we look to compliment and support existing funding structures where available, that we recognise that others are often better placed to deliver the service, and that it is the role of government to determine substantial redistributions between energy consumer groups.
- 4.8. Over the RIIO price controls networks have demonstrated that they are well positioned to support the targeting of funding to those most in need and in the most vulnerable circumstances. The targeting of this support has continued to improve, and the challenge that are looking to address has increased significantly with the cost of living crisis and high fuel costs.
- 4.9. We see value in retaining an agile approach and continue to work with our partners as we remove the barriers most vulnerable customers face including support that might be required in a fair and affordable transition to net zero.
- 4.10. In RIIO-2 we are on track to help and support at least 500,000 customers, this has been enhanced by repurposing the FPNES funding. To date we have already supported over 326,000 households to use energy safely, efficiently, and affordably. These vulnerable households have now accessed over 500,000 unique support services which has contributed to us achieving over £28m in social value. We have worked in collaboration with the other GDNs and overall have so far delivered over 65 projects within the price control period with 109 organisations forming part of our Safe and Warm partnerships to date.
- 4.11. Stakeholders and partners have continued to express concern at the growing number of first-time fuel poor customers, lack of awareness and complexity around support schemes, and unsafe practices in the home.
- 4.12. We see our role potentially evolving to cover a whole house approach ensuring we help to alleviate fuel poverty by providing support to our customers in maintaining a safe, efficient, and warm home. The challenges of fuel poverty are significant, and it is especially important that whatever the decarbonisation pathway is, we take all of our customers with us.
- 4.13. It is important to note however that we see our role as enablers by facilitating and supporting other organisations to make these changes, rather than completing the work. We want our engineers to be able to respond to and support those in fuel crisis access the service that will support them most. It is important that the VCMA funding is maintained at current levels (including the repurposing of the FPNES) to support those organisations best placed to deliver the services in a manner appropriate for the needs of those customers that need it most.
- 4.14. We do not therefore think that any of the VCMA funding should be moved into baseline expenditure and would request that we continue with the clarity and transparency of if being allocated to third parties through the VCMA project structure and maintain benefits for both our stakeholders and Ofgem.
- 4.15. Within this structure, it is important that networks provide ongoing monitoring and support the to the projects to determine the effectiveness of the project delivery and to assess whether they have delivered

the social return on investment that was originally anticipated. On this basis networks should be able to recover the administrative costs as eligible project expenses.

### GDQ29. What are your views on our proposal for GDNs to develop individual and joint-GDN vulnerability strategies?

- 4.16. **We agree with Ofgem's proposal to develop both individual and joint-GDN vulnerability strategies, this approach would align GDN's in key areas and support sharing of best practises whilst acknowledging that there are also regional nuances and requirements that to be understood and progressed by each GDN.**
- 4.17. We are committed to the continuation of the SGN engagement and governance mechanisms including our Vulnerability Steering Group to ensure that our Vulnerability Strategy including our approach to the VCMA is current and reflects the needs of our communities based on supporting those most vulnerable customers unable to maintain a safe, efficient, and warm home. We are also committed to ongoing research that provides data and insight which enable greater targeted delivery to support those communities in greater need including understanding the impact on the beneficiaries served.
- 4.18. We support the retention of GDN Vulnerability working group to share best practices and co-design consistent core services for customers in vulnerable circumstances including the shaping and development of the multi sector Priority Services Register.
- 4.19. We agree that there is merit in the ongoing development of a joint GDN VCMA and individual GDN strategy and would welcome this be overseen by the GDN VCMA Strategic Governance group which includes representatives from strategic consumer advocacy groups including Citizens Advice/ Citizens Advice Scotland and National Energy Action / Energy Action Scotland. However, we also recognise there may be different regional needs and suggest that a principles-based approach around collaboration may allow the flexibility to help where the need is most.

### GDQ30. Do you agree with our proposal to retain the RII0-GD2 vulnerability minimum standards is sufficient to ensure customers in vulnerable situations are protected and treated fairly?

- 4.20. **We agree with Ofgem's proposals to retain the RII0-2 vulnerability minimum standards and we believe these are sufficient to ensuring customers in vulnerable situations are protected and treated fairly.**
- 4.21. We are committed to ensuring that our services are easy and accessible for all of our customers and have led the sector in providing inclusive services for customers. We commit to ensuring that we are providing customer channels that meet the evolving needs of customers and invite annual external review of our core customer services from our partner Scope and undertake the BSI Kitemark for Inclusive Service Provision (Energy).

- 4.22. We adhere to guidance provided through SSC D21 Treating Customers Fairly and SSC D13 provision of services for specific groups and have a customer promises document(charter) which is housed on our website for customers to access, which details the standards of service our customers can expect from us.

**GDQ31. What are your views on our proposal to retain the use of the VCMA UIOLI allowance, on the alternative option to incentivise vulnerability through an ODI-F, and on which activities to support vulnerability could be funded through baseline allowances?**

- 4.23. **SGN strongly supports retaining the use of the VCMA UIOLI allowance. The reason for this is that it provides greater transparency of the funding provided, the benefits realised, and it provides stability in funding that is not available under an ODI-F but highly valued by our third sector partners. The support for retaining the use of the VCMA UIOLI allowance is also shared and fully supported by our ISG, and we are also seeing this highlighted as a priority through our wider stakeholder engagement programme.**
- 4.24. Our stakeholder feedback through early engagement is to see the continuation of the VCMA in its current format and allowances should be increased beyond the revised FPNES levels added at the level set within RIIO-2. The consensus is that they want to see SGN build upon the foundations of RIIO-2 support and deliver more valuable outcomes for vulnerable customers by utilising the UIOLI VCMA allowance.
- 4.25. The UIOLI allows us to collaborate with the other GDN's and deliver effective and innovative projects for when working on national and targeted support schemes that deliver services for vulnerable customer groups including those in fuel poverty.
- 4.26. As the VCMA is a UIOLI allowance, this approach ensures that any unspent allowances are returned to consumers, thus safeguarding consumers interests. Furthermore, the predictability of the funding helps our partners plan and invest to build capacity and extend services.
- 4.27. We are concerned that replacing the VCMA funding with incentive mechanism funding would make the allocation of funding less stable and less transparent as the variable nature of the ODI-F reduces the confidence in making long term commitments. This would change the incentive from that described in para 4.24, where the purpose of the incentive is to invest beyond baseline expectations, to an incentive where the purpose of the incentive is to improve consumer outcomes being generated from the VCMA allowance. As noted however, this could be detrimental to the collaborative components of the VCMA.
- 4.28. We do think there is an opportunity to use an ODI-F to support better customer outcomes by rewarding networks that achieve the greatest benefits through improved social value and through the partnerships that they work with. However, we believe it is important that the majority of funding should be fixed and stable with the incentive on used to promote better outcomes.
- 4.29. As well as maintaining the VCMA UIOLI allowance, we would also like to increase our level of support for our customers in RIIO-3 when we are working in or around their homes and in our communities and grow delivery of our direct support services to customers as we deliver our core role (including e.g., customer on-site welfare, repair and replacement of essential gas appliances and carbon monoxide checks).

- 4.30. In para 4.27 Ofgem question whether some initiatives such as training staff in identifying vulnerabilities, service sign posting, or some safeguarding services should be included in baseline allowances. We do not agree with this. It is our view that where expenditure is outside of core services of operating a safe and resilient network and delivering services to customers in vulnerable circumstances (where a service could in principle be provided by another organisation) then we should operate under a high level of transparency and accountability.

### GDQ32. At what level should VCMA funding be set to ensure its effectiveness and sustainability, and what percentage should be ringfenced for collaborative projects?

- 4.31. **SGN's views are that VCMA funding in RIIO-3 should be maintained at RIIO-2 levels taking into account the reallocation of FPNES levels were reallocated (i.e., anticipated level of £171m). We have received support on our views of maintaining RIIO-2 levels of funding from our ISG, this will also be tested further through our stakeholder engagement programme. We support the continued ringfencing for collaborative projects at 25%.**

#### Level of funding

- 4.32. We also recognise the need for help is much greater than that for which the original RIIO-2 funding allowed. We can see the positive impact and the reach of households we have been able to support using the repurposed FPNES allowances, and we think that it is important that this elevated level of funding is maintained into RIIO-3.
- 4.33. SGNs stakeholders continue to rank delivering more outcomes for vulnerable customers in RIIO-3 as a high priority, this has continued in recent stakeholder engagement sessions, therefore we would recommend that the proposed allowances reflect this increased ambition.
- 4.34. We are conducting research to better understand the evolving needs of vulnerable customers and the intersectionality, the long-term impact of both Covid 19 and the cost-of-living crisis as well as the recent impact of policy changes to forecast the needs of our communities over the next 2-10 years. We are also working with partners to better understand the impact the VCMA funding has had in the advice sectors. We are keen to see this insight shape the funding available.
- 4.35. Given the scale of the challenge, the extent to which this has increased due to the cost of living crisis, elevated fuel prices and that the social value that is generated from each pound of investment is typically more than a multiple of 10x the original investment amount, we disagree with the proposal to return VCMA funding to the levels set out at the start of RIIO-2 (adjusted for inflation) set out in Para 4.33 of the SSMC GD annex.
- 4.36. The engagement held with our customers and stakeholders identified specific challenges that was to be addressed by both FPNES and the VCMA in RIIO-2. The stakeholder to date is that the need is greater now than at the start of the RIIO-2, and therefore it is appropriate to maintain the level of funding the combined VCMA and FPNES funds.

### Collaboration across networks

- 4.37. As we have set out in our annual report into the Vulnerability and Carbon Monoxide Allowance<sup>17</sup> in the first two years of RIIO-2 there were 24 collaborative projects where SGN was the lead GDN in 63% of them.
- 4.38. We are committed to collaboration under the VCMA and it's clear that the GDNs are able to deliver consistent services to shared communities identified as best supported by national partnerships. This approach has provided effective national partnerships with organisations who serve England, Scotland and Wales for example, Marie Curie and MyBnk. Where the GDNs have a shared ambition to support a vulnerable customer group and a national partner has not been identified, we have worked hard to bring together partners to work together collaboratively to provide consistent support, for example Age Scotland, Age UK, and Age Cymru and National Energy Action and The Wise Group. Our stakeholders agree this approach is best for customers and charity partners as it drives consistent support services and minimising the impact on charities.
- 4.39. SGN recommend retaining the minimum 25% of the VCMA funds aligned to the GDNs shared collaborative strategy, enabling flexibility for the networks especially for our Scotland network where there is a greater need for support and there have been greater challenges in spending the collaborative allowance.

### GDQ33. How should VCMA funding be allocated to ensure maximum impact for consumers in vulnerable situations?

- 4.40. **We support the allocation of funding according to need and are currently engaged in research about how this may be delivered most effectively.**
- 4.41. Our stakeholders have also informed us that they are keen to see funding being distributed more appropriately according to the needs of customers in vulnerable situations, reflecting their specific needs, the climate and housing stock that impact those needs. Specifically, we see greater need for services in Scotland, where one in three customers are in fuel poverty and one in four are in extreme fuel poverty, receive help in times of crisis that would otherwise never have been there. This need is greater than many other parts of the UK.
- 4.42. We understand the need to apply a reasonable approach to the allocation of VCMA funding, there are many factors that define 'vulnerability', with fuel poverty being one of many ways to identify those most likely to be unable to maintain a safe and warm home.
- 4.43. We are working with stakeholders and commissioning research (Sustainability First and Evaluate Support Scotland) to help us better understand the evolving nature of vulnerability in our network areas to inform our delivery and potential scope for 2026 onwards.
- 4.44. We have seen evidence that the funding could be utilised more effectively, this has also been backed up by our stakeholders who have asked whether there's flexibility that can be applied in GDN groups,

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<sup>17</sup> [SGN VCMA Annual Report 2023](#)



whereby the funding for one licence area (e.g., Southern England) could be used in projects for customers in other licence area (e.g., Scotland).

- 4.45. Our intentions would be to continue to help our customers where the need is greatest, using data and partner insights to be agile, introduce flexibility and in line with real-time societal challenges.

#### GDQ34. How can learnings from VCMA projects better inform the GDNs' organisational approaches to consumer vulnerability?

