

# Decision

---

## **RIIO-3 Final Determinations – National Gas Transmission**

---

Publication date: 4 December 2025

---

Contact: Network Price Controls

---

Team: RIIO-3

---

Email: [RIIO3@ofgem.gov.uk](mailto:RIIO3@ofgem.gov.uk)

---

The next set of price controls for the Electricity Transmission (ET), Gas Distribution (GD) and Gas Transmission (GT) sectors will cover the five-year period from 1 April 2026 to 31 March 2031 (RIIO-3). In December 2024, the network companies in these sectors submitted their RIIO-3 Business Plans for this period to Ofgem. We assessed these plans and published our Draft Determinations for consultation on 1 July 2025. Following consideration of consultation responses, this document and others published alongside it set out our Final Determinations for the RIIO-3 price controls.

---

© Crown copyright 2025

The text of this document may be reproduced (excluding logos) under and in accordance with the terms of the [Open Government Licence](#).

Without prejudice to the generality of the terms of the Open Government Licence the material that is reproduced must be acknowledged as Crown copyright and the document title of this document must be specified in that acknowledgement.

Any enquiries related to the text of this publication should be sent to Ofgem at:

10 South Colonnade, Canary Wharf, London, E14 4PU.

This publication is available at [www.ofgem.gov.uk](http://www.ofgem.gov.uk). Any enquiries regarding the use and re-use of this information resource should be sent to: [psi@nationalarchives.gsi.gov.uk](mailto:psi@nationalarchives.gsi.gov.uk)

## Contents

<b>RIIO-3 Final Determinations – National Gas Transmission .....</b>	<b>1</b>
<b>1. Introduction .....</b>	<b>5</b>
Purpose of this document.....	5
What is Gas Transmission?.....	5
What are we deciding?.....	5
Navigating the RIIIO-3 Final Determinations documents.....	6
<b>2. RIIIO-GT3 at a glance.....</b>	<b>8</b>
Maintaining a resilient gas network.....	8
Prioritising consumer needs and environmental sustainability.....	9
Maximising value for consumers.....	9
<b>3. Outputs and incentives.....</b>	<b>11</b>
Introduction.....	11
Enhanced monitoring and reporting for the gas transmission PCDs .....	12
<b>Infrastructure fit for a low-cost energy transition .....</b>	<b>13</b>
Gas Strategic Planning – Cooperation with NESO and Other Stakeholders (LO) .....	14
Greenhouse Gas Emissions (compressors) ODI-F .....	15
Greenhouse Gas Emissions (pipeline) ODI-F.....	18
Greenhouse Gas Emissions (fugitive) ODI-R.....	20
NTS Shrinkage Package (GSO) (includes ODI-F and a LO) .....	21
Redundant Assets PCD (GTO) .....	25
Compressor Emissions PCD (GTO) .....	28
Biomethane Connections UIOLI (GTO).....	29
Environmental Action Plan and Environmental Report ODI-R commitments and outputs .....	32
<b>Secure and resilient supplies .....</b>	<b>35</b>
Network Asset Risk Metric (NARM) PCD .....	35
Compressor Breakdown UIOLI (GTO) .....	38
Nitrogen Sleeves PCD (GTO).....	39
West Import Resilience Project (WIRP) PCD .....	41
Bacton Terminal Site Redevelopment PCD.....	45
Compressor Acoustic Building (CAB) PCD.....	47
Easement Reinstatement PCD .....	48
Removal of Valve and Pipe Stabbings PCD .....	49
Actuator Replacement PCD.....	50
Other outputs: Asset Health Non-Lead Assets PCD (Removed) .....	52
<b>High quality of service from regulated firms .....</b>	<b>52</b>
Entry and Exit Constraint Management ODI-F.....	53
Quality of Demand Forecasting ODI-F and ODI-R .....	55
Residual Balancing ODI-F.....	58
Maintenance ODI-F .....	60
Customer Satisfaction Survey ODI-F .....	61

