

# SGN Question Responses (SGNQ)

August 2025

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# **Chapter 1** Summary of responses

Q#	Question	Agree / disagree	Summary of Response
SGNQ1	Do you agree with our proposed design of SGN's Full Site and System Rebuilds PCD?	Agree	SGN agree that our work programme of Full Site and System Rebuilds would be ideally suited to being captured within a PCD. However, we note that the Welling PRS rebuild has been missed off the list and request that it be added to the scope of this PCD.
SGNQ2	Do you agree with our inclusion of the Glenmavis and Isle of Grain projects in SGN's Full Site and Systems Rebuild PCD?	Agree	We agree with the inclusion of Glenmavis and Isle of Grain into the scope of the Full Site and System Rebuilds PCD, however, we would also suggest that the rebuild of Welling PRS be included as well (as per SGNQ1).
SGNQ3	Do you agree with our proposed design of SGN's South London Mains PCD?	Partially agree	We agree that a PCD would be a suitable way of setting allowances for this programme, but it would have to be carefully calibrated to ensure that we have sufficient flexibility to account for updated costs since business plan submission as well as any stakeholder restrictions within the regions that the work will be delivered.
SGNQ4	Do you agree with our proposal to reject SGN's cost to replace its fleet?	Disagree	We disagree with this approach and have outlined key operational, financial, and service-related justifications for adopting a 5-year fleet replacement model. This approach balances cost with improved reliability, reduced downtime, higher residual values, and reduced reliance on short-term hires.
SGNQ5	Do you agree with our proposal to reject SGN's Local Gas Treatment PCD?	Strongly disagree	SGN strongly disagrees with the proposal to reject the Local Gas Treatment PCD. This investment is essential to eliminate safety and compliance risks associated with aging Local Gas Treatment (LGT) systems. These systems are critical to odourising gas in line with GS(M)R and IGEM/SR/16. Failure poses a serious public safety hazard. The investment supports compliant, zero-emissions operation and delivers strong value, with an NPV of £49.95 million across both networks.
SGNQ6	Do you agree with our view that SGN passed all of the minimum requirements and as such are considered to have passed Stage A of the BPI?	Agree	We agree that SGN met the minimum requirements and should be considered as having passed Stage A of the BPI.
SGNQ7	Do you agree with our assessment results for SGN against Stage B of the BPI?	Strongly Disagree	We strongly disagree with the assessment for SGN against Stage B of the BPI as it increases the risk of a double penalty and places an unwarranted level of confidence in the cost assessment process. The proposed level of reward also significantly incentivises optimism bias, while the scale of the penalties proposed are disproportionate, resulting in the removal of important funding for customer outcomes. This is all in the context of an already overstretched and underfunded totex package. The Stage B incentive needs to be recalibrated to align objectives.

Q#	Question	Agree / disagree	Summary of Response
SGNQ8	Do you agree with our assessment results for SGN against Stage C of the BPI?	Strongly Disagree	We strongly disagree with the assessment for SGN against Stage C of the BPI overly and inconsistently focuses on past performance and has directly benefited networks companies that share less information and are more aligned with the SSMD position. Network companies that have presented robust evidence, supported by customers and stakeholders, for the need for change from the SSMD position, have been disadvantaged. For this reason, we consider that the Stage C incentive does not achieve its objectives and should be recalibrated.
SGNQ9	Do you agree that SGN's Remote Pressure management Strategy should not be eligible for NZARD funding, and instead should be funded through baseline allowances?	Partially agree	SGN partially agree with the decision to not approve funding through NZARD for the proposed GD3 expansion of Remote Pressure Management installations across South London and the South-East and instead should be funded through baseline allowances. However, SGN require confirmation that the funding will be technically assessed by Ofgem. This is expanded upon in GDQ36.
SGNQ10	Do you agree that SGN's Intelligent Gas Grid proposal should not be eligible for NZARD funding?	Disagree	SGN disagrees with Ofgem's decision to determine Intelligent Gas Grid unsuitable for funding prior to the Strategic Innovation Fund (SIF) project completion whilst understanding the project cost is above Ofgem's materiality cap of £2m. An early start to this project in GD3 is key to successful delivery and realisation of maximum benefit for the customer, therefore, if Ofgem remain committed to funding IGG through NZASP on completion of the SIF, SGN would strongly advocate for an early re-opener window.
SGNQ11	Do you agree that SGN's Biomethane improved access rollout proposal should not be eligible for NZARD funding, and instead should be funded through baseline allowances?	Partially Agree	SGN partially agrees that the Biomethane Improved Access proposal should be funded through baseline allowances. However, SGN require confirmation that the funding will be technically assessed by Ofgem. This approach reflects the strategic nature of the rollout and aligns with the intent of providing enduring network access improvements for biomethane connections.
SGNQ12	Do you agree that, in its current form, SGN's SIU decarbonisation (design costs) proposal should not be eligible for NZARD funding?	Agree	SGN agree that in its current form the SIU decarbonisation design costs should not be eligible for NZARD funding. SGN proposes that these shall be run independently rather than as a combination, with both expected to fall significantly under the NZARD project £2m cap. SGN will engage with Ofgem whilst we transition through to Final determination with a view to providing updated costs when available.  It is expected that once we have greater certainty over costs and scope that these projects will be eligible for funding through NZARD use it or lose it (UIOLI).
SGNQ13	Do you agree with our proposal to reject SGN's submitted Other	Strongly disagree	We strongly disagree with the draft determination position to reject a re-opener to cover the impact of the Advanced Leakage Detection (ALD) rollout from either a mains repair or

Q#	Question	Agree / disagree	Summary of Response
	Distribution Mains and Services Re-opener?		replacement perspective. Whilst we agree that any additional mains replacement can be picked up through the NARM mechanism, we need to recognise that the outputs from ALD may cause an increase in repair activities that has not been accounted for in business plans.
SGNQ14	Do you agree with our proposal to reject SGN's request for a bespoke River and Coastal Erosions - Asset Intervention Strategy reopener?	Agree	SGN welcomes and agrees with Ofgem's recognition of the increasing risks to our pipelines from the river and coastal erosions and inclusion of funding to address the issue. As part of our submission, SGN considered a separate, dedicated funding mechanism that would be more appropriate given the forecasted workload and scale of interventions expected in RIIO-GD3. However, if the common Diversions and Loss of Development Claims re-opener can adequately cover all identified and future river and coastal erosion projects, we are comfortable with this approach.
SGNQ15	Do you agree with our proposal to reject SGN's request for a bespoke South London Medium Pressure Re-opener?	Partially Agree	With a PCD being proposed to cover the South London MP programme, we agree that the re-opener is no longer required. This is detailed in our response to question SGNQ3 which identifies key considerations.
SGNQ16	Do you agree with our engineering assessment of SGN's RIIO-3 Business Plan?	Strongly disagree	SGN strongly disagrees with Ofgem's engineering assessment of the workloads, and in particular for those that have been rejected partly or in full. We have been engaging with engineering teams throughout the process, and we have provided additional data, evidence and substantiation for those EJPs that have been challenged. The additional data, evidence and substantiation is also included and referenced within our response to this SGNQ16.
SGNQ17	Do you agree with the level of proposed NIA funding for SGN?	Strongly disagree	SGN strongly disagrees with the proposed funding levels and requests the reinstatement of £14.55m in NIA funding, as well as a reconsideration of the business plan incentive score. Our justification for the reinstatement of the NIA funding is found in Sections 1 (workstream adjustments) & 2 (Business plan allocation score).
SGNQ18	Do you agree with our proposed level of funding for SGN's data and digitalisation investments	Agree	SGN agrees with Ofgem's proposed funding for our data and digitalisation investments which will enable us to sustainably deliver the key tenets of Ofgem's digital transformation objectives.

## **Chapter 2** Outputs and incentives

## 2.1 Full site and systems rebuild PCD

#### SGNQ1. Do you agree with our proposed design of SGN's Full Site and System Rebuilds PCD?

- 1 SGN agree that our work programme of Full Site and System Rebuilds would be ideally suited to being captured within a PCD. However, we note that the Welling PRS rebuild has been missed off the list and request that it be added to the scope of this PCD.
- It is essential that this rebuild be included within a PCD, either bespoke for this rebuild or, ideally, within the scope of the aforementioned PCD. Welling PRS rebuild carries an atypically large risk that would distort the NARM model should it be left there.
- Additionally, within Table 12 of the SGN annex document we were criticised, and a business plan incentive (BPI) penalty was applied for including overheads on contingency within the EJP. This is incorrect and it must be noted that the overhead is applied against the projects irrespective of the contingency in a manner that is consistent with our internal account policies for allocating overhead costs to all capex activities. We accept that the table could have been amended to show a different order of line items, but ultimately this wouldn't have changed the bottom line number, nor the overhead applied. The BPI penalty should be removed on this basis.
- 4 We discuss within GDQ36 the importance of costs relating to the Full Site and System Rebuilds PCD to be technically assessed due to the identified material and bespoke nature of this program within GD3 compared to other network activities.

# SGNQ2. Do you agree with our inclusion of the Glenmavis and Isle of Grain projects in SGN's Full Site and Systems Rebuild PCD?

As we have set out in our response to SGNQ1, we agree that a PCD to cover full site and system rebuilds is appropriate. We also agree that Glenmavis and Isle of Grain rebuilds should be included too. However, and as explained in SGNQ1, Welling PRS rebuild should also be included in the PCD or a bespoke PCD created for Welling rebuild on its own.

#### 2.2 South London Mains PCD

## SGNQ3. Do you agree with our proposed design of SGN's South London Mains PCD?

- We agree that a PCD would be a suitable way of setting allowances for this programme, but it would have to be carefully calibrated to ensure that we have sufficient flexibility to account for updated costs since business plan submission as well as any stakeholder restrictions within the regions where the work will be delivered.
- 7 We originally had planned for this programme to be submitted formally within a re-opener submission during GD3, as we didn't have sufficient information to move forward with a full proposal at the time that the business plan was submitted.
- In order to utilise a PCD for this workload, we would need to account for new information that is now available given the ongoing development of this programme since late last year. On review of the re-opener proposal, we have established that we have not appropriately accounted for two factors:
  - the need for overheads to be accounted for appropriately and in line with internal accounting policies; and
  - the scale of stakeholder engagement that would be required, this includes the engagement with Local Authorities and local communities, along with the impact on Street works (lane rental charges, traffic management, etc).
- We have included the details in Table 1, overhead costs, and table 2, streetworks costs, below, which set out our position required for us to be able to deliver on a South London MP PCD.

 $<sup>^{\</sup>rm 1}$  RIIO-3 Draft Determinations – SGN, pg 23

Table 1: Overheads costs required to cover this workload							
Detail	Cost £m	Note					
Original Overhead	1.61	This value was contained within Table 6 in the South London EJP. It represented an initial assessment of incremental overheads for this project.					
Revised Overhead	4.26	Following our extensive stakeholder engagement, we have recognised that this project will need a dedicated project team, due to the impact of the works on the local communities and stakeholders. As such, we have costed a project team to reflect this requirement.					
Additional Overhead	2.65						

Table 2: Road traffic management (RTM) and Streetworks costs not included in original submission								
Project	Number Of Roads Impacted	TFL Cost Per Day £s	Duration (assume 50m per week)	Number Of Days	Cost £m			
Kevington Drive	1	£1,000	41.6	208	0.208			
Collingwood & Belmont Rise	1	£1,500	81.5	407	0.611			
Nightingale Road	1	£1,000	36.2	181	0.181			
Total					1.00			

10 This table shows the applicable Streetwork costs that have been calculated following stakeholder engagement. This cost was not included in our original estimate provided in Table 6 within the South London EJP. To ensure that the project is deliverable, we will need to secure funding to account for these costs.

Table 3: Fully deliver			
Item	Amount (£m)	% of Total	Note
Labour	16.00	59.7%	Built up from our schedule of rates and actual project designs as outlined above
Materials	9.81	36.6%	Materials required to undertake the programme of works
Additional Lane Rental	1.00	3.7%	Additional Lane rental on 3 strategic TFL roads (set out in table 2)
Total	26.81	100.0%	
Overhead (O/H)	1.61		We have calculated an appropriate overhead for this programme as it sits beyond our current portfolio of work. We would need to recruit additional planners and liaison officers to enable this work to be undertaken.
Additional Overhead	2.65		Review of structure required to deliver this workload across GD3 in addition to our current portfolio (set out in table 3)
Total inc. O/H	31.07		
Contingency	2.58	10%	At this stage of planning it is, with significant uncertainties still to be resolved it is appropriate to have a level of contingency associated to account for variables in the design process and optimism bias. Costs are developed on a best-case basis, to minimise the ask, and only see increases on that basis.

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All in total 33.65

- 11 To ensure that the new costs still result in an economic submission, we have updated our CBA to represent our new view of the programme and total cost. The result of this is that the payback period is still within the 11-year period, with a 7 year payback, which includes these new costs. We have included a copy of this CBA within the response submission entitled SGN-GD3-DD-ENG-SD019 Revised South London MP CBA.
- 12 Our stakeholder engagement has also advanced, and we are aware that there may be difficulty accessing some of the locations identified within our EJP. Whilst these projects are not off the table, we need to account for the risk of delay introduced by stakeholders that is outside of our control. We agree that a PCD would be a suitable way of setting allowances for this programme, but it would have to be carefully calibrated, and we suggest that we link the deliverable to a length of London MP to be decommissioned. This would allow us to work within reasonable confines and ensure that we have the flexibility to eliminate the most risk whilst working within the confines of our London stakeholders, such as TFL, Local authorities and highway authorities.
- 13 We discuss within GDQ36 the importance of costs relating to the South London Mains PCD to be technically assessed due to the identified material and bespoke nature of this program within GD3 compared to other network activities.