- 4.46. **We continue to work closely with our Vulnerability Steering Group and our Safe and Warm partnership network to better inform our approach to addressing consumer vulnerability. It is our view that these initiatives support a better approach to addressing consumer vulnerability.**
- 4.47. We are committed to working closely with our Vulnerability Steering Group and our Safe and Warm partnership network with the ambition of greater collaboration and shared learning to inform and deliver better outcomes for customers. We host two annual workshops per year to share learnings between organisations, run training sessions and offer up opportunities for greater collaboration and knowledge sharing.
- 4.48. This collaborative approach has been valued by our partners as it is fostered shared training programmes and the co-design of partnerships that build upon the learnings of pilot initiatives.
- 4.49. All of our Safe and Warm partners provide insight around the challenges vulnerable consumers face around energy safeguarding and usage. Many commission surveys and polls to gain insight to improve their own services, provide information for govt to update, influence policy changes and help GDN's understand the impact of the support for the communities, consumers they serve, thus helping us shape our RIIO-3 vulnerability strategy.

#### GDQ35. What are your views on the options we've set out to incentivise customer satisfaction during RIIO-GD2?

- 4.50. **We agree with Ofgem's proposals to maintain the RIIO-2 incentive for customer satisfaction into RIIO-3 as it works well and drives stronger performance across all networks, however, would caution against significant changes in the risk profile or incentive strength.**
- 4.51. We are committed to providing an excellent service experience for all our customers, whilst always achieving scores above 9 out of 10 across both our networks.
- 4.52. Throughout RIIO-1 and RIIO-2 we have been able to elevate our service by further investing in our service, making us easier to deal with, utilising technology, leveraging innovative ways of working and reducing effort for our customers.

- 4.53. We agree with the view to maintain the RIIO-2 incentive design into RIIO-3 (para 4.49). We also agree, the introduction of the incentive scheme has significantly improved the performance of all the GDNs (para 4.48), therefore demonstrating it continues to achieve the original desired effect by encourage exceptional performance.
- 4.54. However, we do not agree that the objective should only be to reward exceptional performance (para 4.48) or relative incentive structures (para 4.52) as there is not a consistency in what defines exceptional performance. There is a clear regional differentiation on the assessment of the quality of standards of service, with those in the South East of the UK typically being harder to please than customers elsewhere in the country. For example, the Institute of Customer Experience reported regional differences in customer satisfaction rates:
- “The UKCSI shows that a diverse regional picture of UK satisfaction has emerged... People in the South East (75.2) are, on average, the hardest to please.”<sup>18</sup>*
- 4.55. Academic research has examined whether differential satisfaction rates are significant. For example, Brint, A.T & Fry J (2019)<sup>19</sup> indicates there does appear to be regional differences in responses to customer satisfaction surveys. They highlight personality traits may have an influence on satisfaction, as examined in Rentfrow et al. (2015)<sup>20</sup>. Brint & Fry states of Renfrow et al:
- “It was found that there were distinct geographical patterns in the personality traits. Out of the Big Five Personality traits, agreeableness would seem to be the one most likely to have an impact on customer satisfaction ratings. Rentfrow et al. (2015) found that London was the region with the lowest level of agreeableness. This may have important regulatory implications for regional monopolies if low levels of agreeableness correlate with a tendency to give lower ratings”<sup>21</sup>.*
- 4.56. Indeed, Brint and Fry construct statistical models that suggest a statistical relationship does exist with respect to London (which SGN’s Southern network serves in-part).
- 4.57. Not adjusting for this regional variation may unintentionally change the balance of incentive properties to either penalise those areas it is more challenging to achieve or over-rewarding those areas where it is easier to achieve. Applying non-regionally adjusted performance mechanisms would not be appropriate and may indirectly have adverse effects on customers should there be regional differences making the targets unachievable.
- 4.58. We would highlight, although the average score of all GDNs is in reward, the performance is still significantly falling short of max reward. Therefore, the scheme is continuing to encourage the GDNs to raise the bar further and continually improve performance to the benefit of customers. We are seeing

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<sup>18</sup> Source: <https://contact-centres.com/uk-customer-satisfaction-index-from-institute-of-customer-service/>

<sup>19</sup> Brint, A.T & Fry J *Regional bias when benchmarking services using customer satisfaction scores*, University of Sheffield / Total Quality Management and Business Excellence, 32 (3-4) pp. 344-358  
([https://eprints.whiterose.ac.uk/140858/3/AuthorVersion\\_08January2019.pdf](https://eprints.whiterose.ac.uk/140858/3/AuthorVersion_08January2019.pdf))

<sup>20</sup> Rentfrow, P.J., M. Jokela, M.E. Lamb. 2015. Regional personality differences in Great Britain. PLOS ONE 10(3) 1-20.

<sup>21</sup> Page 6 & 7 Brint, A.T & Fry J (2019)

GDN Csat scores outperforming other sectors of the economy ensuing our customers continue to realise the benefits.

- 4.59. Maintaining performance scores at this level is continual work and not without cost, therefore removal of the incentive could see a gradual deterioration on service levels relative to other sectors as there will be less focus on improvement and maintaining economy leading customer services.
- 4.60. The collaboration working groups are valued and have been critical over the years ensuring we are providing consistent service levels to all GDN customers and open to sharing best practice to further exceed customer expectations. Relative rewards & penalties would discourage this interaction and remove convergence across the GDNs.
- 4.61. We would recommend maintaining the incentive as it stands with potential movement on the weighting aligned to where the impact is most, and the most customers served.

### GDQ36. What are your views on how the complaints metric can ensure customers' complaints are resolved quickly and effectively?

- 4.62. **SGN's supports the continuation of a metric scoring system, it incentivises performance improvement and encourages the right behaviours with a real emphasis on day one resolution, we would however recommend a review of the current design of the metric to allow for a fairer measurement across all GDNs.**
- 4.63. In line with RIIO-1 and RIIO-2, we see the value of the metric scoring system, with existing indicators and penalty threshold encouraging the timely resolution of customer complaints.
- 4.64. We strongly support Ofgem's proposed option to report on the total volume of complaints received as a percentage of customers served (or customer base). SGN's preference would be to factor this into the complaint's metric score, however, we would also be supportive of the suggested alternative to report this in RRP.
- 4.65. There is however a recommendation to be considered for a review of the way the metric is designed to measure data, this is an area we have previously highlighted to Ofgem. The current design of the complaints metric may not allow for a fair scoring across the GDNs as in RIIO-2 the metric is designed so that a network with an extremely high level of complaints could still rank highly by having a large proportion of complaints that are easily resolved, in contrast to a network that focuses on getting it right first time, and therefore having a low level of complaints per customer, but any complaints that are remaining would typically be more challenging and take longer to resolve.
- 4.66. In October 2022 SGN suggested that an interim measure be introduced to include a volume of complaints per 10,000 customers, this was to ensure the metric would continue to incentivise the right behaviours within networks to prevent complaints in the first instance rather than maintain a stock of easily resolved complaints for the sake of a higher ranking.

- 4.67. For RII0-3 we would encourage that the current metric be adapted to measure performance in the same manner as suppliers<sup>22</sup> which includes volumes of complaints in relation to your customer accounts/base. This additional measure would improve the representation of customer service and mitigate distortion of rankings.
- 4.68. In terms of the relationship between customer satisfaction and complaint volumes, and understanding the relationship better, we would propose an additional incentive where a GDN achieves both high customer satisfaction and low complaints and handles them effectively. This would encourage GDNs to consider the relationship and full journeys better, providing more insights and a better understanding of how we can further improve service to our customers.
- 4.69. We would also propose that timescales within the day one measure are reviewed. Currently, any complaint that is received regardless of the time of day (i.e., 9pm) is rolled straight into day one on the following working day, however, considering first sight of these complaints would generally be the following working day, we would propose a set cut-off point if received outside of working hours be allocated so that complaints would remain at day zero the following day with timescales commencing then.

#### Complaints Metric Target

- 4.70. Regarding the complaint metric target of five, we would support maintaining this with the same target. It is already stretching and at present allows GDNs to continue their existing ambitions to improve results whilst simultaneously allowing them to embed service improvements. Maintaining a static target of five would allow GDNs to further embed improvements and avoid a more complex calculation.
- 4.71. In terms of unresolved complaint time indicators being reviewed, our view is that current indicators e.g., Adding a further time indicator weighting, would add further complexity particularly when considering introducing PSR and complaint volume percentage reporting as well. It would also mean the existing target of five is more challenging due to additional opportunities to fail dates.
- 4.72. Should an additional time indicator be introduced, we suggest thought is given to redistributing the existing penalty percentages as opposed to adding in more. For example, split the 30% day thirty-one penalty to 20% and apportion the remaining opportunity for 10% to the new time indicator (for example day 14). This means the overall score would still have the chance to remain under five.

#### PSR Complaints

- 4.73. SGN are in favour of the proposal to separately report PSR complaints via RRP, however, we ask that the measure be considered. Similarly, to our point above regarding a fair measurement that does not distort the view of performance, if we are to report on the volume or percentage of customer complaints that are PSR registered we need to consider proportions. For example, one network may have a far higher PSR registered volume of customers which could make the complaint volume percentage seem higher against the customer base. Here instead, we propose that the measure would be the percentage of total PSR customers who complained.

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<sup>22</sup> <https://www.ofgem.gov.uk/energy-data-and-research/data-portal/customer-service-data>

## GDQ37. What changes, if any, are required to the GSOPs?

- 4.74. **Following a full review for RIIO-2, we are broadly comfortable with the overall set-up for GSOPs. We would, however, strongly recommend that the payment cap which was in place for RIIO-1 for GSOP 1 (failure to supply gas) should be reinstated for RIIO-3, or clearer guidance is provided regrading reasonable timeline to stop payments.**
- 4.75. Further clarity is required around exclusions for GS1, whereby all reasonable steps have been made to restore supply, and GS2, where no proactive attempt has been made to report request reinstatement. We suggest that both of these statements need to be amended to include a stipulation that protects GDN's from customers taking such statements and using them for their financial gain.
- 4.76. In addition, we strongly recommend that a cap be reinstated in RIIO-3 to further ensure that GDNs are not unfairly penalised, particularly in relation to GS1, with unlimited payments to customers where a resolution cannot be reached outside of the control of GDNs. This is typically the case where there are multi-occupancy buildings and determining a solution to reinstate gas supplies are either due to the council and securing planning or adhering to local planning requirements (such as only allowing risers at the back of buildings), or residents (who may refuse access to their flat).
- 4.77. Our experience in RIIO-2, provides evidence that the uncapped approach to GSOP Payments left us vulnerable to extensive pay-outs to customers who were unwilling to cooperate, or where resolution could not be reached within a reasonable timeframe. In some instances, payments have run into several thousand pounds (between £5-£10k). When payment is dependent on seeking a customer's approval, it is easy to imagine that periods of low gas usage or access electrical alternatives may encourage some customers not to reach approval given the daily payment rates.
- 4.78. If a fixed cap is not implemented, it is very important that there is greater clarity on the points at which reasonable measures have been undertaken by networks and when it is reasonable to stop payments.

## GDQ38. What are your views on our proposed options for the unplanned interruption ODI-F?

- 4.79. **The structure of the ODI-F has not worked as intended in RIIO-2. As a minimum it is important to separate MOBs and non-MOBs measures of unplanned interruptions. It is our view that this penalty incentive is no longer required as the high GSOP payments for failure to supply gas already provides a strong penalty and incentive to reconnect unplanned interruptions as quickly as possible.**
- 4.80. **If the decision is to retain the penalty, then we broadly agree with Option 3 (separate performance measures) with an additional waiver in place when networks have used all available means to reduce the unplanned interruptions but are prevented from doing so due to uncontrollable, external factors such as planning and other constraints.**

- 4.81. We have taken every opportunity during RIIO-2 to raise our concerns around the current structure of the ODI-F, while also evidencing where the current arrangements have proven to be defective for SGN. Our concerns are driven by the continual risk we face of exceeding the penalty threshold for reasons outside of our control, whilst maintain the safety of our customers.
- 4.82. Both our Scotland and Southern Networks have a large number of multioccupancy buildings (MOBs) on their networks. Our management procedures discourage the disconnection of MOBS and the creation of an unplanned interruption under exceptional circumstances where there is an immediate safety risk which cannot be bypassed or repaired. Through RIIO-1 we developed a number of innovations that enable alternative temporary repairs to be implemented which enables us to keep customers on supply whilst we can implement a planned repair. On occasions the nature of the emergency means that a temporary repair cannot be implemented safely, and we have to disconnect customers in an unplanned way. On the occasions this happens we often have to engage in a protracted process with the local planning authorities, the residents, and the contractors to re-establish gas supply by replacing the risers that transport gas to the residents.
- 4.83. At the start of 22/23 we experienced a significant long duration of unplanned interruption in our Scotland network which, despite an appeal to waiver, resulted in SGN facing a penalty. We submitted an extensive explanation as to how we had done everything within our control to accelerate the process as rapidly as possible. This one event meant that SGN Scotland exceeded the excessive deterioration level at the start of the year and statistically it was impossible for us to recover, as we simply did not have enough unplanned interruptions to bring the average down. If we had the same ODI structure as Cadent we would not have been penalised.