<b>4. Managing uncertainty.....</b>	<b>66</b>
Re-opener cost forecasting and planning expectations in gas transmission .	67
<b>Infrastructure fit for a low-cost energy transition .....</b>	<b>68</b>
Gas Strategic Planning Re-opener.....	68
Network Decarbonisation and Emissions Compliance Re-opener & PCD (GTO) .....	70
Pipelines Diversion Re-opener (GTO).....	72
<b>Secure and Resilient Supplies .....</b>	<b>73</b>
Asset Health Re-opener .....	73
Office, Gas National Control Centre (NCC) and Emergency Control Room (ECR) Relocation Re-opener .....	76
Network Capability Re-opener.....	78
Bacton Enhanced Filtration Re-opener .....	79
Funded Incremental Obligated Capacity (FIOC) Re-opener.....	80
West Import Resilience Project (WIRP) Re-opener .....	81
<b>GT specific pass-through costs.....</b>	<b>83</b>
Final Determinations summary.....	83
<b>Other Uncertainty Mechanisms Proposals .....</b>	<b>84</b>
<b>5. Cost of service.....</b>	<b>86</b>
Introduction.....	86
Load related capex.....	87
Non-load related capex.....	89
Other non-load costs .....	102
Non-operational capex.....	103
Network operating costs (NOCs).....	109
Indirect costs .....	111
Other Costs .....	118
Ongoing efficiency (OE) .....	119
Engineering assessment overview .....	120
Totex Incentive Mechanism (TIM).....	124
<b>6. Business Plan Incentive (BPI).....</b>	<b>126</b>
Stage A.....	126
Stage B.....	126
Stage C.....	129
<b>7. Innovation .....</b>	<b>130</b>
Background .....	130
<b>8. Data and Digitalisation .....</b>	<b>132</b>
Introduction.....	132
<b>Appendices .....</b>	<b>134</b>
<b>Appendix 1 – Summary of Engineering Review .....</b>	<b>134</b>
<b>Appendix 2 – Network Asset Risk Metric (NARM).....</b>	<b>148</b>

---

# **1.Introduction**

## **Purpose of this document**

- 1.1 This document sets out our Final Determinations for the Gas Transmission (GT) price control for National Gas Transmission (National Gas) covering the five-year period from 1 April 2026 to 31 March 2031 (RIIO-GT3). All figures in this document are in 2023/24 prices except where otherwise stated.

## **What is Gas Transmission?**

- 1.2 Great Britain's (GB) GT network, the National Transmission System (NTS), is owned and operated by National Gas, which is the sole Gas Transmission Owner (GTO)<sup>1</sup> and Gas System Operator (GSO)<sup>2</sup> in GB. National Gas' duties and obligations are set out in its licence and in legislation.
- 1.3 The NTS is more than 7,600 km of high-pressure pipeline which transports gas from the entry terminals to gas distribution networks, or directly to power stations and other large industrial users.
- 1.4 Natural gas is essential for the day-to-day heating of households and the enduring functioning of industrial and manufacturing processes. Furthermore, unabated gas will continue to play a critical back-up role throughout the transition to clean power, ensuring security of supply for the whole energy system in GB. This means sufficient network capacity and capability, underpinned by strong asset health and stewardship, including the accommodation of the growing west-to-east gas flows driven by increasing liquified natural gas (LNG) supplies.

## **What are we deciding?**

- 1.5 In Chapter 2 we provide a summary of the key aspects of the RIIO-GT3 price control.
- 1.6 In Chapter 3 we outline the core outputs and incentives that underpin RIIO-GT3. The incentives we are setting will drive the delivery of a secure and resilient GT network. The RIIO-GT3 outputs will hold National Gas accountable for delivering a

---

<sup>1</sup> The GTO is responsible for maintaining the integrity of its network, developing asset replacement schedules and for providing transmission services to the GSO and network users.

<sup>2</sup> The GSO is responsible for the day-to-day operation of the NTS, including balancing supply and demand, maintaining system pressures, providing market functions and ensuring that gas quality standards are met. National Energy System Operator (NESO) is responsible for the long-term gas system planning.