#### 2.3 Outputs we propose to reject

#### 2.3.1 **EAP: SGN's Fleet Replacement Programme**

#### SGNQ4. Do you agree with our proposal to reject SGN's cost to replace its fleet?

- 14 We disagree with this approach and have outlined key operational, financial, and service-related justifications for adopting a 5-year fleet replacement model. The 5 year replacement approach balances cost with improved reliability, reduced downtime, higher residual values, and reduced reliance on short-term hires.
- 15 Our Fleet is a critical part of how we provide an emergency response service that operates 24 hours a day, seven days a week. We always look to respond as quickly as possible to a public reported escape (PRE) to keep people safe, and having and efficient and reliable fleet is critical for this.
- 16 We wish to reiterate the need to adopt a 5-year fleet replacement cycle, which we believe remains the most appropriate strategy to ensure service reliability, manage operational risk, deliver value for money, and provide the critical emergency response service.
- 17 The requirement for this position is supported by detailed evidence set out in the following sections of our business plan submission:
- Service Reliability<sup>2</sup>: Our commercial vehicles are not just transport; they are critical mobile workstations that enable engineers to carry out emergency response and essential maintenance tasks safely and efficiently. As shown in the EJP, Older vehicles, particularly beyond 5 years of age, experience increased failures, longer downtime, and carry the risk of service disruption at times of peak demand. Maintaining a modern fleet ensures continued access to reliable, well-equipped vehicles, which directly underpins our ability to meet safety and service standards.
- Operational and Cost Impact<sup>3</sup>: Vehicles operating beyond the 5-year point demonstrate a clear trend of deteriorating reliability. Our data shows that, at 8 years of age, a van is likely to break down 4-5 times annually and spend up to 20 days off-road—more than double that of a vehicle aged 2–3 years. Each breakdown results in lost productivity, missed or delayed service delivery, and often necessitates the use of costly short-term rental vehicles that are not equipped to the same operational standard, reducing overall efficiency and increasing risk.
- Outcome Sought 4: The core objective of the fleet replacement program is to maintain a reliable, available, and safe fleet that enables our operatives to meet service commitments without compromise. A proactive renewal strategy helps manage lifecycle costs, ensures operatives are supported with the right tools and vehicle

<sup>&</sup>lt;sup>2</sup> SGN-GD3-EJP-FLE-001, pg 10, Probability of Failure

 <sup>&</sup>lt;sup>3</sup> SGN-GD3-EJP-FLE-001, pg 15, Options Technical Summary Table
 <sup>4</sup> SGN-GD3-EJP-FLE-001, pg 18, Business Case Outline and Discussion

- specification, and reduces reliance on older, less efficient vehicles that impose an increasing cost and risk burden as they age. This is demonstrated by a 5 year replacement cycle.
- Financial and Efficiency Gains <sup>5</sup>: Of the options assessed a 5 year programme with leased EV has the lowest total cost at £161m over the length of the agreement. Although the 5-year cycle requires an additional £32.7m in capital investment compared to an 8-year cycle, this is substantially offset by multiple financial and operational benefits:
  - (i) £10m in higher residual values, as vehicles sold at 5 years achieve stronger market prices before deterioration in condition or value sets in. This is a core part of SGN's fleet model and choice to outright buy and subsequently sell vehicles once they have exhausted their use.
  - (ii) £15.2m in operational cost savings, through reduced maintenance costs and significantly lower reliance on short-term rental vehicles, which are both more expensive and operationally suboptimal.
  - (iii) In addition to the direct financial offsets, the operational benefits in safety, standards of service, and efficiency from newer vehicle reliability are likely to far exceed the increased investment requirement. Newer vehicles ensure fewer breakdowns, reduced repair times, and consistent support for critical field operations—especially during periods of high demand. These have not been included within the EJP financial assessment.
  - (iv) Our key priority is to maintain a reliable, available, and safe fleet that enables our operatives to meet service commitments without compromise. We also have increased expectations from our customers to maintain a younger fleet that supports improved environmental performance, reduced emissions (targeting a reduction of emissions from our fleet by 23% or 3,214tCO2e.<sup>6</sup>), and enhanced fuel efficiency. A modern fleet is more likely to be exempt from current and future government or local authority charges linked to ULEZ or clean air zones—costs which currently run into the tens of thousands of pounds annually and are expected to increase over GD3. While future policy developments remain uncertain, adopting a 5-year cycle is a proactive step to minimise potential exposure to such charges. These have also not been included in the EJP financial assessment.
- 18 We acknowledge the regulator's concern that other GDNs operate replacement cycles of 4 to 7 years at lower cost. However, our submission demonstrates that a 5-year cycle best meets the operational, safety, and financial requirements of SGN's fleet, reflecting the intensity of use, the critical nature of emergency response, and the added value in residuals and avoided cost. We have also not included the environmental benefits that the 5-year cycle introduces, as referenced above this would include a reduction of emissions from our fleet by 3,214tCO2e, which in turn would introduce further savings greater than £3 million when converted.

## 2.3.2 Local Gas Treatment

#### SGNQ5. Do you agree with our proposal to reject SGN's Local Gas Treatment PCD?

- 19 SGN strongly disagrees with the proposal to reject the Local Gas Treatment PCD. The existing LGT systems are over 25 years old and increasingly prone to failure. If not replaced, there is a real risk of un-odourised gas entering the network, a clear breach of GS(M)R and IGEM/SR/16, and a significant safety hazard. Un-odourised gas leaks are undetectable by smell, increasing the risk of fire, explosion, and harm to life and property.
- 20 The "do minimum" option was considered but deemed unfeasible, as SGN is subject to a Health and Safety Executive (HSE) improvement notice relating to the mechanical assets of the LGT systems. This enforcement action requires rectification of the identified issues.
- 21 The proposed replacement programme will eliminate these risks and ensure continued delivery of odourised gas in full compliance with regulatory standards. The investment also introduces zero-emissions odourisation systems, supporting SGN's wider Net Zero commitments.
- 22 SGN have identified the systems with which to carry out interventions by conducting various meetings with other stakeholders within SGN to align plans. This has assisted in identifying sites which are captured within other planned works to help to drive efficiency of delivery as all site work, both LGT associated and other planned

<sup>&</sup>lt;sup>5</sup> SGN-GD3-EJP-FLE-001, pg 20, Preferred Option Scope and Plan

<sup>6</sup> SGN-GD3-SD-01 EAP, pg 11, table 3

- works, can be conducted in one outage period as appose to multiple site outages to conduct the various differing
- 23 From a financial perspective, the preferred option offers excellent value, delivering a net present value of £49.95 million across both networks. This clearly demonstrates that the investment is not only the safest and most environmentally responsible option, but also the most cost-effective.
- 24 This proposal addresses SGN's statutory obligations and mitigates an unacceptable level of risk. Deferring or rejecting this investment would be contrary to industry best practice and public safety expectations.
- 25 To further support SGN's investment proposal, additional global asset data which was not presented in document SGN-GD3-EJP-E&I-003 has been provided in the appendix of this document SGN-GD3-DD-ENG-SD010- Local Gas Treatment document, which forms part of the overall response to SGNQ16. SGN-GD3-DD-ENG-SD010 also provides further engineering justification.

# **Chapter 3** Business plan incentive

#### 3.1 Stage A

SGNQ6. Do you agree with our view that SGN passed all of the minimum requirements and as such are considered to have passed Stage A of the BPI?

26 We agree that SGN met the minimum requirements and should be considered as having passed Stage A of the BPI.

#### 3.2 Stage B

SGNQ7. Do you agree with our assessment results for SGN against Stage B of the BPI?

- 27 We disagree with the assessment for SGN against Stage B of the BPI.
- 28 Firstly, the stage B of the BPI aimed to assess the efficiency and justification of costs submissions. It is designed in a way that creates a double penalty between the BPI and catch-up efficiency and places an unwarranted level of confidence in the cost assessment process. The proposed level of reward significantly favours networks operating in a single licence area and encourages optimism bias.
- 29 Secondly, neither the stage B assessment nor cost assessment process does not reflects the design inefficiencies that were include in some networks business plan and would result in a significant over-reward (as has been realised in GD2) if they are not corrected for. These have been set out in SGN's Overall Response, and the GDQ40.8 (banding mix and abandonment ratios).
- 30 Thirdly, errors in the application of the Stage B assessment (it is carried out against the GD2 efficiency assessment, rather than the GD3 efficiency assessment) have overstated the SGN Stage B penalty by £5.5m. Furthermore, accepted errors in the cost assessment mode have fundamentally change the reward prospects of NGN from significant reward to penalty, this level of volatility for such a material amount is inappropriate.
- 31 Finally, stepping back, the results of the Stage B assessment are not proportionate. This leads to a 7.97bps reduction of costs within an already significantly underfunded and overstretched totex package. This amounts to a c. £11m penalty, the equivalent to a £22m allowance reduction which would otherwise fund approximately 94km of repex Tier 1 work, all of which deliver important outcomes for our customers and network.
- 32 While we fully agree with the need for justified and efficient plans, we do not consider the scale of impact on operations to be justified or a proportionate balance of Ofgem's duties, including in light of the concerns set out.

#### Comparatively assessed costs (-8.06bps)

33 The comparative assessment methodology is based on using efficiency scores from the cost assessment process to determine if the costs put forward are justified and efficient. We have engaged consistently with Ofgem, through our response to the SSMD.9 consultation and in response to discussions at subsequent working groups,

 $<sup>^7</sup>$  SGN-GD3-DD-OD - SGN Draft Determination Overall Response  $^8$  SGN-GD3-DD-GD - GDN Question Responses (GDQ)

<sup>9 06.03.24 –</sup> SGN Cover Letter & Response to Overview Document – Confidential pdf, pg 53, para 7.32, submitted 3rd March 2024.

- to raise our concerns that the proposed structure did not deliver the intended design principles and to suggest adjustments to the approach.
- 34 In our response to the SSMD, <sup>10</sup> we set out our concern that the stage B assessment could increase a 'double penalty' by placing an unwarranted level of confidence in the accuracy of the cost assessment process and identified that the cost forecasts presented in GD2 that were disallowed through the benchmarking process nevertheless were realised in practice. We expanded on these concerns in response to a working group on the 11th April 2024.11, where we raised the concern that the BPI could introduce optimism bias at a time of particular market volatility, and that this penalty duplicates 'catch-up' efficiency and penalises companies for 'unexplained noise / error term' that exists in all cost assessment models.
- 35 The BPI proposals were re-presented to a working group on the 17<sup>th</sup> May 2024. We responded. 12 setting out our concerns that the design principles set out by Ofgem would not be delivered and proposed an adjustment to link the BPI to the Totex Incentive Mechanism, which would have directly addressed the risk of optimism bias. We have summarised our key points below. 13;
  - "1: A High reliance on benchmarking, particularly under a single model regime, undermines the incentive's ability to address information asymmetry which becomes indistinguishable from model accuracy, therefore principle 1 does not stand.
  - 2: The strong incentive to earn the Stage B cost reward could lead to unrealistic and unachievable cost forecasts, as the value of the reward may be greater than the cost of failing to achieve the submitted cost forecasts this could lead to gaming and therefore principle 3 does not stand.
  - 3: Information asymmetry is indistinguishable from forecast uncertainty and risk. It is not therefore possible to identify where there is genuine information asymmetry, and there is a significant risk of consumer harm if it is incorrectly identified, therefore, principle 1 does not stand."
- 36 We note, that Ofgem has maintained its reliance on a single model, despite taking a multiple model approach to ED. This increases the exposure to modelling error, noise and unexplained variances. Ofgem has no way to accurately distinguish between modelling error, forecast inaccuracy, reporting discrepancy and inefficiency to give confidence that a duplication of penalty to these factors has not taken place.
- 37 As we set out in our response to GDQ36, different models which are all equally valid can have very different impacts on the regression outcomes. The incentive is therefore not about whether a network is efficient or not, rather it is an assessment of whether its efficiency aligns with the choice of benchmarking model.

o have such a significant monetary value riding on the absolute accuracy of a theoretical value seems wholly inappropriate.

- 38 Furthermore, the scale of the stage B reward at 40bps is a significant financial benefit to networks that are operating in a single licence area; for networks that operate in two or more licence areas the incentive properties largely negate themselves. As reported within the DD position, NGN have achieved an award of 37.33bps for the comparative assessment. 14, which equates to approximately £21.2m over the 5 years after sharing. This is equivalent to a c.£50m outperformance in RIIO-GD3 awarded to them upfront. For context, this is equivalent to the total outperformance forecasts for the GD2 price control period, so presents a significant incentive to overstate the ambition within their plan. This creates a strong incentive for an unjustifiable optimism bias. 15 between what is bid within a business plan submission and what is actually needed to maintain and invest in assets. This was latterly referred to the 'invisible gap' within the Independent Water Commission's Report and was one of the reasons that led to the recommendation to withdraw the QAA (Ofwat's equivalent of the BPI). 16.
- 39 In addition, the BPI is not properly targeted at or consistent in its treatment of efficient and inefficient practices. At the draft determination, Ofgem identified concerns about the justification for some Tier 1 mains workloads forecasts submitted by GDNs in their business plan. 17. As set out in the overview document. It appears that some networks have included a level of inefficiency into their forecasts in a manner that would not be picked up in the

<sup>10 06.03.24 –</sup> SGN Cover Letter & Response to Overview Document – Confidential.pdf, pg 53, para 7.32, submitted 3rd March 2024.