#### **Performance targets**

- 4.84. Given the undue risk of a single event in a MOB distorting the figures, we think it is important to separate the performance measure for MOBs and for non-MOBs buildings (either option 2 or option 3) and would disagree with option 1 being insufficiently targeted and as placing undue and discriminatory risk on networks that do not have separation of MOBs.

#### **Performance levels**

- 4.85. When considering targets, it is also important to recognise that there is a strong incentive to rectify an unplanned interruption through failure to supply gas standards of performance which currently are around £70/day per customer this can result in networks having to pay several hundreds of pounds compensation payments and in some instance several thousands of pounds.
- 4.86. Because of the high rate of GSOP payments we would question whether there is a need for this penalty incentive to remain in place for RIIO-2. It is our view that the introduction of a penalty is a duplication with the costs already incurred through high GSOP payments and would be disproportionate.
- 4.87. If the decision is taken to maintain the penalty only incentive, then the level of performance should be based on network specific data and take into consideration the risk that just a single event can distort an annual figure. For these reasons and given the specific network characteristics of each it is our view that the target levels should be subject to a detailed discussion with the independent stakeholder group and justified through to Ofgem.

- 4.88. Given the challenge in setting an appropriate level of mean unplanned interruptions by high impact events such as MOBs in situations where they happen infrequently, we disagree that it is appropriate to set an average target. A single event may only happen once every 5-10 years. As a result, a network could expect to receive maximum penalty once every 5-10 years for reasons beyond its control. This does not set an appropriate basis for an incentive.
- 4.89. Rather where significant MOB outage events can be demonstrated as happening with a low frequency, such as was the case for SGN Scotland despite having a large number of MOBs, we believe that networks should be expected to report to both their ISG and Ofgem as to the steps they took to resolve the situation as rapidly as possible and the steps they took to protect that customer and their most vulnerable customers during that outage. Formalising these reporting requirements would ensure that networks that already have a highly successful management programme in place are not unduly penalised.
- 4.90. For unplanned outages in non-MOBs, similar safety nets are required for extreme outage events beyond the control of the network (that may be due to water ingress, or flooding) again to avoid distorting the figures. However, the volume and frequency of events must be considered when setting the target as this will be more plausible and reasonable in the circumstances explained than that of the one-off events of MOBs.

### GDQ39. What are your views on the options we have set out for the Collaborative Streetworks ODI-F?

- 4.91. **SGN's perspective is that the collaborative streetworks incentive has been a successful incentive that has been deployed in RIIO-3 to the benefit of consumers in the London Area. It is our view that there is an opportunity to re-calibrate the incentive and look for opportunities to extend it in RIIO-3.**
- 4.92. SGN introduced the streetworks incentive as bespoke incentive as a part of the RIIO-2 business plan submission and following consultation with the GLA. We were pleased that this was accepted by Ofgem and extended across the Cadent and subsequently across to UKPN.

#### Calibration of incentive

- 4.93. At the time the incentive was proposed the approach was at the forefront of social value modelling and built on some previous work undertaken by Anglian Water for PR19. The assessment only took into consideration the direct loss of amenity as reported by quality life metrics for people living in close proximity to road works. As such it was a limited assessment of the total social value benefit of collaborative streetworks, we anticipate that the full value is significantly greater when the impacts of traffic congestion and air pollution are considered. As such we do not think that the issue of consumer's paying twice (para 4.98) for the same benefit are likely currently, however this should be checked and confirmed.
- 4.94. It is our view that there is a benefit associated with re-calibrating the incentive value and that this should consider the work that has been carried out by the GLA since the original assessment was undertaken in 2019.



### Coverage of incentive

- 4.95. During RIIO-2 the incentive was limited to the GLA area (to projects within the M25) and limited to the equivalent of 10 projects. Streetworks is consistently one of the areas that we have a high level of feedback on from customers across our network.
- 4.96. It is our view that the framework and the concept is robust and could be applied out to a further regions, we think given feedback from customers we think it is important that we are provided with an opportunity to deploy a similar structure to other regions, however, in doing this we need to ensure that there is a consistent standard across regions that the methodology is applied to.

### Options under consideration

- 4.97. Ofgem set out 2 options, a flat incentive rate or a dynamic incentive rate based on the social incentives of each project. We think that a dynamic rate where collaborative projects with greater benefits attracting a higher rate of incentive could in principle be a positive develop if the additional administrative cost can be overcome.
- 4.98. We recognised, however, that there may be local authorities that may not have the relevant information or the confidence to engage in such a dynamic option. As a result, we think that it is important to enable both a fixed and a dynamic incentive rate according to the local authority and their level of engagement.

## GDQ40. What are your views on whether the new, large load connections re-opener is still needed in RIIO-GD3?

- 4.99. **It is SGN's view that the large load connections re-opener should be retained for RIIO-3 as there is still uncertainty around both the costs and the volume of network reinforcements required by law due to large industrial loads.**
- 4.100. Due to the legislation change in Scotland in particular, there is a much greater likelihood that the network will see many more Peaking Plants connecting over the RIIO-3 period, when compared to RIIO-2. Demand for domestic electricity is expected to rise significantly in the coming years and it is inevitable that the current electricity grid will struggle to meet demand, facilitating the need for localised gas powered electricity generation, particularly at peak demand times. Due to the current transitional regulatory environment that the networks are in, identifying where, when, and how many of these Peaking Plants are likely to connect remains difficult to ascertain, so a reopener in this area would be essential.
- 4.101. Two further points of note on potential changes to the current New Large Load Re-opener (NLLR):
- >1500 Standard cubic meters per hour (scmh) demand**
- 4.102. We are witnessing the peaking plants being >1500scmh load, which currently qualifies for the NLLR. However, if the above legislation were to change there could potentially be more small-scale peaking plants to support electricity generation located locally at housing developments. This would suggest that there would be merit in lowering the demand threshold. If a number of these went live on the same

network, the cumulative impact could create capacity constraints (for instance) on the LTS upstream. Increasing capacity could therefore be extremely expensive. A lower demand threshold could offer us a way of protecting the network against this uncertainty.

#### **Materiality Threshold**

- 4.103. In RIIO-2, a number of projects met the 1500scmh, however it appears likely that these projects will not be funded through the NLLR beyond RIIO-2, due to Scotland and Southern not meeting the financial Materiality Threshold (see below). Lowering the NLLR financial materiality threshold could also offer companies a way of protecting the network against uncertainty. Whilst our expectation is that there will be more peaking plants in RIIO-3, it is proving extremely difficult to predict hence the reason for supporting the continuation of the NLLR.

### **GDQ41. What are your views on whether the specified streetworks costs re-opener is still needed in RIIO-GD3?**

- 4.104. **SGNs view is that the streetworks costs re-opener is still required in RIIO-3. The current structure in RIIO-2 allows for costs that are out of our control, including, but not limited to, lane rental schemes, new permit schemes, changes to legislation, and any other requirements from public bodies or authorities that cannot be easily forecast from the start of the price control period.**
- 4.105. For RIIO-3 we anticipate that all of these uncertainties will continue across all network areas with continual increase in costs for restrictions specific to regional areas, therefore the re-opener in its current form would remain suitable.
- 4.106. In January 2024 Government announced a 'crackdown on disruptive roadworks'<sup>23</sup> in order to reduce congestion for road users, this includes increased fines for overrun works, which could be out of the control of the network.
- 4.107. Some further anticipated uncertainties would be adequately covered by this re-opener, including the extension of Ultra Low emission zones (ULEZ), Low Emission Zones (LEZ), and low traffic networks, and the environmental issues regarding the disposal of waste (Excavated spoil).
- 4.108. The legislative outlook is always changing, especially with environmental/sustainability requirements. Currently, the way excavated utility waste is managed (the removal of regulatory position statement, RPS, 211 by the Environment Agency – which we argued for having, and ultimately got, included in the streetworks re-opener for RIIO-2), is a prime example of changes in this space which is unforeseen and therefore would be well supported by a re-opener. The removal of RPS211 could incur future unknown costs and given the current delays in negotiations between the EA and SWUK, the implementation period could overlap with RIIO-3.

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<sup>23</sup> [https://www.gov.uk/government/news/government-to-crack-down-on-disruptive-street-works-to-cut-congestion-and-improve-roads?utm\\_medium=email&utm\\_campaign=govuk-notifications-topic&utm\\_source=775ba894-376e-4501-8061-bddc43df2300&utm\\_content=immediately](https://www.gov.uk/government/news/government-to-crack-down-on-disruptive-street-works-to-cut-congestion-and-improve-roads?utm_medium=email&utm_campaign=govuk-notifications-topic&utm_source=775ba894-376e-4501-8061-bddc43df2300&utm_content=immediately)

## RIIO-GD2 outputs and uncertainty mechanisms proposed for removal

### GDQ42. What are your views on our proposal to remove the Fuel Poor Network Extension Scheme in RIIO-GD3?

- 4.109. **We agree in principle with Ofgem's proposals to remove the Fuel Poor Network Extension Scheme (FPNES) in RIIO-3, however our view is that this should continue to be re-purposed and included within the VCMA thus allowing Networks the opportunity to do more for Fuel Poor customers.**
- 4.110. The FPNES has been significantly impacted by the recent legislative and policy changes as well as the removal of funding for First Time Central Heating (FTCH) systems, which is needed to enable FPNES connections, has reduced due to increased focus on decarbonisation.
- 4.111. The challenges with the FPNES seen in RIIO-2 meant that Ofgem re-purposed the FPNES unspent funds into the VCMA, thus enabling more to be done to support those customers that were in a Fuel Poor situation, we have utilised this re-purposing to good effect and contributing to the societal benefits demonstrated under our VCMA.
- 4.112. We still recognise that there could also be situations whereby natural gas is the appropriate and most efficient energy solution for Fuel poor customers, and where required Networks should be able to continue connecting fuel poor households to the network until such time that a policy decision stops us from doing so.
- 4.113. We are committed to supporting households in energy crisis and fuel poverty and our ambition is to work collaboratively to support those most vulnerable to access support schemes through other funded mechanisms that addressed the underlying causes of fuel poverty, which is currently delivered under VCMA.

### GDQ43. What are your views on our proposal to remove the consumer vulnerability ODI-R in RIIO-GD3?

- 4.114. **We agree with Ofgem's proposal to remove the consumer vulnerability ODI-R in RIIO-3 and report annually within the VCMA annual report.**
- 4.115. The six metrics of the ODI-R could be reported annually in the RRP table and the VCMA annual report and that this streamlines the reporting of all VCMA activities and brings consistency across networks.

## GDQ44. How can the annual VCMA event be improved?

- 4.116. **SGN agrees that the VCMA Annual Showcase should remain a requirement of the VCMA and should continue in RIIO-3.**
- 4.117. The VCMA Annual Showcase is an effective way to facilitate collaboration and the sharing of best practice for national / collaborative initiatives. In addition, we will continue to invite a broad range of local and national stakeholders in addition to our Vulnerability Steering Group and experts in vulnerability (NEA, Citizens Advice, Sustainability First) to review our VCMA Annual Report(s) and our delivery approaches to ensure that we are delivering on our Business Plan commitments and our Vulnerability Strategy in an impactful way.
- 4.118. The first two VCMA Annual Showcases in RIIO-2 were both well attended by stakeholders and were heavily influenced and shaped by those stakeholder's current priorities. The feedback from the attending stakeholder sessions was incredibly positive and this approach worked. To accommodate the flexibility, reach of attendees and impact on stakeholders, the preferred delivery method has been to hold as an online event as it minimises the time required and enables accessibility to those stakeholders who would otherwise not be able to attend.
- 4.119. SGN would welcome this continued approach whilst placing more emphasis on the impact and benefits of the VCMA initiatives from the voices of the beneficiaries, both customers and partner organisations.

## GDQ45. What are your views on our proposal to remove the DLCA, and do you see any challenges that might arise if it were to be removed?