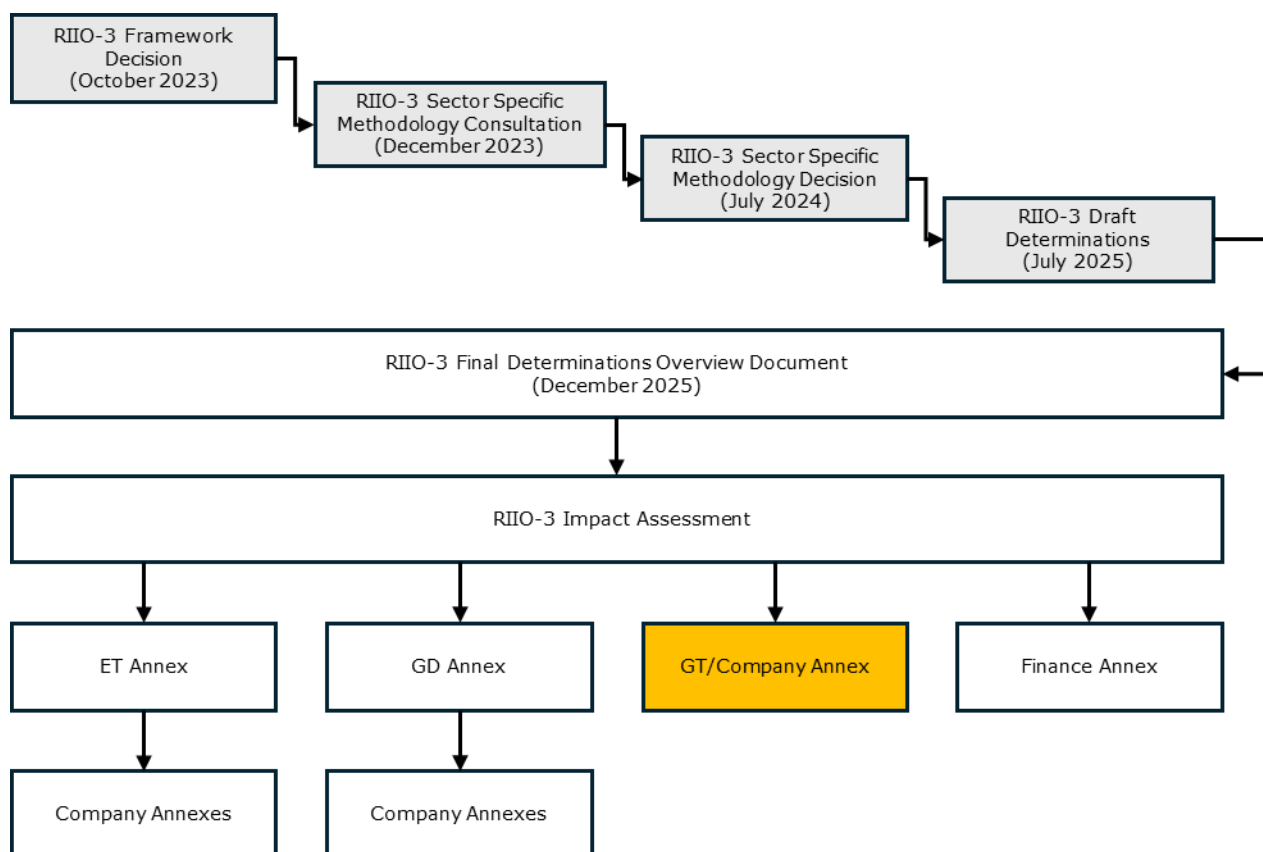
wide set of outcomes, such as service levels, that stakeholders have said they value.

- 1.7 Chapter 4 sets out how we will manage uncertainty during RIIO-GT3. It describes the suite of uncertainty mechanisms (UMs) which will ensure that there is flexibility to enable new funding where needed.
- 1.8 In Chapter 5 we outline how we have approached our assessment of National Gas' costs and engineering justifications for the RIIO-GT3 period to ensure that there is sufficient investment to maintain a safe and reliable gas network, while balancing the cost to consumers of delivering this considering the uncertain future of gas.
- 1.9 Chapters 6, 7, and 8 cover National Gas' performance under the Business Plan Incentive (BPI), Innovation, and Data and Digitalisation respectively.

### **Navigating the RIIO-3 Final Determinations documents**

- 1.10 The RIIO-3 Final Determinations are comprised of an Overview Document, a Finance Annex and sector annexes for ET, GD and GT. This document is both the sector and company annex for GT. The sector annexes are underpinned by a RIIO-3 Impact Assessment, company annexes and, where relevant, technical annexes. Figure 1 below maps all documents relevant to our suite of RIIO-3 Final Determinations, including the framework and methodology documents that have preceded it.

Figure 1: RIIO-3 Final Determinations map



1.11 Our Final Determinations have considered all previous feedback from network companies and other stakeholders, including the reports from the Independent Stakeholder Groups (ISGs) that were established to challenge each of the network companies on their stakeholder engagement and business plans, and the feedback received in response to our RIIO-3 Call for Evidence and Draft Determinations. Further details on our approach to embedding the consumer voice is set out in the RIIO-3 Overview Document.