<sup>&</sup>lt;sup>11</sup> 22-04-28 – SGN-OFGEM Letter Business Plan Incentive.

<sup>&</sup>lt;sup>12</sup> 10-06-28 – SGN-Ofgem 2<sup>nd</sup> Letter Business Plan Incentive. (please note the file name should have aligned with the date of the letter - 10<sup>th</sup> June 2024) <sup>13</sup> 10-06-28 – SGN-Ofgem 2<sup>nd</sup> Letter Business Plan Incentive. Annex – Assessment of business plan incentive stages.

<sup>&</sup>lt;sup>14</sup> RIIO-3 Draft Determination Overview Document, table 4, pg 55.

<sup>15 22-04-28 –</sup> SGN-OFGEM Letter Business Plan Incentive. (please note the file name should have aligned with the date of the letter - 28th April 2024)

<sup>&</sup>lt;sup>16</sup> Independent Water Commission Final Report, 21st July 2025, pg 209. Recommendation 21 and para 467

<sup>&</sup>lt;sup>17</sup> RIIO-3 Draft Determination Overview Document, para 5.220, pg 55.

- costs assessment models. This would provide them with a significant financial benefit in the event that those networks in practice operate in line with their historical average outturns. Meanwhile, the efficiency and justification of SGN's forecasts have not been recognised. In this scenario, we do not think it is appropriate that such networks should be considered for a business plan incentive reward while SGN's efficient costs are ignored, and the outcomes should be rebalanced.
- 40 Many of the concerns that we have expressed have not been addressed in the draft determination and we are concerned that the impact of Stage B has been to punish companies twice; once by disallowing companies' evidenced allowance requests, and then twice by penalising them for making that same request. This is disproportionate. Additionally, we note that the Independent Review of Water has identified a number of similar issues with the QAA approach in water and has made the explicit recommendation that the regulator should withdraw the QAA." 18.
- 41 It is crucial that Ofgem adjusts the Stage B methodology and its application accordingly in the light of;
  - (a) the recommendations set out by the Independent Review of Water,
  - (b) the concerns that set out above regarding the incentive properties and unintended consequences of the BPI,
  - (c) the concerns set out above, and through the rest of our responses regarding the robustness of the cost assessment methodology; and
  - (d) The concern that some networks may have presented an inefficient plan incorporating material design inefficiencies that would not have been picked up by the cost assessment methodology and one network received a material financial benefited from them during GD2.
- 42 It is our view that only those networks that have submitted demonstrably efficient plan (including design efficiency) should be eligible for a BPI reward. And that penalties should only be applied if there is absolute confidence in the quality of the model and it can be demonstrated that a different outcome could not be realised through an equally valid alternative model.

#### Bespoke Cost Assessment (+0.01bps)

- 43 The bespoke cost assessment qualitatively assessed certain costs on their own merits, rather than through the comparative process. Many of the technical assessments conducted on our bespoke costs received positive assessment or a neutral assessment. However, Welling PRS and Steel Services were called out for penalty.
- Welling PRS was penalised (-0.014 bps) for the inclusion of overheads. As set out in our response to SGNQ1, this is incorrect. Overheads are applied to all capex projects in line with our internal accounting policy for allocating overhead costs. There is no basis that we can ascertain as to why overheads applied to Welling PRS should be treated differently. When a direct enquiry was made no further explanation was provided. <sup>19</sup>. The decision therefore lacks the necessary transparency and consistency, and this penalty should be removed.
- 45 Steel services operating >7mb was penalised 0.003 bps in Southern and 0.038 bps in Scotland as it was considered that a more robust evidence base was required for MP and IP services including unit cost and volume. As set out in our response to SGN16, we have provided additional data, evidence and substantiation for those EJPs that have been challenged. This penalty should therefore be removed.

## 3.3 Stage C

#### SGNQ8. Do you agree with our assessment results for SGN against Stage C of the BPI?

46 Stage C of the BPI aims to the assess the quality of the company's business plans and considers the clarity of the business plan, and the ambition and credibility of its commitments.

#### Stage C - Clarity Assessment

<sup>&</sup>lt;sup>18</sup> Independent Water Commission Final Report, 21<sup>st</sup> July 2025, pg 209 https://assets.publishing.service.gov.uk/media/687dfcc4312ee8a5f0806be6/Independent\_Water\_Commission\_-\_Final\_Report\_-\_21\_July.pdf

<sup>&</sup>lt;sup>19</sup> Draft Determination Supplementary Question DDQ-SGN018

- 47 As we raised in our letter on 10<sup>th</sup> June 24.<sup>20</sup>, that networks operating in a more challenging economic environment will find it harder to pass both the quality and clarity assessment given the limited space to explain complex interactions. We also set out that those networks that need to explain more challenging regional factors and localised cost pressures will be more likely to be penalised in this assessment due to the space constraints.
- 48 Furthermore, we set out that those networks that advocated least for localised economic challenges and change in the cost assessment approach would be more likely to benefit from the assessment approach. As a result, this assessment risked duplicating the assessment carried out in Stage B with all the existing risks of unjustified and disproportionate double-penalties that Stage B entails.
- 49 The table below shows the results of the clarity assessment for the four gas distribution networks.

Table 4: BPI clarity assessment results							
Range	+/- 7bps						
SGN	-2.8bps						
Cadent	+4.2bps						
NGN	-1.4bps						
WWU	-2.8bps						

50 When comparing plans that were successful and unsuccessful at Stage C, the plans focusing on design and providing minimal evidence appear to be more successful compared to those that presented detailed explanations of changes to costs and workload at the network level, along with evidence and explanations on policy positions that differed with the regulator's SSMD position and offered solutions to issues raised.

#### **Stage C – Commitments**

51 The table below summarises the results of the assessment of the business plan commitments.

Table 5: BPI commitment assessment results								
	Infrastructures fit for low carbon transition	Secure and resilient supplies	High Quality Service from regulated firms	Total (Range +/-13 bps)				
SGN	+ 1.95 bps	-2.60 bps	-0.98 bps	-1.63 bps				
Cadent	+ 0.00 bps	-1.30 bps	+1.95 bps	0.65 bps				
NGN	+1.95 bps	+1.30 bps	+ 2.93 bps	6.18 bps				
WWU	0.00 bps	0.00 bps	-0.98 bps	-0.98 bps				

- 52 When considering the Stage C commitments, we are surprised at the some of the rationale provided.
- In the assessment of 'secure and resilient supplies', the risk of under-delivery was a constant theme and appears to be the determining factor in the decision to apply a penalty. The assessment called out challenges on the delivery of emergency standards and repex that SGN has experienced in GD2.
- 54 SGN have operated on the basis of full transparency in both of these aspects and looked to demonstrate that we have learnt lessons from and responded to the challenges experienced. We consider this important for maintaining consumer confidence in services that we provide and justifying the efficiency of our costs.
- 55 With repex, we specifically called out the risk of underfunding, competition within the market, and the regional factors that impacted our Southern licence area and the contrast to our Scotland licence area. This remains important evidence for the regulator to take into consideration when determining the efficient cost of operating in these respective network areas. In our 24/25 annual report, we have confirmed that PCD delivery is on track and repex delivery has recovered substantially from annual delivery of 470km in 23/24 to 658km in 24/25. As we

<sup>&</sup>lt;sup>20</sup> 10-06-28 – SGN-Ofgem 2<sup>nd</sup> Letter Business Plan Incentive. Annex – Assessment of business plan incentive stages.

- have explained, we have worked very hard to efficiently deliver our repex workload, but the efficient costs of doing so have been well in excess of the allowances provided for in GD2.21.
- 56 With the emergency standards, the GD2 experience was discussed in the SGN plan as we consider it is important to learn lessons and consider the implications for GD3. We note that another network that also failed the emergency response standard and did not look to reference this, received a rewarded in the same section. This inconsistency has not been justified.
- 57 Ofgem's concerns over the deliverability of these workloads in GD3 can be addressed by carefully considering the evidence SGN has provided as to the efficient costs of delivering works in its region and adjusting the allowances accordingly.
- 58 On this basis the penalty proposed appears to be support the perpetuation of the 'invisibility gap' referred to within the Independent Water Commission's findings and we note the significant reputational harm that has been incurred by SGN as a result through subsequent media scrutiny.<sup>22</sup> We consider that the penalty proposed in the draft determination is disproportionate and inappropriate.
- 59 In the assessment of 'high quality service from regulated firms', the assessment draws attention to two aspects, a lack of ambition in the number of vulnerable households supported and not proposing a common non-MOBs target.
- 60 The draft determination was correct to identify that SGN's target for GD3 is to support 650,000 vulnerable households, and that there is a direct comparison to the ~500,000 households currently supported in GD2 with 18 months to go. However, there was no recognition of Ofgem's stated position in the SSMD, which proposed "to return VCMA funding to its original RIIO-GD2 level but updated to current prices - approximately £74m (2023/24 price base)". 23 which equates to a 65% cut in funding. While we advocated for greater funding to support vulnerable customers, our commitment was made in line with the SSMD funding proposal. Increasing our commitment against a proposed 65% cut in funding remains highly ambitious.
- 61 With regards to not proposing a common non-MOBs target, we explained within our business plan that this would not take into account regional attributes that impact the time taken to undertake repairs in the Southern region due to exogenous productivity factors.
- 62 Again, we have similar concerns to those set out above in the assessment of the 'high quality service from regulated firms' and believe that the penalty is disproportionate and inappropriate, resulting in SGN being punished twice, once by Ofgem's SSMD proposed approach to funding, and then again for submitting a Business Plan that reflects the inevitable realities on the grounds of those proposed funding cuts.
- 63 Stepping back, the results of the Stage C assessment are again, as with Stage B, disproportionate. This leads to a 4.43bps reduction a penalty of £6.2m which is equivalent to a loss of totex allowances of £12.4m within an already significantly underfunded and overstretched totex package which delivers important outcomes for our customers and network. This is equivalent to 55km of Tier 1 repex delivery across Southern and Scotland.
- 64 While we fully understand the importance of clear, high quality and ambitious plans, we do not consider the scale of penalty to be justified or a proportionate balance of Ofgem's duties. This includes the concerns identified above, as well as in relation to Ofgem's assessment of clarity where penalties are again disproportionate when measured against the cost for works for customers, particularly absent specific guidance that excludes content pages and cover pages within page counts.

# **Chapter 4** Managing Uncertainty

#### 4.1 EAP: Remote Pressure Management Strategy

SGN09. Do you agree that SGN's Remote Pressure Management Strategy proposal should not be eligible for NZARD funding, and instead should be funded through baseline allowances?

<sup>&</sup>lt;sup>21</sup> SGN-GD3-DD-OD, SGN Draft Determination Overall Response, pg13

<sup>&</sup>lt;sup>22</sup> https://utilityweek.co.uk/sgn-incurs-hefty-penalty-for-long-winded-business-plan/ <sup>23</sup> RIIO-3 Sector Specific Methodology Decision – GD Annex, para 4.44, pg 57

- 65 SGN partially agree with the decision to not approve funding through NZARD for the proposed GD3 expansion of Remote Pressure Management installations across South London and the South-East and instead should be funded through baseline allowances.
- 66 However, the following key areas must be addressed prior to final determination:
  - On further review of the detail contained within draft determinations, it appears that there has been no award of funding to complete the proposed Remote Pressure Management project through baseline allowances. SGN would appreciate clarity on Ofgem's actual 'minded to' approach for Remote Pressure Management in GD3, and confirmation that the funding alluded to within SGNQ 09 (above), has actually been approved; and
  - SGN require confirmation that the funding through baseline allowances or the PCD will be technically assessed by Ofgem.
- 67 As stated in EJP (Section 2: Executive Summary; paragraph 3)
  - "These networks, and South London in particular, contain an array of diverse District Governor configurations with associated engineering challenges related to installation. SGN are confident that the equipment is flexible enough to overcome these complications but there remains a risk of certain sites being unsuitable for the technology. This will be determined through comprehensive site surveys prior to commencement but SGN maintain that the NZARD UIOLI mechanism is more suited to such a proposal."
- 68 SGN's comprehensive response to the proposed design of NZARD UIOLI for RIIO-3 is detailed in OVQ 15, but to summarise, SGN would argue that either the projects that are over the £2m cap set within the NZARD UIOLI mechanism need to be kept within baseline expenditure but technically assessed, or they should be kept within UIOLI framework, and the governance suitably adjusted. Alternatively, the threshold for a PCD could be lowered to enable them to be delivered as a PCD.
- 69 Our preference is that the UIOLI governance framework should be updated, and the sums added to the UIOLI allowance, as we believe that this provides the transparency that is requested from our customers and stakeholders, without introducing the additional reporting burden of a PCD. Failing this then it is essential that the projects are technically assessed and not assessed though the benchmarking methodology.
- 70 As stated in the Executive Summary, SGN would request clarity on Ofgem's 'minded to' position, as reflected in SGNQ 09, and seek assurance that the £11.22m proposal to install Remote Pressure Management systems in GD3 will be funded through baseline allowances, as this currently appears not to be the case. We also discuss within GDQ36 the importance that Remote Pressure Management is technically assessed due to the bespoke nature of this project within GD3 compared to other networks.