- 4.120. **SGN agrees with Ofgem's proposal to remove the DLCA from RIIO-3.**
- 4.121. As the new build homes standard has already been agreed removing gas central heating systems, this will only impact existing properties where gas may be the most suitable fuel to heat their home. Should a heat pump not be viable for the property, this could push people towards other fuels such as oil or LPG with a higher financial risk/outlay and in some instances increase fuel poverty.
- 4.122. The removal of the DLCA will introduce some risks and challenges that will need to be considered:
- Removal of the option of using standard charges to provide quotations to customers and each request will now require a bespoke estimate and costing. The overhead or cost to produce the design and quotation will increase with an expected increase to site surveys required and increase time to develop estimates / costings, plus the removal of the option to receive a standard charge cost through our existing process.
  - This will also increase actual cost to connect and may prove prohibitive for customers, particularly those that are Fuel Poor.
  - There is an added risk of the potential for an increase in unauthorised connections to the gas network with, due to customers being unable to afford the connection costs without the DLCA.

- 4.123. If the DLCA is removed, consideration should be made for a method of recovering the fixed overhead costs. Theoretically, we will be required to continue to estimate connections with no obligation on the customer to accept, but networks would still have an obligation to provide a quotation and associated costs incurred. Without this consideration for those that do accept, the combined fixed and variable overheads will be costly.

**GDQ46. What are your views on our proposal to remove the domestic connections volume driver? If you think it should be retained, what changes do you recommend for its design?**

- 4.124. **SGN agrees in principle with Ofgem's proposal to remove the domestic connections volume driver from RIIO-3. On the basis that the DLCA is removed entirely, and the full connection cost becomes directly chargeable to the customer. However, we are of the view that this may require legislative change so, until that change is enacted, a volume driver should be maintained.**
- 4.125. Should Ofgem decide to remove the DLCA then we agree with the removal of the domestic connections volume driver on the basis that all costs will be directly recoverable from the consumer. In this instance, there would be nothing to recover from the broader customer base.
- 4.126. However, we are conscious that the basis of the DLCA is in legislation and as such it can be challenging to change in a timely manner. We would, therefore, recommend that the volume driver remains in effect until such time as the legislative change takes place. Thereafter, a transition position would be required for customers with scheduled connections work to have their work completed.
- 4.127. If the DLCA was to remain in some format within RIIO-3, SGN believe the volume driver for domestic connections should continue as this would be the most suitable uncertainty mechanism due to the unpredictable workloads within RIIO-3. The current methodology would need to be reviewed and amended, including the logic behind the calculation should be clearly defined and communicated. SGN's views are to take this back to what the allowance actually is i.e., allowance for service connection and up to the first 10m in public grounds for qualifying properties.

**GDQ47. What are your views on our proposal to remove the smart metering rollout costs re-opener in RIIO-GD3?**

- 4.128. **In line with the timings for the current framework to end in Dec 2025, we agree with Ofgem's approach to remove the smart metering rollout costs re-opener.**

**GDQ48. Should personalising welfare services continue to be supported under RIIO-3 and, if so, how should it be funded?**

- 4.129. **SGN's views are that the personalising welfare services PCD introduced for Cadent in RIIO-2 should be retained in RIIO-3 and made available for other GDN's to deliver further work against for the benefit of a wider group of consumers.**
- 4.130. The additional funding made available to Cadent has made a positive impact for their customers which is also reflected in their increased satisfaction scores and an overall contribution and benefit to the service provided. The provision support such as food vouchers, electric kettles, and rechargeable showers has had a real benefit to the Cadent's customers and in particular for those that need it most.
- 4.131. It should therefore be continued within RIIO-3 and expanded out to other GDN's to deliver further work against for a wider reach of customers throughout GB.
- 4.132. The funding for this, including for other GDN's to utilise and maximise the benefits to customers, could be added to the VCMA UIOLI allowances, this would ensure efficiencies in delivery and governance and all GDN customers would benefit where the needs are required and not be regionally bias or deemed a postcode lottery for customers. Adding to the VCMA allowance would also provide consistency on how the allowances are managed, extend the benefits to the customers, promote sharing and best practice across networks, as well as provide a consistent approach to monitor and compare performance.
- 4.133. This would also allow GDNs to have convergence in service levels and offer welfare services for both planned and unplanned works, allowing us to identify any customers in vulnerable circumstances and increase our help with registration on the PSR for further ongoing support.

#### **GDQ49. What are your views on our proposal to remove Cadent's' bespoke High-rise building plans ODI-R from RIIO-GD3?**

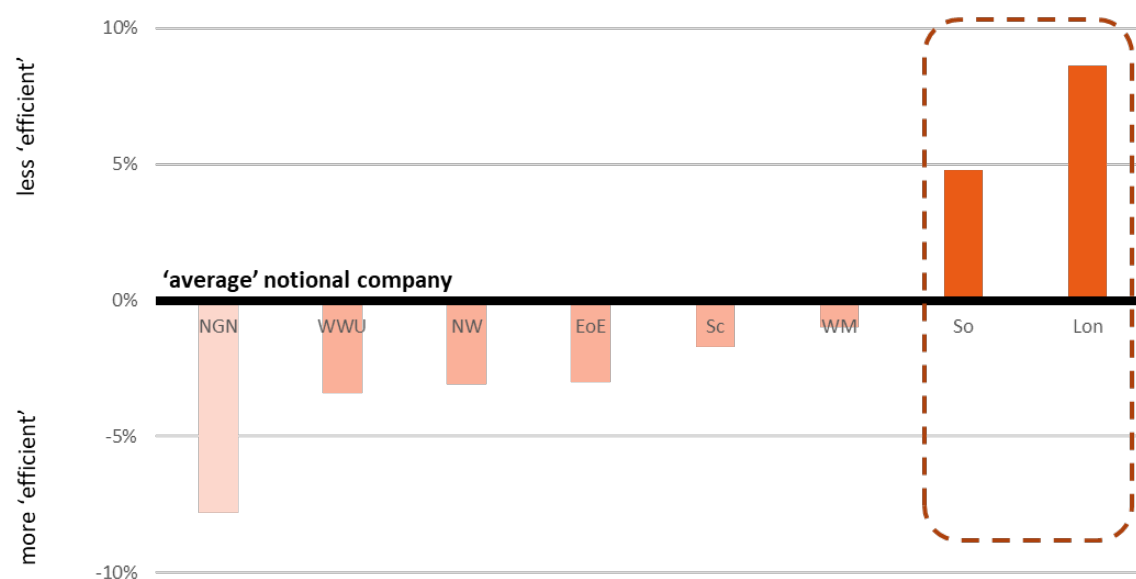
- 4.134. **We do not have a view on this specific ODI-R.**

## **5. SGN's response to questions within the SSMC Section 5. Cost of Service**

- 5.1. Given the experience of RIIO-2, we support Ofgem's approach to focus on refining and improving the RIIO-2 model to better understand the data, the drivers and building on components that are within the current cost assessment toolkit. We believe that this is more appropriate than risking misplaced effort moving to a radically different approach. We do believe the approaches used within RIIO-2 can be evolved to better reflect the cost challenges that companies have demonstrably faced during the last few years through macro-GB pressures, as well as specific industry challenges that are beginning to become more prominent.

- 5.2. Significant focus is required to improve on the quality, robustness, and transparency of the outcomes from RIIO-2. In particular with respect to the approach to regional adjustments and setting of the efficiency target. As we set out in our response to the FSNR<sup>24</sup> the accuracy with which costs and outputs are aligned will depend on the appropriateness and accuracy of the drivers that are included in the benchmarking model to determine the efficient level of costs.
- 5.3. SGN are firmly of the belief that the outputs of the totex regression model were inappropriate and that there is a clear disadvantage to network companies that are located in more urban and densely populated areas such as Cadent's London and SGN's Southern Region.

**Figure GDA4- Network efficiency scores for RIIO-2 FD (pre CMA adjustments)<sup>25</sup>**



- 5.4. The current gas distribution cost assessment approach recognises that there are local factors which should be controlled through normalisations. We agree with this normalisation approach in principle. However, SGN believe that, with particular reference to accounting for regional factors, the current normalisations do not appropriately account for the cost pressures the Southern networks face. Even though there is a regional wages normalisation and sparsity/density adjustments, the Totex model as produced at the RIIO-2 Final Determination shows a significantly higher cost for operating in London and the Southeast.
- 5.5. It is clear from the efficiency score outputs for Cadent and SGN that the network areas within the London areas are outliers to their normal company performance. This highly suggests that the normalisation process was not suitable.
- 5.6. SGN's view is that these costs are real operating costs and that this has been demonstrated by the inability of the contractor market to deliver at the rates set within the allowance for the Southern Region.

<sup>24</sup> 19.05.23 – SGN response to FSNR Consultation Ofgem Confidential.pdf, pg. 15

<sup>25</sup> Source: RIIO-GD2 FD modelling suite, Allowances\_File\_GD\_noRPEs.xlsx



Rather, the RIIO-2 cost assessment approach has incorrectly categorised unavoidable regional costs of delivery as inefficiency.

- 5.7. Ofgem justified the output of the regressions within the Final Determination by stating there was a high model fit due to a high R-squared value (a statistical measure of goodness of fit). It should be noted that the single totex regression model used within the RIIO-2 cost assessment was extremely sensitive to small movements to costs and drivers, despite a high R-squared. In general, a high R-squared alone does not imply that a model is robust – it is one of a suite of tests that Ofgem should consider, including not just the statistical properties of a model but also whether the drivers have clear engineering/economic rationale, consideration of incentive properties, data robustness, etc. Indeed, it is not surprising that Ofgem’s model tends to deliver an exceedingly high R-squared when the cost driver is materially influenced by measures of workload through the repex synthetic cost element.
- 5.8. The RIIO-2 cost modelling also included a stretching efficiency target to the 85<sup>th</sup> percentile, adding further sensitivity to the overall modelling results, since all companies’ allowances were determined by the efficiency score of companies ranked 1<sup>st</sup> and 2<sup>nd</sup> only. Ofgem’s view was that this movement to a more challenging efficiency target (relative to established regulatory practice of upper quartile) was justified because Ofgem had a greater confidence in the data submitted and the robustness of the modelling approach. However, Ofgem implemented numerous adjustments to the submitted data within the RIIO-2 cost assessment process and utilised a single totex regression model (which contrasts starkly with the approach in ED or in RIIO-GD1, where multiple models are used to ‘triangulate’ the results). We continue to believe, as set out extensively in our appeal of the RIIO-2 decision, that the move to the 85<sup>th</sup> percentile is unjustified and wrong and introduces arbitrariness and risk to the approach.
- 5.9. The decision to move to the 85<sup>th</sup> percentile within RIIO-2 showed a failure to follow the defined criteria for establishing a suitable efficiency challenge, that of ensuring model quality was of sufficient robustness and data quality was of a high enough standard to minimise potential statistical noise within the modelled cost output. We implore Ofgem follows the criteria and principles to set an appropriate efficiency challenge within the RIIO-2 period, which we believe should be no higher than the 75<sup>th</sup> percentile resulting from data quality deterioration due to widening company differences in the next price control period.
- 5.10. We will work with Ofgem to help further refine the modelling toolkit, ensuring the RIIO-3 assessment of efficient costs is robust, transparent, and appropriate.

## GDQ50. What are your views on the potential advantages of using multiple totex regression models in RIIO-GD3?

- 5.11. **SGN supports the use of multiple totex regression models in RIIO-3. This is because regression models only ever provide an approximation of modelled costs. Modelled costs from a single model can be distorted through a small sample size and other assumptions made (adjustments to data, choice of estimation technique); a single model can also create perverse incentives which distort outcomes. A multiple model approach will aid in reducing the risk of being reliant on a single approach to determine cost efficiency for networks with different regional, operational, and engineering configurations.**

- 5.12. A key area of weakness in the RIIO-2 cost assessment approach was the reliance on a single model to determine efficient costs. While Ofgem put forward a model with strong statistical foundations, the modelled costs were overly sensitive to driver changes and the operational robustness could be challenged due to an over reliance on MEAV to explain costs where other drives could be determined.
- 5.13. The risk of a single model is evidenced by the fact that the RIIO-2 efficiency assessment consistently suggested that areas around London, with the highest regional related costs ranked worst in terms of efficiency, whereas the areas with traditionally the lower regional related costs ranked best in terms of efficiency. The magnitude of difference in efficiency scores between Cadent London vs the other Cadent licensees; and SGN Southern relative to SGN Scotland, simply lacked credibility.
- 5.14. Due to this SGN supports the principle of employing multiple models (whether totex, middle up or disaggregated) as it is our view that a reliance on a single model increases the risk of inaccuracies in the results generated. The reasons why, in principle, we support the use of multiple regression models are:
- **Any econometric model is only an approximation.** Irrespective of the size of the dataset, a regression model is at best an approximation of the efficient costs required by the GDs to deliver their services. If multiple reasonable regression models produce significantly different results, as was the case with the RIIO-2 regression models, then it is difficult to have confidence that the outputs of a single model are fundamentally more reliable than those of the others. Utilising multiple regression models provides greater confidence, by enabling the averaging out of errors across different models and reducing sensitivity to differences in inputs or assumptions made.  
  