## 2. RIIO-GT3 at a glance

### Maintaining a resilient gas network

- 2.1 Our Final Determinations reflect our absolute priority in ensuring National Gas maintains a resilient and safe NTS that can continue to supply gas where it is needed. This includes £930m of allowances to replace or refurbish ageing or faulty assets with controls to ensure this money is either spent or returned to consumers in full.
- 2.2 At the same time there is both inherent uncertainty about the long-term role of gas networks in the transportation of natural gas and changing usage of the network in the short term driven by evolving supply and demand patterns (for example increasing LNG dependence vs domestic production). Strategic direction and joined up, whole system level, planning are therefore critical to managing this change and uncertainty successfully. In this context:
- Firstly, we will continue to work closely with government in relation to its upcoming publication on future network cost recovery given long-term declining natural gas usage.<sup>3</sup>
  - Secondly, we have ensured that RIIO-GT3 is aligned with the long-term strategic system view of the National Energy System Operator (NESO). We are working with National Gas, the NESO, and government to ensure the full integration of gas into the Centralised Strategic Network Plan (CSNP). We have also built in flexibility through UMs for NESO and government-driven investments that are needed in the next price control period, and introduced a licence obligation on National Gas to support NESO across its planning functions by proactively sharing information that NESO requires.
- 2.3 Our package of approved allowances ensure that National Gas is able to:
- Deliver government and NESO driven investment needed to meet legislative, environmental and safety requirements;
  - Deliver other asset health investment to replace aging assets and to support the needs for ensuring continued and resilient supplies of gas;
  - Secure capacity investment to ensure continued capability of the network in light of the growing west-to-east gas flows driven by LNG; and

---

<sup>3</sup> This programme was announced in the government's June [Midstream gas system: update to the market - GOV.UK](#)

---



- Access funding during the price control for new investments as and when the need for or design of projects becomes more certain through a combination of re-openers and automatic mechanisms.

2.4 Across the RIIO-3 sectors we've increased our focus on cyber and climate resilience, whilst our Network Asset Risk Metric (NARM) tool will ensure the underlying health of the network assets across the electricity and gas networks remains world leading.

### **Prioritising consumer needs and environmental sustainability**

2.5 We want National Gas to prioritise minimising its direct impact on the environment to support net zero and to provide services which consumers value. As such RIIO-GT3 will include:

- Around £0.6bn funding to reduce methane emissions (eg Network Decarbonisation and Emissions Compliance Re-Opener, Compressor Emissions Price Control Deliverable (PCD)) for compressor upgrades and replacement;
- A new Use-It-Or-Lose-It (UIOLI) mechanism for biomethane connections onto the NTS and gas distribution networks to help accelerate the energy transition and increase injection of biomethane;
- New financial incentives aiming at increasing the utility of new technologies to help reduce emissions from compressors and pipelines;
- GSO incentives to drive excellent performance by National Gas when delivering capacity constraint management, demand forecasting, maintenance and residual balancing services to its customers; and
- Over £21m of Network Innovation Allowance (NIA) and access to portions of a £500m Strategic Innovation Fund (SIF) to support network innovation (and third party-led innovation) that contributes to net zero.

### **Maximising value for consumers**

2.6 To deliver these objectives as efficiently as possible we are setting baseline totex allowances for National Gas of £3.2bn, which is £0.9bn lower than its business plan submission, as detailed in Chapter 5.

2.7 Our decision to provide an allowance that is lower than that National Gas sought is due to two main factors. The first is where we have undertaken a robust assessment of proposed costs and set allowances at what we consider is the efficient level. For the most part we have not rejected outright the need for new investment, but we have identified that some could be delivered for less. The second factor is where we agree with the need for the investment in principle, but

we do not consider the underlying justification for the recommended intervention robust or in the interests of consumers.