## 4.2 EAP: Intelligent Gas Grid (IGG)

# SGNQ10. Do you agree that SGN's Intelligent Gas Grid proposal should not be eligible for NZARD funding?

- 71 SGN disagrees with Ofgem's decision to determine Intelligent Gas Grid unsuitable for funding prior to the Strategic Innovation Fund (SIF) project completion whilst understanding the project cost is above Ofgem's materiality cap of £2m.
- 72 An early start to this project in GD3 is key to successful delivery and realisation of maximum benefit for the customer, therefore, if Ofgem remain committed to funding IGG through NZASP on completion of the SIF, SGN would strongly advocate for an early re-opener window, to enable swift and uncomplicated access to required funding in the initial weeks and months of the new price control period.
- 73 In summary, SGN propose the following:
  - Utilise NZARD UIOLI for initial enablement and preliminary work; and
  - Utilise the NZASP Reopener for the full implementation of the solution.
- 74 In the Business Plan submission, SGN requested £7.1m to upgrade all remaining sites from the ongoing GD2 Remote Pressure Management PCD, alongside 317 sites in South London and 120 sites in South-East, to the IGG Intelligent Control software. This was the preferred option within the EJP, but also the 'Do More' option, as the proposal looked to upgrade 100% of existing and planned installations.

- 75 The 'Do Less' option within the EJP could potentially allow a smaller scale rollout at the beginning of GD3, funded through NZARD. SGN could upgrade 150 of the District Governor sites installed with Remote Pressure Management systems through the GD2 PCD, for £1.9m (project costs remain below the £2m materiality cap). SGN could then, on completion of the current IGG SIF project, submit a proposal to upgrade any new Remote Pressure Management sites, through the NZASP Re-opener.
- 76 Details of the revised workload and costs for the proposed 'Do Less' option can be seen in Table 8 and Table 9, below.

Table 6: Revised Intelligent Gas Grid Workloads – Do Less Option								
WORKLOAD	2026/27	2027/28	2028/29	2029/30	2030/31	GD3		
GD2 PCD	75	75	0	0	0	150		

Table 7: Revised Intelligent Gas Grid Costs – Do Less Option (23/24 Prices)									
COSTS (£m)	COSTS (£m) 2026/27 2027/28 2028/29 2029/30 2030/31 GD3								
GD2 PCD 0.94 0.94 0 0 0 1.88									

- 77 We also note in the Draft Determination.<sup>24</sup> Ofgem's position on several proposals submitted by SGN in its draft Business Plan to be funded under the NZARD UIOLI allowance (that have now been directed to utilise other mechanisms due to these activities exceeding the maximum threshold of £2m for NZARD or disallowed.
- 78 Whilst we appreciate the threshold of £2m was applied in GD2 for the NZARD UIOLI, however, in GD2 the threshold for a PCD was significantly lower with some projects such as biomethane improved access roll-out being set as PCD even though it has a value of £3.5m in Scotland. With the extension of the PCD cap to £15m, we think that there is a gap for the deployment of known innovation projects, that are strongly supported by customers and sit between the £2m NZARD UIOLI cap and the £15m threshold.
- 79 The proposal within the draft determination is to move these costs into baseline funding, however, this option only works if the projects are technically assessed and are not included in the benchmarking cost assessment models (which they are currently).
- 80 By including them in the benchmarking cost assessment model, there is not an appropriate cost driver that reflects the additional workload being undertaken and as a result the additional cost will simply be reflected as an inefficiency.
- 81 This gives rise to three points of inappropriate penalty. Firstly, the funding requested to deliver an output that is supported by customers is removed and identified as catch-up efficiency. Secondly, SGN is then penalised through the business plan incentive for having an ambitious plan that looks to deploy innovation and demonstrate its deployment. Finally, it causes SGN reputational damage, as we are unable to deliver a project that at face value appears to have been accepted and ruling out appropriate funding in future price control periods on the justifiable but incorrect assumption that it has already been funded.
- 82 As a result, either the projects that are over the £2m cap set within the UIOLI cap need to be kept within baseline expenditure but technically assessed, or they should be kept within UIOLI framework and the governance will need to be adjusted, alternatively the threshold for a PCD could be lowered to enable them to be delivered as a PCD.
- 83 Our preference is that the UIOLI governance framework should be updated, and the sums added to the UIOLI allowance, as we believe that this provides the transparency that is requested from our customers and stakeholders, without introducing the additional reporting burden of a PCD. Failing this then it is essential that the projects are technically assessed and not assessed though the benchmarking methodology.
- 84 SGN's comprehensive response to the design of NZARD UIOLI for RIIO-3 can be found in OVQ 15. For further Engineering justification please refer to document SGN-GD3-DD-ENG-SD006.

<sup>&</sup>lt;sup>24</sup> RIIO-3 Draft Determination – SGN, Chapter 3, para 3.3

## 4.3 Biomethane improved access rollout

SGNQ11. Do you agree that SGN's Biomethane improved access rollout proposal should not be eligible for NZARD funding, and instead should be funded through baseline allowances?

- 85 SGN partially agrees that the Biomethane Improved Access proposal should be funded through baseline allowances. However, SGN require confirmation that the funding will be technically assessed by Ofgem. This approach reflects the strategic nature of the rollout and aligns with the intent of providing enduring network access improvements for biomethane connections.
- This funding route provides greater certainty for delivery and reflects the systemic benefits of unlocking biomethane capacity across the network. It also avoids the uncertainty and delay that could arise from competitive innovation funding processes, enabling SGN to proceed with timely and efficient rollout plans.
- 87 The costs for the project must be separated out and should be technically assessed. This approach provides greater transparency for customers and stakeholders. We discuss this further within our response to GDQ36.
- 88 If this is not technically assessed and maintained within Totex allowances as a stand-alone this could be seen as an inefficiency as there is no appropriate driver to reflect the workload. If this is not to be technically assessed then it should either be included within the NZARD UIOLI, if this is the case then the governance would need to change due to the overall cost, or it should be separated out as its own PCD.

# 4.4 Statutory Independent Undertakings (SIU) decarbonisation (design costs)

SGNQ12. Do you agree that, in its current form, SGN's SIU decarbonisation (design costs) proposal should not be eligible for NZARD funding?

- 89 SGN agrees that in its current form the SIU decarbonisation design costs should not be eligible for NZARD funding.
- 90 SGN proposes that these shall be run independently rather than as a combination, with both expected to fall significantly under the NZARD project £2m cap. SGN will engage with Ofgem whilst we transition through to Final determination with a view to providing updated costs when available.
- 91 It is expected that once we have greater certainty over costs and scope that these projects will be eligible for funding through NZARD.

#### 4.5 Other Distribution Mains and Services

SGNQ13. Do you agree with our proposal to reject SGN's submitted Other Distribution Mains and Services Re-opener?

- 92 We strongly disagree with the draft determination position to reject a re-opener to cover the impact of the Advanced Leakage Detection (ALD) rollout from either a mains repair or replacement perspective. Whilst we agree that any additional mains replacement can be picked up through the NARM mechanism, we need to recognise that the outputs from reaping the benefits of ALD may cause an increase in repair activities that has not been accounted for in business plans.
- 93 In our business plan submission, we flagged that there was uncertainty on the impact of ALD on our asset management process. We were concerned that in a few areas we could see considerable additional leaks detected, which would result in repairs and a realisation that the main was in worse condition than originally understood. The greatest area of concern was on mains that were not at risk, i.e. beyond 30m, where typically they are subject to less public scrutiny.
- 94 In our response to SGNQ16, we have stated that we would not be looking to re-forecast our Iron >30m workloads, as we don't have a basis for a re-forecast. We also agree that the NARM mechanism can be used to account for additional mains replacement, but this doesn't account for the uncertainty in the number of mains repairs. Please see the response to SGNQ13 for more information on our response in this area.

95 For further Engineering justification please refer to document SGN-GD3-DD-ENG-SD017.

## 4.6 River and Coastal Erosion - Asset Intervention Strategy

SGNQ14. Do you agree with our proposal to reject SGN's request for a bespoke River and Coastal Erosions - Asset Intervention Strategy re-opener?

- 96 SGN welcomes Ofgem's recognition of the increasing risks to our pipelines from the river and coastal erosions and inclusion of funding to address the issue. As part of our submission, SGN considered a separate, dedicated funding mechanism that would be more appropriate given the forecasted workload and scale of interventions expected in RIIO-GD3. However, if the common Diversions and Loss of Development Claims re-opener can adequately cover all identified and future river and coastal erosion projects, we are comfortable with this approach.
- 97 Through RIIO-GD2, the completed interventions were heavily associated with the high rainfall associated with recent storms e.g. Storm Babet. For RIIO-GD3, SGN intend to undertake a prioritised programme of river crossing surveys for areas that follow known storm paths. This will be in addition to the existing survey programmes as defined through SGN policies SGN/Maint/14 and SGN/Maint/15 (see section 5.2 of the EJP).
- 98 Identified issues will be risk assessed and prioritised for intervention. SGN estimate that they will need approximately 12 significant interventions per annum in Scotland, and 7 interventions per annum in Southern. It is also expected that a number of minor preventative interventions will be required, and these are intended to be completed in the scope of the forecast workload and costs (see Section 10.2 of the EJP).
- 99 At the time of submission (December 24) SGN had completed 13 interventions throughout RIIO-GD2 to protect against the effects of river and coastal erosion. The nature of each individual intervention is unique to the circumstances found i.e. nature of the erosion, the varying risk to SGN pipes, the length, size and pressure tier of the pipe at risk, minimising the impact to the watercourse etc. As such there was significant variance in the cost of the 13 individual projects, however the average cost over the total expenditure of £1.3m was £100,050 (see Section 10.2 of the EJP) which was deemed an appropriate estimate of a one off job. The total programme expenditure of £12.47m was a projection based on the forecast volumes over RIIO-GD3 (see Table 6 in section 10.2 of the EJP) at an average cost of £131,263 (£100,050 per intervention + overheads).
- 100 The uncertainty of these above variable intervention costs was a consideration in requesting funding through a dedicated funding mechanism River and Coastal Erosions Re-opener. However, if all currently identified and future projects can be fully accommodated within the existing Diversions and Loss of Development Claims re-opener, we are satisfied with this approach and consider it a practical way to manage the risk.
- 101 Please see our response to GDQ24 where we also make reference to a known diversion at Brechin with a full cost of £2.55m
- 102 For further Engineering justification please refer to document #SGN-GD3-DD-ENG-SD007.

## 4.7 South London Medium Pressure Re-opener

SGNQ15. Do you agree with our proposal to reject SGN's request for a bespoke South London Medium Pressure Re-opener?

- 103 With a PCD being proposed to cover the South London MP programme, we agree that the re-opener is no longer required.
- 104 This is detailed in our response to question SGNQ3 which identifies key considerations.
- 105 Our programme was not ready at the point of business plan submission; this is why we proposed a re-opener. Work undertaken since has both moved our understanding on, notably around stakeholder engagement, but also raised additional issues that need to be accounted for.
- 106 We have flagged that there needs to be sufficient scope to tackle emerging problems and respond to stakeholder needs. Additionally, our costing was not mature enough for a full submission and did not include a full account of project management (overheads) and streetworks costs.

# **Chapter 5** Cost of service

## 5.1 Engineering assessment of SGN's business plan

#### SGNQ16. Do you agree with our engineering assessment of SGN's RIIO-3 Business Plan?

- 107 SGN strongly disagrees with Ofgem's engineering assessment, where there has been a rejection of the workloads.
- 108 We have been engaging with engineering teams throughout the process, and we have provided additional data, evidence and substantiation for those EJPs that have been challenged.
- 109 Please see below list of appendices documents to support our response to the engineering challenges posed as part of the Draft Determination SQ16.

#### SGN-GD3-EJP-DST-001 Advanced Methane Detection Strategy

- 110 Please see Appendix 1 with reference SGN-GD3-DD-ENG-SD001 for our full engineering response.
- 111 In addition, please also see GDQ02 and GDQ44 for further response information.

#### SGN-GD3-EJP-DST-002 Steel Services Operating above 75mb

112 Please see Appendix 2 with reference SGN-GD3-DD-ENG-SD002 for our full engineering response.

#### SGN-GD3-EJP-DST-003 Overbuilds

- 113 Please see Appendix 3 with reference SGN-GD3-DD-ENG-SD003 for our full engineering response.
- 114 In addition, please also see GDQ24 for further response information.

#### SGN-GD3-EJP-DST-004 Multi-Occupancy Buildings

- 115 Please see Appendix 4 with reference SGN-GD3-DD-ENG-SD004 for our full engineering response.
- 116 In addition, please also see GDQ22, GDQ31, GDQ41 for further response information.

#### SGN-GD3-EJP-DST-005 General Reinforcement

- 117 Please see Appendix 5 with reference SGN-GD3-DD-ENG-SD005 for our full engineering response.
- 118 In addition, please also see GDQ26 for further response information.

#### SGN-GD3-EJP-DST-006 Intelligent Gas Grid (IGG) Strategy

- 119 Please see Appendix 6 with reference SGN-GD3-DD-ENG-SD006 for our full engineering response.
- 120 In addition, please also see SGNQ10 for further response information.