For example, issues which can significantly affect the efficiency scores and allowances include: a change in the weightings of the component part of the CSV; the assumptions around included/excluded costs; the approach to normalisations for regional wages / density; the use of forecast data underpinning cost drivers as well as many others. As such, there is no single 'best' econometric model, and all models will have some weaknesses. Ofgem should mitigate against this by weighting multiple models to prevent an over-reliance on a particular approach.
  - **A small sample size can reduce confidence in a single model.** In RIIO-3, there is access to a small cross-sectional dataset that consists of 8 licensees of which half are part of a single ownership group. This means the dataset available to Ofgem for the GD industry is small for traditional statistical approaches. This provides a limit to what Ofgem can reliably model and adds extra sensitivity to cost and drivers. The limited sample size also places an extra burden on data quality controls.
  - **A single regression model introduces risk of perverse incentives.** Relying on a single regression model can introduce a perverse incentive for networks to prepare a business plan whose costs are going to be evaluated favourably when run through the single regression model. Ofgem should mitigate this perverse incentive by introducing multiple models and applying weighting to different models based upon the strength of model output and quality of data that the models use.
  - **The complexity and lack of transparency with a single CSV.** Ofgem utilises a composite scale variable (CSV) driver in order to aggregate multiple explanatory variables into one for use within the regression function. While this is understood, it is a sub-optimal solution and reduces transparency within modelling results. This is evident from the fact that small changes to weightings or inputs can cause counter-intuitive outcomes within model runs. A multiple model approach could investigate alternative cost drivers, which could be simpler to interpret, more transparent, and make the models less sensitive to technical assumptions (e.g., the choice of the CSV weights).

- **Having multiple models enables errors to be interrogated and averaged out.** Utilising multiple models allows for different hypotheses to be examined and a balanced view of costs to be taken. Any individual regression model, however, requires a number of assumptions to be made by the regulator that are based on judgement rather than known fact. There is invariably a level of error in these judgements and the use of multiple models helps to dilute the impact of differing assumptions, inputs or errors that will arise in each individual model and as such provides an overall stronger balanced view of efficient costs.

- 5.15. A key consideration when using multiple models is how to aggregate models together to form a single view of efficient costs. In previous price controls Ofgem has applied an equal weighting of models used, though this does not appropriately appraise each model approach for their strengths and weaknesses.
- 5.16. It is our view that Ofgem should look at wider regulatory precedent on these areas; once such approach could be that used in Germany where BNetzA <sup>26</sup> uses the strongest efficiency score from 4 different models for each DSO. This approach reduces the risk of any individual model approach not being aligned with any unique characteristics of a network. If adopted as an approach within the RIIO framework, it would balance outcomes by reflecting different drivers of cost, but still set challenging efficiency targets.

### GDQ51. What alternative cost drivers and model specifications would you propose for early testing?

- 5.17. **It is SGN's view that it is too early to be specific about cost drivers and model specifications and all areas should remain open. Areas that we would consider for early testing includes exogenous focused cost drivers, dynamic CSV approaches and MEAV driver improvements. Ofgem have not mentioned the efficiency challenge of models within the SSMC, which was a highly contentious issue within RIIO-2 and as such we believe it is important to discuss the issue. It is important that the key principles for setting an efficiency challenge are set up front to ensure transparency in approach.**
- 5.18. We believe that Ofgem should test all operationally sensible cost drivers and model specifications to ensure the statistical relationship can be understood. The CAWG meetings are the most appropriate settings to work through testing to ensure companies and Ofgem both understand the implications of drivers and specifications.

#### Cost Drivers

- 5.19. Areas where we would suggest that Ofgem could start on early testing of cost driver changes are:
- **Considering an alternative exogenous focussed cost driver.** Within the RIIO-2 modelling suite Ofgem proposed a cost driver which is called 'CSV1' (made up of customer numbers 0.25, network length 0.50 and throughput 0.25). This approach removed some of the endogeneity that is within the CSV that was used during the RIIO-2 totex regression model. The CSV1 is also simpler and easier to

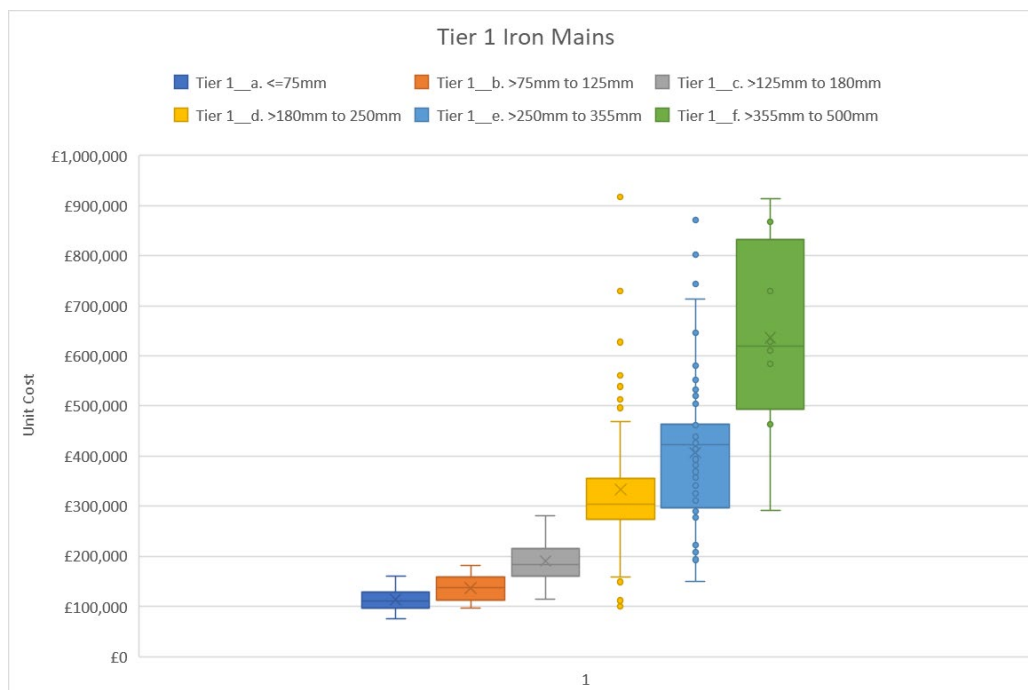
<sup>26</sup>

[https://www.bundesnetzagentur.de/EN/RulingChambers/Chamber8/RC8\\_05\\_Revenue%20caps\\_revenue%20regulation/54\\_Efficiency%20benchmarking/Efficiency%20benchmarking\\_.html](https://www.bundesnetzagentur.de/EN/RulingChambers/Chamber8/RC8_05_Revenue%20caps_revenue%20regulation/54_Efficiency%20benchmarking/Efficiency%20benchmarking_.html)

understand than the CSV used at RIIO-2, with its construction requiring a significantly smaller number of assumptions compared to the CSV. A model that includes CSV1 could be used to provide an alternative view of cost efficiency. It is our view that this choice of cost driver should be reviewed to improve robustness of the modelling.

- **It should be noted that exogenous components of the CSV1 may not be constant over time.** The GDNs will need to provide forecasts for each of their regions drawing from the FES scenarios in their business plans. Ofgem will need to assess whether GDNs have used different approaches for their forecast drivers, e.g., if different assumptions are used by GDNs that reflect geographical characteristics and the impact of regional decision making. If Ofgem were to use CSV1 for RIIO-3, it will be important to ensure consistent assumptions are made across the sector, so that the relationship between these drivers and costs are estimated robustly. We note that the main driver for our expenditure is safety, i.e., totex may not move proportionately with changes in customers numbers and throughput. To the extent these drivers are used, these changes should be considered carefully.
- **Recognising NARMs outputs within the cost assessment approach.** Particularly within totex modelling, a cost driver accounts for both volume and rate efficiency. The use of NARMs based modelling and outputs ensures that networks are appropriately managing their risk and helps to justify work volumes. Ofgem should consider how the NARMs methodology can be introduced into cost assessment. An example could be RIIO-ED2, where Ofgem utilised the NARMs justifications to accept volumes within disaggregated modelling where it was available.
- **Improving the assumptions underlying the CSV weights by considering a dynamic CSV weighting approach.** Ofgem utilised a dynamic CSV weighting approach within RIIO-ED2 for their totex model 1 approach. It is our view that this approach better aligns the CSV weightings to the cost mix incurred and this helps reduce the subjectivity of setting a weighting.
- **Re-evaluating the Repex synthetic cost driver approach.** Repex synthetic costs are sensitive to normalisation for outliers determined by an iterative rules-based approach. Highlighted below are the unit rates by banding that were utilised within the RIIO-2 repex synthetic cost driver setting, showing the interquartile ranges and outliers within a box-plot view.

**Figure GDA5 – Repex Synthetic outliers for tier 1 mains<sup>27</sup>**



5.20. Figure GDA5 highlights that unit rates are aligned across networks until banding D (>180mm), after which the outliers that Ofgem implement to determine the repex synthetic cost driver increase considerably.

5.21. There are risks that the thresholds used to remove outliers, which remain uniform regardless of banding, are not statistically relevant. The spread of data in each category will vary, and as such it would be appropriate to guide the thresholds through statistical approaches.

5.22. Furthermore, the treatment of outliers within the Repex Synthetic unit cost is inconsistent with the wider totex model. The totex model does not have a similar assessment procedure to eliminate outliers. Instead, asymmetry in the data spread (including outliers) is accounted for by log transforming the data prior to modelling. In effect outliers remain in the totex model. This poses questions over the purpose of data cleansing in the Synthetic costs' calculations. Is it a purely statistical exercise, or does it reflect poor cost confidence in these unit costs.

- **Further interrogating the MEAV cost driver.** The MEAV cost driver accounts for 36% of the CSV used by Ofgem during RIIO-2 and it is traditionally used as a measure of network scale when it is difficult to incorporate specific cost drivers.

5.23. Given the importance of the MEAV cost driver we think it is important to:

- Update the unit rates used to determine the MEAV for recent cost data.
- Review MEAV components for any missing cost categories.

<sup>27</sup> Source: Ofgem FD modelling suite - Capex\_Synthetic\_Unit\_Cost\_Model\_v3.xlsx 18.19 real prices.

- Review MEAV changes over time to understand any data quality challenges.
- Review differences in assets across networks – as MEAV is heavily utilised as an explanatory variable for cost, there needs to be a more informed understanding of differences between networks and how they are recognised within the MEAV.
- Corrections for mis-allocations and inconsistencies in interpretation across networks.

5.24. These are just some initial thoughts on cost driver challenges. We believe Ofgem should investigate all operationally intuitive permutations of cost drivers to improve the confidence that both the operational and statistical views of drivers are understood.

5.25. Ofgem have set out within 5.21 of the GD annex principles used during previous price controls for setting of cost drivers. We agree with the principles put forward to also include:

- A review of the incentive properties of cost drivers should be understood and considered when including them within modelling, to ensure the models are aligned to outputs.
- Data informing the driver should be available, robust, and consistent across networks.