- 2.8 Nevertheless, these allowances are a material increase in funding from our Draft Determination position. We were clear then, and have always been, about our enduring commitment to funding network resilience and, more broadly, asset health. We were deliberate and specific in outlining where and why National Gas failed to adequately justify its proposed interventions. The increase from our Draft Determinations show that National Gas has responded to the challenge we set out, resulting in an additional ~£700m in cost allowances now.
- 2.9 Furthermore, we expect that ~£1.5bn of allowances may be requested through UMs for further investments during RIIO-GT3. This includes re-openers (eg Asset Health Re-opener, Network Decarbonisation and Emissions Compliance Re-opener, Network Capability Re-opener) to enable National Gas to fund the work which is better finalised when there is greater clarity of need and specific engineering specifications develop during RIIO-GT3. That does not include the work required to meet government or NESO-driven investment need (ie Gas Options Advice (GOA),<sup>4</sup> Centralised Strategic Network Plan (CSNP), Clean Power 2030 (CP2030)) in the future, as the need and the cost for those are at this point in time uncertain.
- 2.10 We have set a stretching but deliverable ongoing efficiency target of 1.0% for all companies across RIIO-3. We consider this reflects the overall scale of investment expected, the opportunities presented from new technologies and approaches, including through data and digitalisation, and efficiency gains and innovation in the wider economy. We recognise that to achieve this, companies will need to find for new ways to drive costs lower, including by becoming more productive and innovative.
- 2.11 With approximately two thirds of total allowances in ex ante baseline funding, the proportion (and absolute amount) of allowances set ex ante vs in period UMs remains high in RIIO-GT3. In providing for such high proportion of ex ante allowances, we aim to give as much clarity as possible to National Gas in facilitating its infrastructure delivery programme. This greater certainty, that will help with supply chains particularly, is designed to enable delivery of projects on time and at lowest possible cost.

---

<sup>4</sup> Referred to as Gas Options Advice Document (GOAD) in our Draft Determinations.

---

## 3. Outputs and incentives

### Introduction

- 3.1 This chapter sets out the package of outputs that will apply in RIIO-GT3, including Licence Obligations (LOs), Price Control Deliverables (PCDs), Use-It-Or-Lose-It (UIOLI) allowances and Output Delivery Incentives (ODIs).<sup>5</sup>
- 3.2 The outputs are set out under the headings of the RIIO-3 outcomes:
- Infrastructure fit for a low-cost energy transition;
  - Secure and resilient supplies; and
  - High quality of service from regulated firms.
- 3.3 Table 1 and Table 2 outline the outputs and incentives for RIIO-GT3 and set out where you can find full details.

Table 1: Cross-sectoral outputs and incentives in RIIO-3

Output name	Output type	Sector(s)	Further detail
Network Asset Risk Metric (NARM)	PCD, ODI-F and ODI-R	ET, GD, GT	Overview Document
Physical Security	PCD and re-opener	ET, GD, GT	Overview Document
Cyber Resilience	PCD and re-opener	ET, GD, GT	Overview Document
Environmental Action Plan and Annual Environmental Report	ODI-R and LO	ET, GD, GT	Overview Document and this document
Strategic Innovation Fund (SIF)	UIOLI	ET, GD, GT	Overview Document
Network Innovation Allowance (NIA)	UIOLI	ET, GD, GT	Overview Document
Totex Incentive Mechanism (TIM)	ODI-F	ET, GD, GT	This document
Operational Transport Emissions Reduction	PCD	ET, GD	Overview Document

Table 2: Sector specific outputs and incentives in RIIO-GT3

Output name	Output type	Sector(s)	Further detail
Gas Strategic Planning – Cooperation with NESO and Other Stakeholders	LO	GT	This document
Greenhouse Gas Emissions (compressors)	ODI-F	GT	This document
Greenhouse Gas Emissions (pipeline)	ODI-F	GT	This document

<sup>5</sup> ODIs can be either financial (ODI-F) or reputational (ODI-R).

<b>Output name</b>	<b>Output type</b>	<b>Sector(s)</b>	<b>Further detail</b>
Greenhouse Gas Emissions (fugitive)	ODI-R	GT	This document
NTS Shrinkage Procurement	ODI-F	GT	This document
NTS Shrinkage Procurement Strategy	LO	GT	This document
Redundant Assets	PCD	GT	This document
Compressor Emissions	PCD	GT	This document
Network Asset Risk Metric (NARM)	PCD	GT	This document
Compressor Breakdown	UIOLI	GT	This document
Nitrogen Sleeves	PCD	GT	This document
West Import Resilience Project (WIRP)	PCD	GT	This document
Bacton Terminal Site Redevelopment	PCD	GT	This document
Compressor Acoustic Building (CAB)	PCD	GT	This document
Easement Reinstatement	PCD	GT	This document
Removal of Valve and Pipe Stabbings	PCD	GT	This document
Actuator Replacement	PCD	GT	This document
Entry and Exit Constraint Management	ODI-F	GT	This document
Quality of Demand Forecasting	ODI-F and ODI-R	GT	This document
Residual Balancing	ODI-F	GT	This document
Maintenance	ODI-F	GT	This document
Customer Satisfaction Survey	ODI-F	GT	This document