#### SGN-GD3-EJP-DST-008 River and Coastal Erosion - Asset Intervention Strategy

- 121 Please see Appendix 7 with reference SGN-GD3-DD-ENG-SD007 for our full engineering response.
- 122 In addition, please also see SGNQ14 and GDQ24 for further response information.

#### SGN-GD3-EJP-DST-010 Pressure Management Maintenance

123 Please see Appendix 8 with reference SGN-GD3-DD-ENG-SD008 for our full engineering response.

#### SGN-GD3-EJP-E&I-002 Functional Safety

124 Please see Appendix 9 with reference SGN-GD3-DD-ENG-SD009 for our full engineering response.

#### SGN-GD3-EJP-E&I-003 Local Gas Treatment

- 125 Please see Appendix 10 with reference SGN-GD3-DD-ENG-SD010 for our full engineering response.
- 126 In addition, please also see SGNQ05 for further response information.

#### SGN-GD3-EJP-G&I-002 Governors Other

127 Please see Appendix 11 with reference SGN-GD3-DD-ENG-SD011 for our full engineering response.

#### SGN-GD3-EJP-G&I-003 Network Integrity

128 Please see Appendix 12 with reference SGN-GD3-DD-ENG-SD012 for our full engineering response.

#### SGN-GD3-EJP-G&I-005 R6 Governors

129 Please see Appendix 13 with reference SGN-GD3-DD-ENG-SD013 for our full engineering response.

#### SGN-GD3-EJP-LTS-007 Preheating Replacement Programme

130 Please see Appendix 14 with reference SGN-GD3-DD-ENG-SD014 for our full engineering response.

#### SGN-GD3-EJP-RPX-001 Bulk Service Replacement

131 Please see Appendix 15 with reference SGN-GD3-DD-ENG-SD015 for our full engineering response.

#### SGN-GD3-EJP-RPX-002 Cams Hall

132 Please see Appendix 16 with reference SGN-GD3-DD-ENG-SD016 for our full engineering response.

#### SGN-GD3-EJP-RPX-003 Other Distribution Mains and Services

133 Please see Appendix 17 with reference SGN-GD3-DD-ENG-SD017 for our full engineering response.

134 In addition, please also reference SGNQ13, GDQ05 for further response information.

#### SGN-GD3-EJP-SIU-001 Wick and Thurso SIU- Compressed Biomethane (CNG)

135 Please see Appendix 18 with reference SGN-GD3-DD-ENG-SD018 for our full engineering response.

# **Chapter 6** Innovation

## 6.1 Level of Network Innovation Allowance (NIA) funding

## SGNQ17. Do you agree with the level of proposed NIA funding for SGN?

- 136 SGN strongly disagrees with the proposed funding levels and requests the reinstatement of £14.55m in NIA funding, as well as a reconsideration of the business plan incentive score. Our justification for the reinstatement of the NIA funding is found below.
- 137 However, we recognise the concerns that have been presented in the draft determination and appreciate the subsequent engagement that we have had with the team in Ofgem to clarify their expectations. We welcome the opportunity to resubmit further evidence to support our position as part of this draft determination response.
- 138 In the section below, we have set our more clearly defined expectations and a greater level of detail surrounding the plans that we presented in our business plan.<sup>25</sup>.
- 139 In the light of this additional information, we request that NIA funding of £29.65m is granted and awarded as part of the final determination.
- 140 SGN also requests that given this additional information, the business plan score adjustment of 56% that was applied at the draft determination is now removed.
- 141 In the response to this question, we have set out;
  - (i) How we have understood our customer needs
  - (ii) Our updated funding request
  - (iii) The alignment with totex funding
  - (iv) How we will deliver our innovation activities
  - (v) The values and benefits our innovation activities will deliver
  - (vi) How the revised funding request builds on and complements innovation in GD2 and GD1
  - (vii) How we will collaborate with our peers and avoid duplication
  - (viii) How we will enhance the dissemination of information
  - (ix) How we will roll out and deploy innovation

<sup>&</sup>lt;sup>25</sup> SGN-GD3-SD-05 Innovation Strategy

#### (i) How we have understood our customers' needs

- 142 SGN is committed to supporting the Scottish and UK Governments' objectives to meet net zero by 2045 and 2050 respectively. Furthermore, SGN's targeted investment in innovation is a direct response to delivering the expectations of both Ofgem and our stakeholder and customer engagement groups, the latter of whom prioritised innovation to net zero as a key component of our business plan. The depth of understanding our customer needs was set out in our business plan and innovation strategy <sup>26,27,28</sup>. Our innovation strategy was a particular area of interest for our ISG, and we benefited significantly from their ongoing and constructive input in supporting us to realise the strongest customer insights.
- 143 SGN's proposed NIA investment is directly commensurate with our ability to deliver to these expectations. Without a suitable level of innovation funding during a time of such uncertainty, SGN will be unable to deliver the full range of customer benefits associated with maintaining a resilient network and supporting the transition to low-carbon alternatives.

#### (ii) Our updated funding request

144 SGN makes the following updated NIA request (see Table 10 below) which seeks reconsideration from Ofgem on its workstream adjustments, as set out in detail throughout section 1 'workstream adjustments'. We review each of these in the section below, to provide the clarity the draft determination identified as missing from the original submission.

able 8: SGN's updated NIA funding request summary						
NIA Theme	Updated request	Workstream	Workstream request	Sub-workstreams	Sub- workstream request	
Today	£1.25m	BAU innovation	£0.75m	-	£0.75m	
		Scouting/ Fast Follower	£0.5m	-	£0.5m	
Network Transition	£19.3m	Greening the network	£6.5m	Operational readiness	£4.4m	
				Real-time settlement methodology implementation	£2.1m	
		Whole system approach	£6.8m	Digital solutions	£3.8m	
				Whole system decommissioning interoperability considerations	£2.5m	
				Regulatory and policy change framework mapping	£0.5m	
		Mobs Transition Pathways	£6m	-	£6m	
Future	£9.1m	Future network strategy (*)	£4.1m	Asset management and reuse	£2.3m	
				Customer focus	£0.2m	
				Alternative heat	£1.2m	
				Whole System Energy	£0.4m	
		Decommissioning	£5m	-	£5m	
Total	£29.65m		£29.65m			

<sup>(\*)</sup> This updated ask removes the £0.5m request for I&C Decarbonisation, £0.2m request for CCUS, and the £0.2m request for Transport, in line with Ofgem's DD view.

#### Today's network:

145 In the draft determination, the funding for Today's Network was reduced from £1.25m to £0 on account of this funding request being unnecessary given the reinstatement of the SIF discovery phase.<sup>29</sup>.

<sup>&</sup>lt;sup>26</sup> SGN-GD3-SD-05 Innovation Strategy, Dec 25, Section D pg 10-13,

<sup>&</sup>lt;sup>27</sup> SGN-GD3-SD-12 Stakeholder Engagement and Decision log, lines 14 to 23 and line 36 to 46. <sup>28</sup> SGN-GD3-BP-00 SGN RIIO-GD3 Business Plan Final, Dec 25, section 7.3

<sup>&</sup>lt;sup>29</sup> RIIO-3 Draft Determinations – SGN, July 25, para 6.5

- 146 We do not agree that there is an overlap. Our 'Today's Network' request is based on two innovations streams (i) BAU Innovation and (ii) Fast Follower innovation. These are set out below and neither would be eligible for SIF discovery phase, which is focused on large scale, disruptive, strategic projects rather than smaller scale, low cost, early development project.
- 147 We believe these projects are more appropriate for the NIA, as the NIA is flexible and not directly timebound by bid phases. This allows us to test, evaluate, and scale real-world solutions. NIA also better allows for more formal learning outputs, and active knowledge transfer via a wide range of external stakeholder groups and shared innovation platforms.

#### 148 Today's Network - BAU Innovation (£0.75m):

SGN's request is based on a £150,000 a year driving opportunity in developing, testing and trialling new technology in these three areas:

- Safety: targeting safe, secure, and resilient networks, with innovation projects aimed at improving operational safety and customer protection, including vulnerable customers.
- Efficiency: process and system changes designed to accelerate the deployment of innovation and network upgrades aiming for zero emissions and minimising downtime and disruption.
- Sustainability: sustainable and efficient resource use to minimise waste and pollution.
- 149 This funding is important as it allows us to move at pace and support the broader innovation eco-system. In our experience the particular beneficiaries are in relation to third party innovators and Small-Medium Enterprises (SMEs).30 who are able to benefit from the rapid access to funding to enable progress with innovations avoiding supply chain challenges and delays.
- 150 Through GD2 we have delivered projects collaboratively with over 115 project partners, over 90 of these have been delivered with SMEs. Removal of the proposed NIA in this area will significantly reduce any opportunity to see similar success to the innovative work SGN have delivered in GD2 again in GD3 as well as a risk that the third party innovators and SMEs will focus on developing new technologies in other sectors. This level of agility is not available under SIF discovery due to accessibility based on themes and the overall mechanics of the framework.
- 151 Notable examples of innovation work that have delivered in this area in GD2 includes:
- Expanding the use of keyhole technology.31, enabling us to carry out essential gas works through small, targeted excavations. SGN's innovative approach has delivered tangible benefits such as reducing disruption to communities limiting our time working in roads reducing congestion, improving safety and efficiency, and significantly lowering our environmental impact by cutting spoil sent to landfill while also saving £5k per operation.
- SGN have successfully deployed Stent Bag system.<sup>32</sup> across all regions, increasing environmental benefits, reduced methane leakage, and the safety of our operatives and general public while reducing gas repair work.
- SGN core and vac vehicles which have now scaled to four fully operational units that will bring £12-15m savings over there of 5-7 years lifetime demonstrating how targeted innovation initially from NIA can move rapidly into business-as-usual.
- 152 These innovations have been recognized through UKSTT and IGEM awards. At the 2025 IGEM Gas Industry Awards, SGN won Product of the Year for the Stent Bag.33, developed with Sarco Stopper and would not be eligible under the SIF discovery phase.

#### Today's Network - Scouting/Fast Follower projects (£0.5m):

153 SGN are seeking funding to sustain our structured innovation scouting programme that tracks emerging technologies through supplier engagement, cross-sector research, and collaboration with academia and start-ups. A small team leads targeted campaigns to identify practical solutions (TRL 6-8) that align with SGN's goals for safety, environmental benefits, resilience, and sustainability.

Next-generation Core & Vac fleet reaches UK roads | SGN Your gas. Our network.
 Safely reducing gas emissions | SGN Your gas. Our network.
 We're winners at this year's IGEM Awards | SGN Your gas. Our network.

- 154 This funding is important to enable a broader innovation network identifying innovations that can be brought in from beyond the gas distribution sector, strengthening our ability to adopt new technology other sectors both within the UK and internationally. Without such funding, the pool of information becomes smaller, there is a higher risk that we don't capitalise or reinvent improvements from other sectors.
- 155 In GD2, SGN trialled over 50 fast-follower projects, with 32 progressing to formal network approval. A prime example where SGN partnered with FYLD to co-develop an Al-driven safety model incorporating historical incident data, human behaviour cues, and real-time environmental inputs (weather, traffic, voice analysis, object detection) to predict and prevent risks across job sites. This project progressed into a SIF beta where the aim is to deliver a solution that will reduce incidents and near-misses by ~20% and enables dynamic, real-time risk scoring with tailored interventions before hazards materialize. This proven pipeline of rapid pilots demonstrates the value and scalability of the scouting programme.

#### **Network Transition:**

- 156 The draft determination reduced the funding for the Network Transition workstream from £19.25m to £5.95m, this was on the basis that the NIA was not considered the most appropriate route for further work relating to future of gas and hydrogen.<sup>34</sup>.
- 157 We do not agree with the reasoning provided for the reduction in allowances, as we set out below the network transition innovation workstream is about energy resilience providing flexible options to support the wider transition to a greener gas network or alternatives by enabling rapid adaptation to policy changes and delivering optimal net zero solutions for consumers.
- 158 Our 'Network Transition' request is based on three innovations streams (i) Greening the Network, (ii) A Wholesystems Approach, and (iii) Multi-occupancy Buildings and we ask for the full reinstatement of £19.3m.

#### Network Transition - Greening the Network (£6.5m):

- 159 The request to reinstate allowances for 'Greening the Network' is dues to two project streams the first is operation readiness (£4.4m) and secondly for developing real time settlement methodology (£2.1m).
- Operational Readiness: Regardless of the source of greengas, as a network, we need to be ready to support the
  connection of greengas production facilities to our network in the most cost effective and efficient manner to
  minimise the cost to the consumer of greengas. This workstream focuses on the design and implement a futureready framework for green gas integration, including standardised connection agreements and modular design
  parameters. This will enable safe and efficient network operational capability through dynamic, data-driven
  network control systems.
- Real time settlement: As greengases increase their contribution to net zero, and to limit the negative impacts of propanation to bring all greengases to an equivalent calorific value for billing purposes it is important that we are able to move to a billing system that enables a real-time settlement methodology for greening the network. In achieving this it will allow networks to empower fair and accurate billing by reflecting real-time gas composition, including unpropanated biomethane blends, to unlock the ability to introduce blends by overcoming current billing constraints, to support regulatory and market evolution by aligning with anticipated GS(M)R changes and Network Entry Agreements, improve constraint management across electricity and gas systems.
- 160 This workstream looks to limit delays in connecting new producers to the network, by standardising designs and accelerating processes that support greengas injections and increasing the potential to roll out unpropanated biomethane and ensure accurate billing for new green gases. Without funding through the NIA, these opportunities will be harder to explore and develop. The NIA funding supports fast collaboration with other partners and helps accelerate green gas adoption in line with government targets. Progress in delivering green gases in the network, and intelligent billing as shown in SGN's GD2 RTSM. To project and the clear opportunities to cut CO<sub>2</sub> emissions and deliver customer benefits.
- 161 In GD2 we delivered a number of projects in this area, examples of two are given below
- The Biomethane Islands project is an important case study of SGN's biomethane innovation work. This project
  has established the business case for the optimisation of biomethane injection and formation of biomethane
  islands across the UK's gas network. This initial feasibility study addresses key areas including regulatory,
  technical, environmental, social, and commercial aspects as well as comprehensively assess the viability of

<sup>&</sup>lt;sup>34</sup> RIIO-3 Draft Determinations – SGN, July 25, para 6.5

<sup>35</sup> The RTSM programme | SGN Your gas. Our network.