### Model Specifications

5.26. In terms of model specifications, we believe Ofgem could conduct early testing on:

- **Recognition of structural breaks.** The macro environment of GB has changed significantly since the submission of licensees' RIIO-2 Business Plan's. Key changes include the impact of COVID, high inflation, supply chain shortages, and high interest rates. In addition, the Southern Region in particular has suffered labour shortages because of Brexit. These macro impacts have created a step change in costs. This will likely cause a difference in modelled cost efficiency within the RIIO-3 period compared to previous periods. As such Ofgem will need to ensure a suitable approach is utilised to reflect these differences (e.g., Ofgem could consider dummy variables).
- **Timing of structural breaks.** Ofgem included time trend variables within the RIIO-2 modelling approaches to recognise structural breaks between historic and forecast periods. The timing of when these dummy variables are introduced will need to be carefully considered, as cost impacts of macro changes will impact networks differently, dependent upon regional differences. The sensitivities of the timing of implementing dummy variables should be carried out, to ensure they are recognised appropriately. Despite this, it should be acknowledged that due to reasons outside of the control of networks there will be differences on when external pressures impact forecasts, and as such this increases statistical noise within the modelling outputs.
- **Non Linear functional form.** RIIO-2 technical annexes recognised that the relationship between the CSV and cost may not be linear. The annexes tested adding a duplicate independent variable (squared) to the OLS model. Instead, there is the technique Nonlinear Least Squares Regression (NLS) that can allow different functional forms to be tested, potentially reducing the need for additional variables. This could be investigated alongside other non-linear approaches. This could have particular use within a middle-up model where a more specific cost area could be more exposed to a non-linear form.
- **Principal Component Analysis (PCA) / Factor Analysis.** Ofgem could investigate statistical approaches to understand relationships between costs and drivers to better determine weightings as well as to model with. Akin to the dynamic CSV weighting approach this would help remove an element of

judgement through setting cost weightings as well as to better determine the statistical relationship between the costs and drivers.

- 5.27. In para 5.23 Ofgem state that the RIIO-2 model achieved a high adjusted R2 and passed most post-estimation tests. This combined with “a totex CSV that reflected sound economic and engineering logic”, Ofgem suggest supported the decision to use a single top-down model. We do not think that the factors in isolation can are sufficient given the observations set out above.

### **Efficiency Target**

- 5.28. A key element of setting allowances is determining the efficiency target that networks will be challenged against. Historically this has been set at an upper quartile level of performance (75%) to reflect the statistical noise and un-certainty that are naturally inherent within econometric modelling. This was discussed in GDQ50 in more detail.
- 5.29. Within the RIIO-2 draft determination Ofgem had set the efficiency target to the upper quartile within expected in line with regulatory precedent, but for final determination this was changed to a glide-path towards the 85th percentile. This was justified by reference to supposed improvements in model robustness and high confidence in the data provided by the networks. We believe that neither of these areas materially improved in RIIO-2, and therefore believe Ofgem should re-consider the level at which the efficiency target is set.
- 5.30. There are inherent limitations that Ofgem will encounter within any model within the RIIO-3 period, due to both the small sample size and model specifications that are available to be used. As discussed within GDQ50 the sample size is limited to 8 separate networks that are operated by 4 companies, and while the number of years available to be modelled will increase for RIIO-3 it is still a small dataset. Moreover, most of the variation and explanatory power is cross-sectional. Further, due to macro-GB factors, historical costs are not necessarily a good indicator of future costs.
- 5.31. In terms of model specification for the RIIO-2 period, due to the small sample period, a single driver is used as an explanatory variable within the regression modelling. To include multiple explanatory factors a composite scale variable (CSV) is used which includes different drivers at a set weighting. This is a compromised solution as ideally key drivers should be independently included as variables within the regression (or regressions). There are also challenges with an appropriate setting of weightings that further reduce model robustness.
- 5.32. A key consideration when deciding whether to adjust the efficiency target should also be the quality of the data that is available. Within RIIO-2 Ofgem stated that the quality of data increased due to the use of BPDts and supplementary questions. It should be noted that the process of setting business plan guidance and the BPDts during the RIIO-2 process was challenging, with changing requirements and at times loose requirements. Issues around key drivers changing vs historic with little explanation, and the number of clarifying questions and adjustments required late in the process would tend to indicate that data quality did not justify a more stringent efficiency challenge.
- 5.33. Ofgem have recognised this challenge within the SSMC by pushing further forward with the Data & Digitalisation initiatives. These initiatives will not be introduced for the RIIO-3 cost assessment period and may not be able to provide an improved data robustness for a significant period of time due to the need for companies to change approaches to collect and present data to Ofgem.



- 5.34. For the RIIO-3 period, the business plan process has been further compressed due to the FSNR consultation that ran ahead of the RIIO-3 planning period. We will be constructing a business plan with guidance provided late in the process. Furthermore, we will be going into the business planning period without an Ofgem annual report generated for the first 2 years of the RIIO-2 period, showing a lack of confidence in the public availability of key performance data.
- 5.35. We acknowledge that the stretching efficiency challenge was appealed within the RIIO-2 period and the CMA did not overturn Ofgem's decision. The CMA was careful to stress, however, that its decision should not be taken as an endorsement of the use of the 85th percentile in future cases, and that regulators "must always consider the case-specific circumstances and set the benchmark at a level appropriate for the case"<sup>28</sup>. The CMA noted in particular that, for RIIO-2: "it is important to note that it was not disputed that the effect of the choice of efficiency benchmark was small for the GDNs in RIIO-2. Focusing specifically on the impact on SGN, GEMA's decision to set the efficiency benchmark at a glide path from the 75th percentile to the 85th percentile in RIIO-2 had only a limited effect in absolute terms on the level of totex allowed for SGN: around £2.8 million or 0.11% of its baseline totex."<sup>29</sup> The CMA also made several references to the fact that the RIIO-2 target was only "marginally tougher than the upper quartile." In our view it is clear that if the gap between upper quartile and 85th percentile had been wider, there would have been more reason for the CMA to consider overturning Ofgem's RIIO-2 decision. This is important context for considering this question at RIIO-3.
- 5.36. Ofgem should therefore re-consider using the increased efficiency challenge that was utilised within RIIO-2. This process should be carried out once the modelling approach has been set, as to reflect the robustness of the approach adopted and the magnitude of the impact of stretching beyond the well-established precedent of upper quartile.

## GDQ52. What are your views on the potential of middle-up modelling in RIIO-GD3?

- 5.37. **Middle-up modelling provides a valuable point of reference to cross check results and cost drivers. We recognise middle-up models have been challenging to define, therefore we put forward that new approaches such as PCA and factor analysis should be considered to help determine statistical relationships.**
- 5.38. Well-defined middle-up models can be an alternative view to determine efficient costs. We believe Ofgem should include such modelling within their cost assessment approach as a cross check, to help identify inefficiency and improve the understanding of cost drivers. We do acknowledge it has been difficult to construct a robust middle-up model historically and as such would welcome collaboratively working through the CAWG on this approach.

<sup>28</sup> CMA RIIO-2 appeals Final Determination, Volume 3, para 12.142.

<sup>29</sup> CMA RIIO-2 appeals Final Determination, Volume 3, para 12.133.

- 5.39. As mentioned above, middle-up model can be useful to better determine the relationships between cost areas, but the key challenge is determining what the appropriate combination of costs and drivers should be. These cost pools have been difficult to define historically.
- 5.40. SGN proposes that Ofgem should consider utilising alternative statistical approaches such as PCA or Factor Analysis to help determine optimal cost pools to run middle-up models. These approaches would benefit the econometrics modelling by both highlighting how costs are related statistically and determine if they are operationally intuitive. If the cost pools determined are not statistically robust or intuitive, this could be used as evidence to carry out further data quality checks or even determine if the cost driver used are appropriate.
- 5.41. We believe middle-up models will help aid transparency within the cost modelling suite. A key issue with totex models is the lack of understanding of how costs and drivers interact between themselves but also as a group. This transparency will further extend to assisting with the disaggregation of allowances process and ensure that each sub area of Totex better reflect their representative efficiency.

### GDQ53. What are your views on the potential of disaggregated modelling in RIIO-GD3?

- 5.42. **Disaggregated modelling would be an incredibly useful approach within the RIIO-3 toolkit to aid transparency of determining cost efficiency, for example by considering more intuitive cost comparator techniques such as unit rate analysis.**
- 5.43. As with middle-up modelling, we believe the benefit of a disaggregated modelling approach to add a new view for cost assessment and to support with the disaggregation of allowances would outweigh the challenges of setting up the modelling approach. There are differing ways to apply disaggregated modelling within the overall Ofgem suite of cost assessment that can be tailored dependent upon the confidence that the modelling has.
- 5.44. While disaggregated modelling can be useful there are some risks to disaggregating the cost data, mostly around different interpretations of the regulatory guidance and through differing company policies/approaches that can cause costs to be placed in different locations through genuine reasoning.
- 5.45. Ofgem within RIIO-ED2 managed these risks by combining some of the most obvious interlinking disaggregated areas, such as IT being assessed as a group across opex and capex related IT activities.
- 5.46. Regardless, there is a risk that some of the perceived efficiency differences across networks are due to legitimate differences in cost allocation approach. Again, within the RIIO-ED2 approach Ofgem managed this challenge through lowering the efficiency challenge to a median assessment instead of Ofgem's traditional approach to use the upper quartile. This helped to also reduce the risk that differing techniques (ratio analysis and unit rate analysis) across interlinked cost activities were not equally offset against each other through the model approach. We believe the approach to lower the efficiency challenge to be sensible and helps to mitigate the issues of differences in company policy and reporting interpretation.

**GDQ54. In your view, what is the most suitable configuration of cost activities for middle-up or disaggregated modelling, that once combined, could form a complete bottom-up assessment of totex?**

- 5.47. **As far as initial thinking is concerned, we believe initial focus should be around defining the key principles that might be used to determine the most suitable configuration. It is too early in the process to determine the most suitable configuration of cost activities.**
- 5.48. We consider that the criteria that Ofgem has set within para 5.41 of the GD annex are sensible (with the inclusion of the two further principles set out in our response to GD51). As mentioned above, we believe Ofgem could also add a principle based around the incentive properties that the combination of cost activities may induce. In particular, consideration should be given to the perverse incentives or distortion of GDN behaviours that the configuration of cost activities could lead to.
- 5.49. As regards where it would be more appropriate to adopt disaggregated modelling, as within RIIO-ED2 we would consider that it would be sensible to perform company level analysis where costs are subject to company-specific drivers, such as IT-related costs and Business Support Costs.

**GDQ55. What do you think would be appropriate criteria for determining cost exclusions for RIIO-GD3?**

- 5.50. **Cost exclusions are important area to support a robust modelling suite. The criteria for exclusion should be established early in the process and be consistently applied across networks. Areas such as cyber, data and digitalisation - where there is not an effective cost driver - are additional areas where exclusions might be warranted.**
- 5.51. A pre-requisite for effective (econometric or alternative) benchmarking is that the data is for comparable activities across networks. A key challenge in the process for RIIO-2 was the change of criteria late in the process, which included elements of cost that we believed would have been more appropriately excluded from cost assessment. We would welcome Ofgem setting out the criteria for cost exclusions as part of Business Plan guidance so appropriate evidence can be put forward to Ofgem.
- 5.52. In the SSMC, Ofgem have identified a desire to reduce the number of PCDs. In our response to OVQ12 we acknowledge the benefits of simplification, however, we also identify a number of instances where there are costs that are not appropriate for inclusion in the benchmarking model for cost assessment. This creates a new category of costs that are technically assessed outside of the benchmarking model for cost efficiency but do not have a PCD associated with them.
- 5.53. When excluding costs, SGN believes the following criteria ought to be considered:
- **Materiality** of cost. In RIIO-2 the materiality for LTS projects was set at £5m. We suggest that this should be reduced to £2m for the RIIO-2 sector due to projects within the RIIO-2 sector being primarily driven through safety factors.
  - **Whether the output is unique.** In RIIO-2 PCDs were awarded to projects that were unique, these included projects deploying a new innovation or delivering a specific customer outcome.

- **Whether costs are outside of GDNs control.** Certain costs are outside the GDNs control such as pass through costs.
- **Inconsistency across networks.** In areas such as cyber or data and digitalisation there is likely to be a lack of consistency across networks, both in terms of current levels of output delivery and future investment required to deliver targets, thereby reducing the comparability of cost submissions.
- **Costs can be clearly delineated.** Costs for exclusion need to be clearly categorised as relating to a specific output.
- **Costs that do not have clearly related driver impacts.** Where there is not an explanatory driver that relates the cost to the output delivered in a robust manner.

5.54. Within RIIO-2 Ofgem excluded cost areas such as MOBs, streetworks, repex diversions, smart metering, land remediation, SIU opex and growth governors which we believe are still suitable cost exclusions for the RIIO-3 period.