- developing Biomethane Islands. This project will help support strategic decision-making regarding the development and adoption of Biomethane Islands for both GDNs and the wider energy industry. <sup>36</sup>
- The Real Time Settlement Methodology project serves as a pivotal example of SGN's innovation in green gas blending. Traditionally, the FWACV framework applied an average calorific value (CV) to all customers across a charging area, resulting in billing inconsistencies those receiving gas with a higher CV were undercharged, while others were overcharged for gas with a lower CV. Regulatory measures such as GS(M)R and GCoTER placed caps on daily charging CVs, restricting any significant deviation from the lowest source CV. With the increasing injection of green gases into the network, these legacy methods would create amounts of unbilled energy, which suppliers would later recover through higher bills. Customers located near sources of green gas would be particularly affected, as the typically lower CV of such gases requires higher volume usage, potentially leading to further increases in their bills. To address these challenges, SGN has developed a flexible settlement and billing solution designed to more accurately charge customers within a multi-gas system, minimising discrepancies and ensuring fairer outcomes across the network. 37

#### Network Transition - Whole System Approach (£6.8m):

- 162 The draft determination suggested to remove the innovation stimulus of £6.8m for whole system energy planning, as it was considered to be duplicative with the work NESO will be developing as part of its Regional Energy Strategic Planning. To clarify, the purpose of SGN's 'Whole System Approach' funding request is to complement and not duplicate NESO's RESP programme as well as complement the work of other actors in the energy system transition such as local government or LAEPs as they develop their decarbonisation strategies.
- 163 The whole system approach is necessary for meeting the NESOs requirements, considering the recent Licence Condition obligations for networks to provide intelligence to each of the RESP areas, eight in SGNs case, they interact with in a timely manner. This includes energy system data, documents, records and reports, as well as adhoc requests. It should also be noted that the development of our whole system approach is relevant not only to NESO and RESP but with local government and Local Area Energy Plans (LAEPs), playing a critical role in developing a bottom-up approach in the transition to net zero. We have therefore requested the reinstatement of the £6.8m ask.
- 164 Our 'Whole System Approach' is based on three innovation streams (i) developing new digital data acquisition systems, (ii) addressing whole-system interoperability and decommissioning needs, and (iii) regulatory policy change and framework mapping. These are set out below;
- Developing new digital data acquisition systems (£3.8m): Recognising the limitations of existing infrastructure, there is a pressing requirement to design and build entirely new digital data acquisition systems. SGN needs to build new digital platforms to overcome legacy limitations and provide essential intelligence for NESO, RESPs, and stakeholders. NIA funding will support the creation of advanced sensors and data platforms, enabling effective management of gas flows and green gas volumes. These systems will deliver the flexibility and detailed information required for the evolving energy network.
- Addressing whole system interoperability and decommissioning needs (£2.5m): Our NIA funding proposal will
  enable us to develop the management methodologies and interlinked digital bridging platforms for greater whole
  system interoperability and controlled decommissioning. These platforms will centralise real-time network data
  for efficient asset monitoring and proactive maintenance, support planning for infrastructure decommissioning,
  and enhance integration with the wider energy system. This will significantly improve network flexibility,
  reliability, and value for customers during the energy transition.
- 165 **Regulatory and policy change framework mapping (£0.5m):** SGN's NIA proposal will develop a flexible framework, mapping out the impacts of the net zero pathways with the required regulatory and policy issues to help GDNs, regulators, and stakeholders navigate the energy transition and support informed net zero policy decisions. Managing the evolving gas role is crucial for resilience, affordability, and a fair transition. NIA funding, aligned with Ofgem's 'just net zero transition' objective, will provide evidence to guide regulatory and policy frameworks while safeguarding consumers, particularly against premature network decommissioning risks, and security and duty of supply legislation requirements.
- 166 This work is essential to avoid cascade failures in the energy system as usage profiles shift, and infrastructure is reconfigured to meet net zero targets. NIA funding will allow us to innovate in this space, ensuring that energy

<sup>36</sup> https://portal.futureenergynetworks.org.uk/content/projects/NIA2 SGN0072

<sup>37</sup> https://smarter.energynetworks.org/projects/nia2\_sgn0046/

delivery remains efficient, resilient, and aligned with consumer needs—whether domestic, industrial, or commercial—and that low carbon gas generation can continue to provide system flexibility and resilience. Furthermore, access to NIA is critical to assess operational readiness for network decommissioning. This includes developing a credible pathway for a minimum viable network, enabling the sequential adoption of alternative low carbon technologies. This must be done in a way that balances transient energy demand and avoids systemic risks, which could arise if decisions are made based solely on static data rather than robust, forward-looking methodologies.

167 SGN are committed to decarbonising assets and developing solutions to meet the needs of all customers, particularly those in vulnerable situations. SGN's Heat Network Transition study.<sup>38</sup> is an example of SGN's commitment to providing the best solution for the consumer in the transition to net zero including how we may repurpose existing assets, ensuring no customer is being left behind or disproportionately impacted.

#### Network Transition - Multi-Occupancy Buildings (£6m):

- 168 SGN request £6m of NIA allowances for Multi-Occupancy Buildings (MOBs) as part of its Transition workstreams in its NIA. MOBs make up a significant part of UK domestic energy use and often house vulnerable residents. Decarbonising MOBs is complex due to legal requirements, safety concerns, mixed ownership, a lack of uniformity in building types given rise to multiple and diverse technical barriers especially in high-rise properties. New regulations require gas suppliers and building owners to carefully address vulnerability, building use, and safety.
- 169 Initial NIA work on viable transitioning pathways is required to identify alternative heat options for a fair consumer transition, of which £4.6m of this spending is for Transitional Pathways technical solutions and £1.4m for Consumer vulnerability identification and transitional support requirements.
- 170 The NIA work is to refine the transitional safety, technical, financial, legal and logistical aspects of decarbonising MOBs. If this project is successful we anticipate that it will lead to a NZASP reopener to fund trial projects that will test electrification, district heating, and renewables in a high-rise, aiming to create a scalable retrofit model. Ultimately, the project will provide a clear, practical blueprint for decarbonising multi-occupancy buildings by modelling alternative energy options, managing risks, and supporting all stakeholders through the transition to net zero.
- 171 As a responsible and prudent network operator we need to ensure we can deliver a credible solution for this group of consumers, following a just transition in order to meet net zero targets. We have obligations to ensure our consumers are treated fairly and are not negatively impacted by the activities we undertake, this aspect is further enshrined under the duty of supply obligations under the Gas Act which GDNs must follow as their primary legislation. As a duty holder we are legally bound to provide a connection when required, unless unsafe to do so. Where appropriate we will contribute to assessing, identifying, and coordinating solutions based on the needs of our customers especially those in vulnerable situations often present in MOBs.
- 172 In GD2 we conducted substantive feasibility projects.<sup>39</sup> to assess the viability for the transition of MOBs from natural gas. The outcome showed that significant effort is required to re-purpose existing internal high-rise installations to the required level of safety this increases the risk of extended cut-off and risk of poor customer outcomes for some of the most vulnerable segments of society.
- 173 MOBs repair is an increasing proportion of the cost base in GD3 and is expected to increase further as risers come to the end of their operational life. This innovation stream is important to ensure that we have alternatives available as we progress through that repair workload.

#### **Future Network:**

- 174 The draft determination reduced the funding for the 'Future Network' workstream from £10.0m to £7.86m, this was on the basis that the NIA was not considered the most appropriate route for further work relating to future of gas and hydrogen.<sup>40</sup>.
- 175 SGN also acknowledge Ofgem's Draft Determination to disallow £2.14m NIA funding for I&C Decarbonisation, CCUS, and Transport Decarbonisation, and SGN has withdrawn its funding request in these areas.

<sup>38</sup> https://smarter.energynetworks.org/projects/nia2\_sgn0071/

<sup>39</sup> Heat Network Transition Study, MOBS QRA and Testing, MOBS Data Analysis Phase 1, MOBS Asset Information Review Phase 2, Interventions by Asset Group Phase 3, MOBS Standards and Procedures Phase 4

<sup>40</sup> RIIO-3 Draft Determinations – SGN, July 25, para 6.5

- 176 We do not agree with the reasoning provided for the reduction in allowances. As we set out below in 'Future Network' stream, our proposal and associated allowances outline plans to support a low carbon energy system and enable the transition to net zero by repurposing existing infrastructure. SGN propose a credible decommissioning pathway for a minimum viable network, aligned with a whole system transition.
- 177 Our 'Future Network' request is based on two innovation streams (i) Future Network Strategy, (ii) decommissioning and we ask for the full reinstatement of £9.1m.

#### Future Network - Future network strategy (£4.1m)

178 SGN's request for future network strategy innovation workstreams is broken down into the following areas:

- Asset Management and Reuse (£1.3m): aims to maximise the value of SGN's gas infrastructure by repurposing assets for uses such as storage, transporting waste fuels, and heat distribution. This approach reduces waste, extends asset life, supports network resilience, and helps customers transition more smoothly.
- Customer Focus (£1.2m): ensures SGN prioritises all customers—especially vulnerable households—throughout the energy transition. As gas demand falls and network costs rise, there's a risk to the most vulnerable. This theme will drive innovation in engagement, targeted support, and inclusive service design, such as expanding the Priority Services Register and tailored decarbonisation advice, to ensure affordability and a fair transition to net zero. SGN has a strong track record of engaging with communities and supporting vulnerable customers. 41. This commitment is embedded in our decision-making and underpins our approach to ensuring a fair energy transition.
- Alternative Heat (£1.2m): focuses on decarbonising buildings by developing flexible, low-carbon heating solutions beyond traditional gas. With most UK homes still reliant on gas, SGN aims to support the transition through heat networks, thermal storage, and hybrid systems, offering practical, affordable alternatives that minimise disruption for existing gas consumers.
- Whole Energy System (£0.4m): centres on integrating SGN's gas network within a decarbonised energy system. By supporting Power-to-Gas, energy storage, and grid balancing, SGN helps manage renewable electricity's intermittency and unlocks greater value from renewables, ensuring resilience and flexibility in the UK's transition to low-carbon energy.

#### Future Network - Decommissioning (£5m)

- 179 SGN's request for decommissioning innovation workstreams includes work to develop a network decommissioning safety and operational planning methodology, as well as developing an asset reconfiguration for decommissioning assessment.
- 180 A central GD3 theme is developing evidence for alternatives to green gas conversion, including the costs and complexities of decommissioning the gas network when repurposing isn't feasible. SGN's Innovation Strategy cites HSE's decommissioning guidance under the Pipeline Safety Regulations (PSR) 42 43, stressing safe, costeffective processes and support for vulnerable customers.
- 181 A decommissioning feasibility assessment is required to ensure a safe and compliant means to de-energise the gas network, considering the implications of a minimum viable network for our customers security of supply, system resilience and balancing legal requirements. As a licensed duty holder with clear responsibilities, we must ensure a safe and cost-effective transition to net zero for consumers, especially those in vulnerable situations.
- 182 SGN propose to develop credible plans for a viable and safe decommissioning pathway, interlinked with a whole system approach to the energy system transition to net zero. SGN will deliver outcomes that will focus on the following areas:
- Network decommissioning safety;(£1.5m);
- The minimum viable network;(£1.5m);
- Operational planning methodology; (£1m); and
- Asset reconfiguration assessment, (£1m) including repurposing options.

<sup>41</sup> H100 News https://www.h100fife.co.uk/latest/

<sup>&</sup>lt;sup>42</sup> The Pipelines Safety Regulations 1996 <sup>43</sup> A guide to the Pipelines Safety Regulations 1996

183 Where SGN's assets cannot be repurposed, either to transport green gases or for alternative uses, decommissioning represents a significant technical challenge; gas networks are extensive and deeply integrated systems, across urban and rural areas, supplying homes and business which in turn have supply chain and support structures in place. The perceived simplicity of decommissioning is little understood from a technical and safety perspective. The impact of decommissioning will require extensive environmental and technical inputs including nitrogen/grouting of pipes and venting of natural gas. This will require sectorisation to avoid water ingress which will cause safety issues.

#### (iii) The alignment with totex funding

- 184 Core allowances provide funding for processes such as emergency response and defined workloads, where innovation is related to process improvements, improving the efficiency of operations, or improving the effectiveness of asset management practices, then these innovations are outside of the NIA and incentivised through the totex incentive mechanism (TIM).
- 185 The innovation identified above in section (ii) are all outside of this, in that the benefit primarily aligns with either our customers, particularly where there is a strong vulnerable customer component, environmental benefit or whole-system planning, reducing the cost of decommissioning. These benefits do not directly align with benefits that can be realised by the operational aspects of the business.
- 186 The innovation is associated with risk, and the benefits are not realised by the network and as a result GDN's require incentives to go beyond the prescribed totex framework. Ofgem recognise this risk, and have their own guidelines inherently designed to the point that innovation is too risky to be a formal totex allowance.
- 187 The second area of alignment with totex funding is where there are areas of innovation that are necessary to establish the engineering necessary to try an innovative approach prior to deployment. Front End Engineering and Design (FEED) requirements are critical to the development process, allowing projects to reach a stage where there is confidence to accurately define and justify future requirements for totex funding. An example of this is shown in the Bio CNG SIU Feasibility study.<sup>44</sup>

#### (iv) How we will deliver our innovation activities.

188 SGNs innovation strategy is governed by a central programme office and has embedded several frameworks and a control mechanism into its innovation process to ensure the smooth transition from early-stage ideas to deployment. In the following section we expand on each of these, and overall process.

Project life cycle

Product life cycle

Extended project life cycle

Concept

Definition

Deployment

Transition

Adoption

Benefits realisation

Operation

Termination

Figure 1: SGN's project life cycle

- 189 Our control framework defines how we manage and deliver all programmes and projects in our portfolio; it is comprised of a standard project lifecycle (see Figure 1 below); defined project deliverables; project control processes and requirements; and clear governance arrangements.
- 190 Within our innovation control framework, we apply three levels of management:
- Portfolio management: aligns projects with overall business strategy.
- Programme management: coordinates related projects to meet strategic goals.

<sup>44</sup> https://smarter.energynetworks.org/projects/nia2\_sgn0017/

- Project management: delivers focused, individual outcomes.
- 191 The framework and management structure are there to support consistency and visibility across all projects; performance tracking and benefit realisation; consistent governance across all projects; and effective execution of innovation at every scale.

#### Project lifecycle framework

- 192 SGN's innovation project lifecycle framework enhances governance and ensures we can engage at the correct project stages. Following the Association for Project Management (APM) methodologies.<sup>45</sup>, our project life cycle progresses through four key stages: concept, definition, deployment and transition.
- 193 All SGN Innovation Project Managers are trained in APM processes, ensuring consistency and best practices across all projects. This framework supports early visibility and prioritisation of projects, stakeholder engagement and support (internal and external), a clear scope and outcomes, controlled delivery and execution, transparent governance and decision making. In achieving this, it also enables a more rapid identification and intervention when risks arise along with smoother transitions to business as usual.

#### **Project controls**

- 194 Integrated project controls ensure projects stay aligned with objectives and allow early action on time, cost, or quality issues. The APM framework sets clear requirements to keep scope, schedule, and budget in line with the business case.
- 195 We apply six key controls across all project stages these govern; information management, project scope definition, reporting and planning; cost management; risk management and change control.
- 196 Projects are categorised early to determine the appropriate level of governance and control. A consistent process is then followed for all project types, from small NIA projects to large SIF and NZASP reopeners, with controls scaled accordingly.

#### **Assurance and governance**

- 197 The innovation PMO team ensures compliance with the control framework through regular check-ins and portfolio reviews, and is broken into three areas
- **Transition framework.** Provides subject matter expertise to ensure business readiness for new processes, products, and services.
- **Technical assurance.** Provides assurance for documents and deliverables related to safety, technical standards, and compliance.
- **Stakeholder engagement.** Manages the engagement framework and advises on stakeholder activities across initiatives, projects, and programmes.

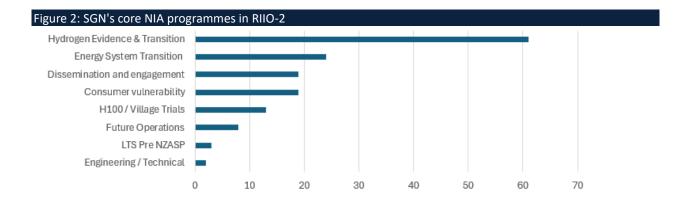
#### **Transition framework**

198 When projects move into deployment or are handed over to the business, we use our Transition Framework to guide the shift toward operational and business readiness. The framework consists of distinct phases and evidence-based assurance processes. This framework delivers operational and business readiness by ensuring people, processes, equipment, and systems are fully prepared to support and run the project. In doing so it ensures clear alignment between business functions and the project, and provides necessary controls, governance, and assurance to start the operational phase effectively.

#### (v) The values and benefits our innovation activities will deliver

199 Figure 2 below highlights our innovation success in RIIO-2, including £23 million invested in over 150 NIA projects, with 44 ongoing and a targeted £2.2 million for 17 new projects this year. SGNs overall NIA programme covers 8 core themes highlighting the focus areas. This is shown below in the Figure 2 which provides a project count by theme.

<sup>&</sup>lt;sup>45</sup> APM | Chartered Membership Organisation



- 200 Innovation stimulated through our core NIA programmes, as illustrated in the above Figure 2, and SIF have provided significant customer benefits throughout GD2, as published annually in SGN's Innovation Annual Summary...46
- 201 SGN's innovation strategy is grounded in the energy system transition particularly for vulnerable groups. This is demonstrated through initiatives such as H100 Fife and Fairer Warmth.<sup>47</sup>, where SGN has worked closely with local communities via a dedicated Community Liaison Groups, partnered with schools and colleges, and support for local events and charities. These efforts ensure that innovation is inclusive and responsive, helping customers navigate the energy transition with confidence and choice.
- 202 Green gas blending is also central to SGN's role in enabling a low-carbon future. SGN's green gas blending programme will continue to align with government policy, and we advocate for continued funding to reflect the advanced status of distribution networks in this area. NIA-funded projects Hydrogen Entry Unit Design. 48 and Cominglo – Blended CV Measurement Point. 49 provide critical evidence and readiness for safe integration of green gases. These initiatives support early adoption, reduce CO2 emissions, and align with national net zero
- 203 Operational efficiency and whole-system decarbonisation are also key pillars of SGN's innovation approach. The RTSM project.50 showcases how intelligent billing and real-time system monitoring can enhance network performance and deliver customer benefits. Meanwhile, previous NIA-funded work on multi-occupancy buildings.<sup>51</sup> and biomethane conversion for Scottish Independent Undertakings.<sup>52</sup> explore practical, low-cost pathways to decarbonisation. These projects reflect SGN's commitment to delivering measurable benefits through innovation, collaboration, and strategic investment.
- 204 Our RIIO-3 innovation strategy is designed to deliver lasting benefits for consumers and the wider energy system as the transition to net zero accelerates. The approach centres on strategic investment and collaboration, ensuring we have the flexibility to pivot our thinking as external influences, such as government policy on hydrogen, change and we can facilitate projects to provide:
- Network Security and Resilience: Operational innovation maintains a robust and efficient gas network, supporting reliability and long-term value for consumers, especially those in vulnerable situations.
- Decarbonisation: Initiatives around green gas, reduce carbon emissions and enable a cost-effective transition to net zero for consumers.
- Whole-System Energy Transition: Investment is aligned to local needs, improving security of supply and supporting the energy system's flexibility through regional strategies and technology development aligned to meet NESO requirements.
- Stakeholder-Driven Innovation: Ongoing engagement ensures projects meet consumer needs and adapt to emerging opportunities, with a focus on reducing bills and maximising impact.

<sup>46</sup> https://www.sgn.co.uk/sites/default/files/media-entities/documents/2025-07/innovationannualreport2025.pdf

<sup>47</sup> https://www.fairerwarmth.com/

https://www.sgn.co.uk/sites/default/files/media-entities/documents/2025-07/innovationannualreport2025.pdf Page 30

https://www.sgn.co.uk/sites/default/files/media-entities/documents/2025-07/innovationannualreport2025.pd https://www.sgn.co.uk/sites/default/files/media-entities/documents/2025-07/innovationannualreport2025.pd

<sup>51</sup> https://www.sgn.co.uk/sites/default/files/media-entities/documents/2025-07/innovationannualreport2025

https://smarter.energynetworks.org/projects/nia2\_sgn0017/

- Efficiency and Sustainability: Innovations target process improvements and leakage reduction, driving both economic and environmental gains across operations.
- 205 Through a balanced mix of research, development, and collaboration, SGN's innovation programme brings proven technologies and operational improvements from concept to implementation, ensuring the gas network is fit for both current and future needs while supporting a just and sustainable transition for all consumers.

#### (vi) How our funding request builds on and complements innovation in GD2 and GD3

- 206 Our programme of innovation activities during the RIIO-2 period have played an important role in developing our proposals for RIIO-3.
- 207 In GD2 we have successfully delivered 150 NIA projects, with 44 ongoing and 17 new projects originated this year. This will lead to an anticipated investment of £25.2m over GD2 for NIA, this compares to a funding request of £30.7m for NIA that we have request for GD3.
- 208 Through GD2, we have also delivered a significant number of projects (totalling £21.7m) through other funding mechanisms. This includes system transformation work, as well as preliminary work for both LTS Futures and H100 projects.
- 209 As documented each year in our innovation annual report SGN delivered against a wide range of initiatives such as:
- DESNZ hydrogen for Heat Programme: SGN delivered c.80% of the overall R&D work required. This achievement, through collaboration and leadership, demonstrates our impact beyond outputs, supported by the Health & Safety Executive's summary of safety evidence for 100% hydrogen heating.
- Safety Evidence for 100% Hydrogen Heating: SGN directly contributed to HSE's evidence base for a demonstration on how to convert the natural gas system to 100% hydrogen heating.
- **Future of Gas:** SGN conducted several early-stage feasibility studies across a wide range of areas such as Heat transition, SIU future scenarios, future network configuration to facilitate increased biomethane injection, and future billing methodologies to support and wider range or green gas acceptance in to the network.
- **Consumer vulnerability:** providing direct value to customers developing new technologies for CO monitoring and emergency call handling for non-verbal vulnerable customers.
- 100% Hydrogen: Delivering key evidence for H100 Fife, the 100% hydrogen neighbourhood trial.
- The LTS Futures pipeline: which has evolved from and early-stage idea to a live demonstration.
- 210 Initiatives such as H100 Fife and LTS Futures show how NIA funding drives practical decarbonisation solutions where SGN successfully transitioned key NIA projects to alternative funding routes, optimising our utilisation of the RIIO-2 award.
- 211 These initiatives, along with the others in our portfolio have been delivered through our innovation control framework, working collaboratively with partners, widening our innovation ecosystem to ensure we provide credible solutions and benefits for consumers, whilst transitioning our network to meet the challenges of climate change. This has provided a solid foundation for our RIIO-3 innovation strategy and the key commitments within this, considering our engagement with stakeholders throughout our business plan development to ensure we meet their needs and expectations, and shaping our network for the future.

#### (vii) How we will collaborate with our peers and avoid duplication

212 Collaboration is central to our ethos on innovation and is an integral part of the process for identifying and delivering NIA projects. SGN consider third party collaboration central to innovation and will continue to codevelop, co-deliver, and co disseminate innovation with a broad range of partners across sectors.

Figure 3: Innovation Ecosystem Overview



- 213 Some of the examples through which we have collaborated in GD2 and will continue to collaborate and avoid duplication in GD3 are;
- Establishment and chairing of the Gas Innovation Governance Group (GIGG). SGN currently chairs GIGG, which brings together all five gas networks to coordinate innovation activity. Through GIGG, networks peer-review proposed NIA projects, assess collaboration opportunities, and prevent duplication. A shared project notification (PN) tracker gives all networks visibility of proposals, enabling early alignment and joint delivery. GIGG also oversees the Future Energy Networks Innovation Process (FENIP).<sup>53</sup>, which standardises how innovation is governed and delivered across the networks. OFGEM, UKRI and NESO regularly attend the semi-monthly sessions with secretariat support from the FEN.
- Joint development of the NIA engagement strategy. SGN co-developed the strategy alongside all GDNs and DNOs to create a consistent approach to stakeholder engagement and idea generation. The strategy is built around shared innovation themes and objectives aligned to Ofgem's consumer-focused outcomes. It enables networks to start from a common position, identify joint priorities, and reduce the risk of duplication through coordinated engagement with third parties.
- The Future Energy Networks Innovation Process (FENIP): All innovation project notifications (PN) are submitted to a central shared tracker where they are reviewed for overlaps and assessed for collaboration opportunities. Findings are discussed in the semi-monthly GIGG meetings, where projects are either endorsed, challenged, or flagged for coordination with other networks.
- **Shared visibility:** Approved projects are registered to the FEN Innovation Portal, allowing all networks transparent access to live and historical projects supporting cross-checking and avoiding duplication.
- **Joint strategy:** GIGG has been instrumental in developing the wider NIA engagement strategy which focuses on three themes all innovation projects must follow creating a universal approach that ensures consistency and avoids fragmented delivery, these themes are (i) delivering an environmentally sustainable network (ii) maintaining a safe and resilient network, (iii) meeting the needs of consumers and network users
- SGN has led in the development of hydrogen evidence as part of DESNZ 'Hydrogen for Heat' programme. This successfully delivered over 100 evidence documents for the H2 for Heat comprehensive formal assessment.