5.55. As within RIIO-2, Ofgem will need to review the network business plans to ensure that they are constructed within the same underlying assumptions. Some areas that may require consideration in how they are normalised include network expectations for;

- The number of connections and disconnections and alignment / non-alignment with FES scenarios or the inclusion of a volume driver.
- Stakeholder led initiatives that are built within licensees' business plans. Customers and stakeholders are at the centre of our business planning process, and it would not be correct for any network to be penalised because of the requests of their customer and stakeholder groups.
- Networks will have different views on how to deliver to their EAP, based on local stakeholder expectations, network configuration differences and regional differences. Costs relating to environmental initiatives should be excluded from the main cost assessment process as this difference in ambition could unduly impact our base level of required expenditure for safety and reliability.
- As discussed within GDQ17 networks will be exposed to increasingly different levels of productivity impacts due to the remaining work within the IMRRP. These differences are driven through specific network configuration differences and the remaining assets on our networks, which will be different across networks. The work we have available will not be able to be adjusted to manage to a notional view that could come out of cost assessment. As such the BPDTs will need to ensure appropriate data is collected in a consistent manner to ensure a review of any normalisations required can be conducted.
- Investments in cyber security. Within the RIIO-2 cost assessment stage cyber costs were excluded from benchmarking due to the early stage of cyber guidance and the rapidly changing nature of cyber risks. We anticipate that cyber guidance and cyber risks will continue to develop, and companies may be in different places on the pathway to improving cyber security. Accordingly, we believe it would be appropriate to continue to exclude these costs from benchmarking and for the assessment of cyber related cost to be conducted by individuals with relevant technical knowledge (this is discussed in GDQ55).
- Data & Digitalisation is a key area where Ofgem would like networks to enhance their capacity. Companies will have a different starting position and are likely to have a different interpretation of

what is required to achieve the objective. As a result, it is likely that the networks will not start from the same positions and may be on different pathways to comply with Ofgem's requirements. This makes it unsuitable for Ofgem to determine cost efficiency in this area.

- Large capital expenditure projects on the local transmission system are determined to a large extent by the geographical characteristics of the network (density and sparsity of population, geological conditions, proximity of high voltage electrical infrastructure etc), the age of the networks, and the history of interventions. For RIIO-2 a materiality threshold of £5m was set for large capex projects, as set out in OVQ12 we believe this to be too high and suggest that the materiality threshold would be more appropriately set at £2m. We think that this should be debated and defined early in the process, along with the definition of both a project and a programme of work to support consistency across networks.
- GDQ31 also asks how funding for customers in vulnerable circumstances should be taken into consideration. As we set out in our response to that question, if the decision is taken to not to progress with a UIOLI funding mechanism and to include it within baseline allowances then it is important that it is excluded from the cost benchmarking process and not subject to a benchmarking methodology. This is because the need to provide services for customers in vulnerable circumstances will be determined by the level of geographical need and the level of customer and stakeholder commitments and therefore outside of the control of the network.

5.56. Many of the examples set out above demonstrate the interdependency between policy formation and the approach to cost assessment. It is therefore especially important to review whether a cost should be excluded or not through the business planning process as policy becomes more established.

GDQ56. What are your views on the modelling treatment of workload adjustments for RIIIO-GD3?

5.57. As per the principles discussed in GDQ55, any normalisation should be made with consistency at both the cost and driver level. Ofgem's approach to adjusting workload in line with any cost normalisations must ensure that a fair and transparent view of cost efficiency can be obtained.

5.58. In the SSMC Ofgem identified a number of examples of workload adjustments, those associated with the Repex synthetic cost driver and those associated with the CBA cut-off period.

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[REDACTED]

5.65. By working with network companies, we can add value to Ofgem's review of cost exclusions as well as aiding the transparency of the process.

## Overheads

5.66. When excluding costs consideration is needed in regard to overheads, in particular if the cost exclusion is for an activity that can be carried out differently between networks, i.e., one network utilises a contractor and another an internal direct labour approach. While there is guidance to ensure consistency in costing regardless of approach, it is unlikely companies can allocate overhead costs in a way that will be consistent. This should be considered when assessing the overall robustness of the modelling approach.

5.67. Furthermore, network costs have a large proportion of fixed overheads that are allocated across workloads. By removing these workloads, a proportion of the fixed overheads are also removed. There should be an opportunity to reallocate these back across other workloads as, despite the workload being removed, the fixed element of overheads will remain. The consideration of overheads is particularly important where a cost is excluded because it is likely to be determined by a volume driver.

### CBA Cut-off

5.68. Para 5.52 refers to the 16-year payback cut off in 2037 for asset management main investment. There was no clear discussion on this within the core document, however, as we set out in our response to OVQ7, we need to maintain investment in safety and reliability as long as there are customers connected to the network. As investment is driven by safety rather than customer numbers, the risk of an asset being stranded is determined by the likelihood that the asset will be de-energised during that period.

■ [REDACTED]

- 5.69. A 16-year CBA would take an investment in 2026 (operational in 2027) through to 2042. During this period sum-of-digits depreciation would have depreciated almost 60% of the asset value, and by 2050 it would have depreciated nearly 80% of the asset value. The value at risk is therefore the probability of that specific asset being de-energised multiplied by the remaining value.
- 5.70. As we set out in our response to OVQ7, policy today does not favour mandatory cut-offs of consumers from the gas network, so on this basis we see no reason to have confidence that we can de-energise any component of the network before 2050.
- 5.71. As such we believe there is enough scope to have a payback cut off period up to 2050, which would align with the likelihood that gas distribution networks would still mostly be in use up to 2050, and from a depreciation policy (based on RIIO-2 current depreciation policy) that RIIO-3 investments will be mostly depreciated by this point.

**GDQ57. What are your views on the approach to regional factors for RIIO-GD3?**

- 5.72. **Regional factors are an especially important adjustment to the cost assessment and need to be taken into account when considering the costs of efficiently operating according to regional characteristics that constrain ways of working compared to the national average. In RIIO-2 the adjustments were insufficient and there were significant negative impacts in the outcomes against the Southern regions, the first years of RIIO-2 have shown the agreed workloads in the southern network are not deliverable within the allowances awarded.**
- 5.73. Regional factor normalisations are a fundamental element to ensure costs can be compared across networks. As such we agree with Ofgem’s approach to have regional factors defined as a specific normalisation approach. While there are many ways to apply regional factor normalisations, we believe that an approach that is transparent, can be applied to different model types equally and is easy to follow is the most appropriate approach.

[Redacted]

[Redacted]

[Redacted]



5.77. When considering regional factors consideration should be given to the costs that they are applied to and the type of costs pressures that are taken into account. We believe regional factors should be separated according to:

- **Regional Wage differences.** This is the cost necessary to attract people to work in the South of England compared to other areas of the UK. This needs to accommodate the higher cost of living in the south compared to other parts of the country. It is our view that the ASHE data set from the ONS needs closer scrutiny to ensure that it is truly reflective of the wage differential that we see in practice. In particular, we are concerned that it does not fully reflect the cost of contractors and their costs of maintaining a local labour force in the South of England.
- **Regional costs on the supply chain.** These are supply chain costs that are incurred due to working within densely populated urban environments. This includes the costs of bring material in further to complete work, to reinstate work or to hire necessary plant and equipment, the cost of holding material on the site or nearby and having constraints on the ability to store material and the additional costs of security.
- **Impact of macro factors on the supply chain.** The current approach assumes direct labour and contractor expenditure has a related cost pressure, and as such the approach to regional wage differences is also utilised to normalise for contractor costs. In reality, contractor cost pressures are more nuanced than simply wage movements and include an element of risk related to the regional location of the contractors. If a contractor is within a regional area where there is greater demand of work, or lower supply of workers then they will expect an increased return due to the extra risk they may need to take on to meet the demands of any contract they agree to. This risk of greater demand of work and lower supply of workers is exactly what is being experienced within the Southern regions. Ofgem should ensure consideration of this risk premium is accounted for regarding contractor use within the Southern regions.
- **Productivity impacts due to Density.** These are costs that impact the efficiency with which a cost area is completed, they include the hard to quantify impacts such as the additional travel time of operating in congested urban areas, restrictions on working times in busy working areas to evening or weekend works with the associated mobilisation and de-mobilisation costs, the ability to locate vehicles close to the site, and the congested street space above ground (with cycle lanes, bus lanes, pedestrian areas etc) and below ground (crossing water, telecoms, electricity etc).
- **Productivity impacts due to Sparsity.** The cost of travelling can also be significant within a sparse area as well. For example, to provide the emergency service and ensure that we are able to respond to a gas emergency within an hour in sparsely populated areas, this may result in either increased property costs to place depots in more remote locations so as they can respond within minimum standards appropriately, or increased travel times if property costs are to maintain the same ratio as less sparse regions. There is also an increased cost through contractors to deliver works, with contractors adding increased travel costs for carrying out work in sparse regions.

- 5.78. It should be noted that networks can be categorised as both dense and sparse, particularly those that have a larger geographical footprint. Consideration should be placed on the density/sparsity levels within each local authority within a network's footprint. In particular with Repex, there is a finite amount of remaining work that needs to be completed. Some of this work will be in particularly densely populated or particularly sparsely populated locations that exist within otherwise average density local authority areas in that network. If appropriate weighting is not placed on managing the regional factors of the work that is required to be completed at a sub-network level, this could lead to unsuitable allowances to complete the required workload.
- 5.79. It is our initial view that these impacts should be applied as pre-modelling adjustments rather than within modelling adjustments, as this enables greater transparency in the adjustments that are applied. While the alternative of within model adjustments is interesting, we would want to ensure the adjustments are transparent. We have not yet identified a mechanism that is able to make appropriate adjustments at both the density and sparsity levels.
- 5.80. The use of an in-modelling approach could be useful to ensure the correct calibration of pre-modelling adjustments, and if there is a significant difference between approaches it is important to understand why this may be the case. We are open to discussing pre-modelling and in-modelling adjustments in the CAWG meetings. However, there is a significant risk that in-modelling approaches do not yield sufficiently transparent and statistically robust approaches, so our minded to position is that we do believe a revised pre-modelling adjustment approach must be examined to better account for the range of costs we currently experience in the most sparsely and densely populated areas within our networks.

#### **Application of adjustments**

- 5.81. It is our view that these adjustments were defined too narrowly during RIIO-2 and that a greater consideration needs to be applied to the geographical coverage of regional costs and the application of boundaries.
- 5.82. Further understanding is also needed to be given to the workloads that regional costs are applied to and the costs of supporting that workload. Within the RIIO-2 framework the catch-up efficiency adjustment of each network was applied to the regional adjustment prior to it being added back to modelled costs. As the catch-up efficiency includes both efficiency and workload elements, it is not appropriate to apply this adjustment to the regional costs, as they are outside of the control of companies. An adjustment should only be made for any workload exclusions that are applied.

#### **GDQ58. What are your views on the approach to company-specific factors for RIIO-GD3?**

- 5.83. **As with regional factor normalisations, the use of company-specific factors is important to ensure the fair assessment of cost efficiency across companies. It is especially important to have clarity on the adjustments made and the reasoning behind them.**
- 5.84. Company specific adjustments are important, and they should be considered in a distinct manner from items that are excluded due to the inability of the cost assessment model to capture their costs and outputs robustly (as set out in our response to GDQ 55). This should include costs that are technically

assessed and included in a PCD as well as costs that are technically assessed and not covered by a PCD (as set out in response to OVQ12).

- 5.85. It is our view that company-specific factors should be limited to the costs that are unique to a small number of licensees. One potential example could be as a result of the geographical nature of its network and cannot be mitigated within a reasonable cost boundary. For these reasons we would expect this to include the cost of working in the SIUs and the cost of working in the Isle of Wight.
- 5.86. We therefore agree with the majority of the principles with the exception of the 0.5% of gross total expenditure as a minimum threshold. There is a concern a collection of multiple company-specific factors that are below this set threshold could be material when combined.
- 5.87. It is our view that the other principles provide a sufficiently robust definition to avoid additional costs. However, of the two costs identified the Thames Tunnel Project and hire costs in London (to correct the SSMC these are applied to Southern and Cadent London) we would not categorise either of them as company specific factors. SGN maintains in this regard that the Thames Tunnel should have been considered as a capital project specific PCDs and the hire costs in London should have been considered a regional cost.