<sup>53</sup> https://portal.futureenergynetworks.org.uk/innovationprocess

- Over 100 SMEs have partnered with SGN, making up nearly 80% of our innovation collaborators, supporting the co-creation of new ideas and stimulating economic growth with partners.
- 44% of SGN's NIA portfolio has been delivered in collaboration with other networks, totalling 65 joint projects to date.
- **Learning and outcomes are shared** through reports, workshops, conferences, and engagement with industry bodies, helping to surface opportunities for collaboration and build on others' work.
- SGN has built strong working relationships with all other gas networks, as well as third parties, SMEs, academia, and European multinationals.
- SGN maintains active engagement through joint field trials, demonstrations, and speaking events, reinforcing our
  collaborative role in the sector.
- External Engagement: SGN runs open innovation calls and working groups to engage with external innovators, SMEs, academia and other networks.

214 As we progress into GD3 SGN will continue to actively collaborate through building existing networks with:

- Academia: SGN collaborated with over 10 universities for R&D and targeted trials across SIF and NIA in GD2, leveraging their research and expertise. SGN plans to continue this approach in GD3. For example, in GD2 SGN engaged with University of Strathclyde for extensive material testing.
- Industry Peers: SGN will collaborate through cross GDN-partnerships on projects, ENA working groups to explore strategic challenges and knowledge sharing via FEN innovation portal. Benchmarking with other asset infrastructure owners globally has and will continue to create new opportunities for faster innovations.
- Innovators and SME's: Running open calls, partnering on SIF/NIA trials and offering pilot environments for new technology. Our recent online open call on the SIF challenge theme input from innovators was well received and enlarged our ideas and ecosystem.
- Local Authorities & 3<sup>rd</sup> Sector: Supporting local councils with the development of their regional decarbonisation
  plans. In Scotland this has been through Local Heat and Energy Efficiency Strategies or through Local Area Energy
  Plans (LAEPs), LAEPS are now emerging in the Southern network where SGN will continue to engage. Across GD2
  SGN developed a partnership with TFL and Kent Lane Rental to expand a keyhole technology. Additionally see the
  case study 'Tap SOS' in the additional evidence annex for how SGN have previously supported vulnerable
  customers.
- Regulators and government bodies: SGN will continue to engage with Ofgem throughout the lifecycle of projects from shaping early-stage ideas based on SIF priorities to providing input into evolving innovation governance. SGN will also continue to work with DESNZ contributing insights on the role of green gases and hybrid heating, an example is our work in the Comprehensive Formal Assessment with DEZNZ and the HSE.
- Supply Chain Partners: Partners are embedded in SGN trials and early deployments for example Core & Vac
  technology, which was developed with reinstatement contractors and delivery teams, creating 4 operational units
  now in use.

#### (viii) How we will enhance the dissemination of information

- 215 Engagement and Collaboration are critical elements of how SGN operate. Many of the groups and forums identified above in '(vii) How we will collaborate with our peers and avoid duplication' are equally central to the dissemination of information. In the past year, SGN have engaged in over 50 dissemination events, the following showcases a few ways that SGN achieve this:
- Innovation summary: SGN provide an innovation summary annually disseminating ongoing NIA projects, the summary showcases our approach whilst also helping to avoid duplication. <sup>6</sup>
- Member of the European Gas Research Group (GERG): SGN co-chair the hydrogen working group and SGN's Chief Strategy and Regulation Officer is President enabling cross border knowledge sharing. <sup>54</sup>

<sup>54</sup> https://www.gerg.eu/about-us/#structure

- Presentations and events: SGN present at ENA, FEN, Future of Energy events, (EIC, ALL Energy, SIF Forum, Utility Week, Future Utilities) and publishing formal updates through FEN Innovation Portal. SGN additionally host stakeholder workshops such as the Open Innovation Sessions series which generated 15 ideas. This can be found in our Innovation Strategy Summary 2023/24.55
- Trial data: SGN publish detailed reports shared with other networks through the annual summaries and the FEN Innovation Portals.<sup>56</sup> adding benefits within established reporting mechanisms, as shown in the BAU innovation table. SGN delivers high TRL trials through third-party funded innovation schemes (e.g. TfL 57 and Kent Lane rental funds), enabling other networks to follow guickly and benefit from proven solutions.
- Social media: SGN share information to a broad stakeholder range across LinkedIn, Twitter and Facebook. This includes our work to help vulnerable customers. ...<sup>58</sup>
- Beyond gas network collaboration: For collaboration beyond gas networks such as Core&Vac trials and Street Score 2 SGN share Industry forums, peer reviewed case studies and detailed trial reports are used.
- In-House Learning: SGN run regular lunch and learn sessions, operational handovers, and internal briefings to transfer learning from innovation projects into BAU, these projects support rapid staff upskilling and cross discipline engagement. This learning has been disseminated by inviting external experts to deliver Lunch and Learns e.g. APM, Carbon Networks Phase 1 webinars.
- Government programmes: SGN has led in the development of hydrogen evidence as part of DESNZ 'Hydrogen for Heat' programme actively chairing the Gas Networks Safety and Technical board and reporting to the DESNZ Programme Management Board, as well as being involved across 4 other boards, and still are the only GDN involved in the integrated hydrogen trials as SGN's work continues with H100 Fife and LTS Futures.

#### (ix) How we will roll-out and deploy innovation

- 216 As previously discussed above in '(iv) How we will deliver our innovation activities' our innovation strategy is governed by a central programme office and has embedded several frameworks and a control mechanism to ensure the smooth transition from early-stage ideas to deployment. We focus here on our transition framework for the roll-out of proven innovation into the wider business.
- When projects move into deployment or are handed over to the business, we use our Transition Framework to guide the shift toward operational and business readiness.
- Operational and business readiness ensures people, processes, equipment, and systems are fully prepared to support and run the project. This follows the same framework as shown in Figure 4 Project Life cycle.
- The framework consists of distinct phases and evidence-based assurance processes.
- It ensures clear alignment between business functions and the project, and provides necessary controls, governance, and assurance to start the operational phase effectively.
- 217 For more detail on operational innovation processes which demonstrate the benefits are set out in table 11 below.

<sup>55</sup> https://www.sgn.co.uk/sites/default/files/media-entities/documents/2024-07/SGNInnovationAnnualSummary2023-24.pdf

<sup>56</sup> https://portal.futureenergynetworks.org.uk/content/fen

<sup>57</sup> https://sgn.co.uk/news/three-of-our-innovative-techniques-recognised-tfl-improving-london-roadworks 58 https://www.sgn.co.uk/news/sgn-supports-over-750000-vulnerable-households-amid-rising-hardship

Project Name	Project Description & Benefits			
Project Name	This BAU £30.9k project looks to replace traditional barhole plungers with an electric drill adapter to reduce manual effort. The project will address health and safety concerns associated with the current method, particularly physical			
Barhole Solutions	strain and injury risks. By conducting trials and assessments to validate the effectiveness of the new adapter solution with an independent technical provider (Steer Energy) we will quantify the level of risk to allow an implementation decision to be made. Testing will be done in Aberdeen at Steer Energy's office followed by onsite trialling in Scotland region as this is closely located to Steers HQ			
Beamex MC6 - Ex Trial	Trial and rollout of all-encompassing calibration kit with digital logging that would improve efficiency on E&I calibration activities			
CISBOT - Large Diameter Bolted Joints	The project aims to carry out a trial using CISBOT on a large diameter bolted joints at Trafalgar Avenue in SGN Southern Network. Additional review and testing prior to confirming that it is an acceptable remediation method will be carried out and if successful technique to be approved on the network.			
CISBOT 48"	The objective of this Project is to design, develop, build, test and field trial a new robotic system CISBOT 48" that is capable of being deployed in 48" CI mains to repair and/or remediate the asset using anaerobic sealant.			
CORE AND VAC TRIALS	Project to carry out C+V trials on repair, connection and replacement sites. To demonstrate use of keyhole techniques to excavate/reinstate and the usage of long handled tooling as well as utilising Special Ops team solution to support core business workloads			
DARK DATA REGULATOR MAINTENANCE - STAGE 2	The aim of this project is to expand on the "Dark Data" initial NIA project with a view to developing a model that can be adopted within the business-as-usual environment for the wider business benefit. Deliver an operational proof of concept that can reliably predict the time to the next alarm on above 7bar assets			
Dust Suppression	Project seeks approval to introduce new method of reducing the amount of dust exposure to the members of public and our engineers onsite. Development of an attachment for rockdrills to suppress dust			
Dust Suppression Phase 2	Project seeks approval to introduce new method of reducing the amount of dust exposure to the members of public and our engineers onsite. Development of an attachment for rockdrills to suppress dust.			
Enhanced Gas Detection Phase 1	Support in business to recharge software integration piece. People not able to corrupt readings. Integrate machine with records. Auto entered from sensor – RPA. How to prove location of reading where exact location of barhole in 1m. Auto locate from sensor.			
Grit Blasting BA Kit	Project seeks approval to introduce new Breathing Air Testing and Purification kit produced by SAFEWELL, across Scotland and Southern Network to comply with to COSHH Regulation 7 & "BS EN 12021 – Respiratory equipment — Compressed gases for breathing apparatus by Purchasing of 5 Purifiers and 3 Analysers in Scotland and 3 Purifiers and Analysers in Southern			
High Volume Gas Escapes (Stage 3)	Leading on from the outcomes of the concept development and extensive operational engagement under NIA, this stage will undertake the Qualification process to deliver the field-ready tools with associated methodologies. It will take the learnings from the NIA in-house testing and "field use" to produce final designs, manufacture field-ready tools and prepare for roll out into "business-as-usual". The training for the initial SGN teams using the tools will also be developed during this stage.			
Humata - VTM	Improving access to information - Ability to upload policies and procedures into an Ai platform which learns, analyses and feeds back Q+As. Answers complexed questions and gives easy to understand answers along with references x100			
I-Branch - New Mould	This project will include purchase of 10 assembly units to support field trial under NIA_SGN0155. This will allow Souther Ops to attach and fully utilise their existing water extraction kit and help complete innovation field trial.			
INFINITY BYPASS	This project aims to roll out a re-usable and safe bypass technology across SGNs Southern network to 10 contractors and to each depot in Scotland, each with '1 trailer consisting of 2x61m wheels' and Southern Contractors with '5 sets of 6m'.			
LONG HANDLED TOOLING	This project is to purchase two complete sets of Long Handled Tooling for use in the Southern network, the funding has been granted to SGN further to a successful application to the Kent Lane Rental Governance Committee (LRGC). The Long Handled Tooling, developed under the NIA "iCore" project, looks to be implemented in Southern Operations to demonstrate the benefits of using tooling from outside the excavation.			
Oxford Flow IM Regulator 7-2 bar	This funding request seeks to take advantage of the developments under NIA by enabling the purchase of 2 x IMs + Pilots at the discounted price of £4k to complete the 'full' twin stream IM Regulator installation at West Kilbride DPG.			
Picarro Advanced Leak Detection - Pilot	YPPC Idea - add layer for leakage to MRPS. Emissions Data Step Change			
PLASSON PURGE END FITTING	Mass-rollout of Plasson Purge end fitting to SO & SC networks.			
Research Connect Trial	As Innovation looks to diversity our portfolio, we aim to trial the research connect solutions to discover other funding opportunities that are available across the globe.			
REUSABLE FITTINGS PURGING APPS	Field trial of Cast 180mm GF reusable purge end fittings			
ServiBoost	This project aims to roll out the ServiBoost technology across SGNs Scotland and Southern network with 70 units which would allow our Operatives to utilise the kit in line with SGN Policy.			
SMALL DIAMETER MP PE TRACING	This glanding system, which has been tested at pressures up to 7 bar, is most suited for insertion of the Tracer Rod into gas and water mains and services. The gland rubber, which is about 25mm thick, can be compressed during use to increase the seal and prevent leakage. It has a 1" BSP internal thread as standard and is supplied with an adaptor to suit %" BSP. An adaptor to suit %" and 1" gas meter thread is also available			
STASS Trial (Ph 1 and 2)	This project looks to trial the STASS solution which offers a remote repair solution avoiding unnecessary excavation and public disruption. Subsequently seeking to approve technique to be used on the network as a proactive measure.			

- 218 Another example demonstrating how SGN reduces leakage by assessing and accounting for the adoption of new technology can be found in the Leakage Management in the Energy System Transition project.59. This project reviewed and assessed the LRMM to identify improvements and its role in transitioning to 100% hydrogen. It delivered key insights, including the impact of network upgrades, cathodic protection records, and the GD1 CISBOT programme on leakage. Crucially, it advanced understanding of hydrogen's effect on emissions and outlined future leakage management needs. The findings pave the way for environmental and financial benefits through more accurate leakage modelling and targeted remediation.
- 219 This demonstrates SGN's approach to delivering its recent operational innovation approach and its success in delivering this into BAU.

# **Chapter 7** Data and Digitalisation

SGNQ18. Do you agree with our proposed level of funding for SGN's data and digitalisation investments?

- 220 SGN strongly agrees with Ofgem's proposed funding for our data and digitalisation investments which will enable us to sustainably deliver the key tenets of Ofgem's digital transformation objectives. This will provide the necessary investment needed to continue building on the progress made in GD2 under the Getting the Basics Right approach.
- 221 GD3 will bring the continued drive to delivering digitalisation outcomes through its technological and data transformation initiatives, and proposed determination will enable SGN to deliver against both its Digitalisation strategy and Data strategy objectives.

<sup>&</sup>lt;sup>59</sup> https://smarter.energynetworks.org/projects/nia2\_sgn0020/