#### GDQ59. In your view, which cost areas will require separate technical assessment in RII0-GD3?

- 5.88. **For costs that are excluded from the main suite of cost assessment we believe it is important that Ofgem carries out a separate review to determine if expenditure is efficient. By definition, the costs removed from the main suite of cost assessment are unique and lacking in historical comparator points, requiring specific technical assessment.**
- 5.89. We believe Ofgem should carry out a separate technical assessment in all cost areas that are excluded from the main suite of cost benchmarking. The areas discussed within GDQ55 of MOBs, streetworks, Repex diversions, smart metering, land remediation, SIU opex and growth governors would seem to be suitable for separate technical assessment.
- 5.90. We would note that companies are still bringing their business plans together and as such workload requirements will evolve and potentially identify further cost areas that will require separate technical assessment.
- 5.91. One area that should be normalised for and separately technically assessed are costs within LTS. The assets within LTS are not necessarily volume-based works, and as such within price controls networks can be exposed to costs at inconsistent levels based upon the age profile of assets. A key link is around the cost drivers utilised, that being MEAV and for a price control period the MEAV does not flex suitably based on age-profile to ensure efficient costs can be determined. If there was a driver utilised in the totex model that better accounted for workload, then potentially there would be less requirement for a separate technical assessment of LTS related expenditure.
- 5.92. Furthermore, within SGN Scotland we have a high proportion of line guard assets that are required to be upgraded to a more robust functional safety approach. The current assets on the Scotland system are responsible for a large proportion of historic outages within the Scotland LTS network, and as such drive a

unique resilience issue within our Scotland network. We are proposing workloads relating to line guard within RIIO-3, which will be unique to SGN Scotland and as such should be technically assessed due to lack of driver to justify the upgrading within the RIIO-3 price control plus lack of historic cost comparators.

- 5.93. As discussed within OVQ16, costs relating to specific regional challenges to deliver our EAP will be unique to each network. As such, costs related to EAP should be removed from the main suite of cost benchmarking and be separately technically assessed to ensure that the level of ambition that companies are looking to present does not unduly influence the wider base level of required works regarding safety and reliability.

### GDQ60. What are your views on alternative technical assessment approaches for RIIO-GD3?

- 5.94. **SGN's preference would be for Ofgem to adopt a similar approach to alternative technical assessment as at RIIO-2, i.e., conducting that assessment on a qualitative and quantitative basis using expert and engineering reviews. By having a clear decision set ex ante this helped to reduce risk within the price control. We would not support DIWE as a process of ex-post assessment except in exceptional circumstances when project risk makes ex-ante allowance setting challenging.**
- 5.95. The business plans produced by the networks represent the product of technical and expert views, and as such to assess the more unique and complicated elements of those plans Ofgem should ensure they also have the appropriate engineering expertise available to carry out technical assessment.
- 5.96. We note the suggestion of using a Demonstrably Inefficient and Wasteful Expenditure (DIWE) framework to help streamline the cost assessment process by replacing ex ante assessment with an ex-post approach. In the long term, however, adopting a DIWE framework is more likely to increase regulatory burden and may lead to unintended consequences.
- 5.97. There is a key risk around the reduction of certainty within the assessment, which would increase risk and therefore need to be appropriately accounted for within other areas of the regulatory framework, such as implications within the cost of capital assessment. If the increased risk is not appropriately compensated this could create a further hurdle for companies to overcome when aiming to carry out the correct course of action with the information that is available to them at the time.
- 5.98. Where Ofgem has any concern around the approach to technical assessment they should consult with independent expertise to ensure the cost assessment framework is robust.

### GDQ61. In your view, which cost areas will require separate non-regression analysis and benchmarking in RIIO-GD3?

- 5.99. **As linked with previous questions we believe separate non-regression analysis is a useful approach within the modelling toolkit to help assess costs that are removed from the main cost modelling approach. We agree with the areas Ofgem have identified to utilise non-regression analysis.**

- 5.100. It is our view that many of the cost activities assessed through non-regression analysis that were identified in RIIO-2 and are listed in para 5.68 (MOBs, Streetworks, Diversions, land remediation etc) remain likely to require some form of non-regression analysis.
- 5.101. However, the decision on this requirement should be taken in line with the approach taken to regression, and the effective coverage of the regression model. As such it is too early at this stage to determine which costs should be subject to a non-regression analysis. It is our view that where costs are identified the process for scrutinising those cost and the manner in which they are excluded should also be clarified, as some discrepancies occurred in RIIO-2 that were identified too late to be corrected or adjusted for.
- 5.102. For streetworks it should be noted that the approach utilised within RIIO-2 would not be applicable for the future price controls. The RIIO-2 approach utilised the average of 4 years of streetworks costs to determine an efficient spend level, but due to the recent large increases in both volumes and rates of streetworks costs more consideration should be placed on the most recent data. As these costs are outside of the control of companies it is imperative that appropriate allowance is determined to ensure works can be carried out.

#### GDQ62. Which separately assessed cost activities from RIIO-GD2 could potentially be included in totex benchmarking in RIIO-GD3?

- 5.103. **The separately assessed cost activities from RIIO-2 that Ofgem set were appropriate for the price control and appear likely to continue to be appropriate to be assessed separately going forward.**
- 5.104. During recent CAWGs it has been suggested that smart metering and land remediation could be areas to include in totex benchmarking going forward. We do not believe there needs to be a change to the RIIO-2 approach in these areas.
- 5.105. GDNs are not responsible for installing smart meters but we potentially do have to respond to issues relating to these assets. As this control and exposure rate is outside the control of each network and there is no suitable driver due to the differing up take of smart meters, the cost activity should continue to be separately assessed.
- 5.106. While land remediation within RIIO-3 is likely to be immaterial, until network business plans are submitted, we believe a decision on whether associated costs should be excluded from benchmarking should be postponed until more information is available.

#### GDQ63. What are your views on retaining the RIIO-GD2 pass-through cost items for RIIO-GD3?

- 5.107. **The existing pass-through costs as listed under para 5.72 are appropriate to carry forward into RIIO-3. It is important to add to this list the cost of delivering the Joint Office services, the cost of supporting the RESP, and we would like to review the current lack of consistency between Electricity Distribution and Gas Distribution in regard to business rates.**
- 5.108. Broadly we consider the pass-through cost items from RIIO-2 to be an appropriate starting point for RIIO-3. It is our view however, that the costs of the Joint Office should be considered as a pass-through cost as

well. The reason for this is that the Joint Office manages the development of code modifications and for implementation by Xoserve. Until now the Joint Office has been delivered through an agreement across networks but was not an independent entity in its own right.

- 5.109. This has now changed and in RIIO-3 the services of the joint office will be provided by Encoda a not-for-profit corporate entity. This change enables transformation through either code reform process or as arising from the demands of its customers (the gas shippers and transporters). These costs are outside of the network control and networks do not want to be a barrier to change for budgetary considerations, we therefore suggest that the costs of the Joint office should be considered pass through.
- 5.110. In addition to the Joint Office the creation of the Regional Energy System Planners (RESP) will also place an unknown and unquantified cost on networks. Networks should be able to recover associated costs of engaging proactively with and supporting the RESP and the associated NESO as a pass-through cost.
- 5.111. Under the Regulatory Instructions and Guidance (RIGs) for RIIO-2 the definition of totex under para 2.2 states business rates for non-operational buildings should not be included within pass-through, and therefore is a totex item. Whereas within the RIIO-ED2 Annex A Glossary all business rates are classified as pass-through costs, and more specifically under the definition of Property Management (Business Support) states that all business rate payments should be a pass-through cost.
- 5.112. As business rate payments differ in approach between England and Wales compared to Scotland, there are regional differences associated with these costs that are outside of the control of companies. We believe due to this Ofgem should classify all business rate costs as pass through to remove a cost element that is outside of the control of companies and ensure consistency between sectors.

#### GDQ64. What are your views on suitable approaches to the disaggregation of totex allowances for RIIO-GD3?

- 5.113. **Disaggregation of allowances is a crucial step of the cost assessment process, and particularly important when aligned to specific PCDs and Volume Drivers. At RIIO-2, the process was not as robust as it should have been, and we welcome engagement with Ofgem to implement a process during the determination stages.**
- 5.114. For the RIIO-ED2 process Ofgem introduced the process of disaggregation of allowances during the determination stages which helped with the variant elements of the allowances. By introducing a process early this helped DNOs provide feedback to Ofgem and understand better the design of the variant allowances.
- 5.115. The process for RIIO-3 can be aided by ensuring the disaggregation of allowances process is defined alongside the final determination and licence drafting, well ahead of the start of the new price control.
- 5.116. One area that will require further engagement between companies and Ofgem will be to better understand how the modelled scores of totex assessments are broken down into component parts of company expenditure. Historically Ofgem has assumed the efficiency scores determined through totex assessments should be applied equally across all areas of expenditure without providing sufficient evidence for this approach.

- 5.117. We note the recent CMA decision from the RIIO-ED2 process raised by NPG where it was determined allocating cost efficiencies based upon a company's original business plan cost mix is not necessarily appropriate.
- 5.118. As discussed within GDQ52 and GDQ53, the use of disaggregated and middle-up models can assist with the disaggregation of allowances, as they do within the ED2 process.
- 5.119. We welcome further discussion on how Ofgem have remedied this approach during the CMA appeal and how it can be used to better inform the application of totex cost assessments to the disaggregation of allowances, in order to ensure that any allocations are appropriate for both variant and non-variant allowance setting.

## Proposals for Business Plan Data Templates (BPDTs)

**GDQ65. In your view what are the high-priority areas of reporting inconsistency between GDNs within the RIIO-GD2 BPDTs and RRP, and how can these be addressed for RIIO-GD3?**

- 5.120. **Networks are invariably different across GB, this alongside RIGs that are at times non-prescriptive can cause reporting inconsistencies across networks. Areas of main focus for Ofgem should be on repairs to report ratios (if Ofgem continues to use reports as a proxy for repair costs), the construction of the repex synthetic particularly at banding level and application of indirect costs.**
- 5.121. While companies and Ofgem should strive to ensure reporting consistency across all networks, it should be accepted that due to variations in network design, contractor approaches and interpretation of RIGs there will naturally be inconsistencies in reporting.
- 5.122. Ofgem should therefore ensure that any efficiency challenge that is applied is appropriate to account for this comparison risk. Within RIIO-2 the cost benchmarking efficiency challenge was set to the 85<sup>th</sup> percentile on the basis that modelling was more robust, yet throughout the process it is now evident that there are great inconsistencies across network in some key areas.
- 5.123. We believe a key focus area should be the ratio of repair volumes to external condition reports. Ofgem uses the external condition report driver as the explanatory variable for repair cost, yet this is not the driver for cost. The driver for cost for the repair area would be the repair number, which is both statistically more aligned and operationally ensures the correct behaviours. By introducing a further ratio of the number of repairs to reports that determines efficiency, there can be perverse incentives for companies to maximise the reports in order to better justify repair costs. Ofgem has in the past stated they had concerns on the accuracy of the repair volume data, though have never provided evidence as to the reason. We also acknowledge there is no consistent definition within the RIGs on when to count a report, which leaves consistency issues open. We welcome engagement with Ofgem during the CAWGs on this matter to highlight the inconsistencies across networks within the report to repair ratio, and how to find a more appropriate cost driver for repair expenditure.
- 5.124. As discussed within GDQ56, there are inconsistencies within the banding mix of the tier 1 repex synthetic cost driver for forecast compared to history within some network views. Any changes to history should be



transparent, and if for a particular reason then a control should be considered to prevent perverse incentives.

**GDQ66. We invite views on current reporting requirements and reporting structure at the cost activity level and how this may be adapted to better suit RIIO-GD3 and related development of BPDTs.**

- 5.125. **While the current reporting requirements provides a great deal of information to Ofgem, how the information is utilised within the cost efficiency setting needs to be understood better. A key principle identified through the FSNR process was about streamlining, yet a large element of the data collected within the RRP and BPDTs are not utilised.**
- 5.126. Some examples of areas that are not used within cost modelling is the level of disaggregation requested for insurance related costs and IT related costs, which seems excessive within the early views of the BPDTs provided by Ofgem. We believe this is a key example of where Ofgem can streamline the process by ensuring data requested is appropriate for the task of modelling efficient costs.
- 5.127. We have raised within recent CAWGs that the design of the current RRP is challenging, with inconsistencies in terminology, number placement and overall structure to enable data analysis. We have put forward suggestions to improve the overall structure and would welcome these to be adopted within RIIO-3 in order to better aid data analysis.
- 5.128. It should not be underestimated the requirement to have a clear reporting structure. This is a vital element to ensure consistency across business plan submissions and to enable both Ofgem and networks to carry out suitable data quality checks.
- 5.129. Ofgem and network companies should work together to ensure the right level of data is requested within the BPDT process, to streamline the process and ensure both networks and Ofgem are not distracted with data that is not required. Learnings from the development of the RIIO-3 BPDTs should feed into the process for developing of the annual RRP.