### **Enhanced monitoring and reporting for the gas transmission PCDs**

3.4 A significant development since our Draft Determinations is the expanded application of Price Control Deliverables (PCDs) in our Final Determinations. We have introduced four new evaluative PCDs covering asset health works related to Compressor Acoustic Buildings (CABs), removal of valve and pipe stabbings, actuator replacements, and easement reinstatements. These PCDs, which are additional to the NARM PCD, will mean direct funding for activities that were disallowed at the Draft Determination stage. We continue to consider there to be a risk to consumers arising from under- or over-delivery of the works within the scope of each of these (see this chapter and Chapter 5 for further detail), which can best be managed through a dedicated evaluative PCD.

- 3.5 More generally in relation to all PCDs, we have identified deficiencies in output and cost monitoring which increase the risk of over-rewarding performance against business plan targets where consumers have funded high specification, comprehensive network interventions but lower quality, cheaper solutions could then be implemented by National Gas in period. To address this, we will require enhanced reporting and record-keeping across relevant PCDs to track costs and price control decisions. This will include mandatory reporting through the Regulatory Reporting Pack (RRP) for all Load and Non-Load Capex expenditure, with entries for each decision point. These measures will strengthen transparency, improve monitoring capability, and support the evaluation of project progress against the PCD allowances throughout the price control period. In this chapter, we have indicated where such additional requirements are expected.

## **Infrastructure fit for a low-cost energy transition**

- 3.6 In our RIIO-3 Sector Specific Methodology Decision (SSMD) and Draft Determinations we set a clear expectation that we want to focus on minimising National Gas' impact on the environment and accelerate the transition to a smarter, more flexible, and sustainable low-carbon energy system.
- 3.7 We included two categories of outputs under infrastructure fit for a low-cost energy transition:
- Gas Strategic planning to support NESO's whole system planning approach;
  - Environmental outputs to work towards decarbonising the NTS.
- 3.8 This chapter should be read alongside our Overview Document, which considers:
- the future of gas in more detail (see Chapter 2);
  - the cross-sector environmental framework to ensure that stakeholders have a clear understanding of National Gas' environmental actions and impacts during RIIO-GT3 (see Chapter 4); and
  - how we will use UMs in the RIIO-3 price control to support network companies, including National Gas, to manage the uncertainty around the energy transition through a suite of related UMs (see Chapter 6).

## Gas Strategic Planning – Cooperation with NESO and Other Stakeholders (LO)

---

**Purpose:** To support alignment of National Gas' system planning with NESO's wider energy system planning processes. This includes proactive engagement, collaboration and information sharing with NESO and other stakeholders in the area of gas strategic planning.

---

**Benefits:** Increased transparency and alignment of National Gas' and NESO's wider energy system plans.

---

### Final Determinations summary

Design	Final Determination	Draft Determination
Output type	Licence Obligation.	Same as FD.
Output scope	Licence obligation on National Gas to proactively share information and engagement with NESO with NESO and other relevant stakeholders in the area of gas strategic planning.	Same as FD.
Reporting	When requested by us.	Change - reporting to us every two years, or when requested by us.

### Final Determination rationale and Draft Determination responses

#### Output type

3.9 We have decided to introduce a licence obligation for National Gas to collaborate and engage with NESO across several areas of gas strategic planning and the associated deliverables. Five stakeholders responded to our Draft Determinations consultation; a consumer organisation, an industry stakeholder, a gas distributor and NESO were supportive of our proposed introduction of the new licence condition. However, National Gas opposed it.

#### Scope

3.10 We have decided to retain the scope of this licence obligation as proposed in our Draft Determinations. National Gas stated that data sharing provisions already exist and are in place, and that a new condition would increase regulatory burden due to additional reporting requirements to us. Instead, National Gas proposed that additional requirements to engage with stakeholders are added as additional requirement to the specific long-term planning deliverables (ie long-term development statement, Gas Network Capability Needs Report and Strategic Planning Options Proposal).

- 3.11 Whilst we agree that seeking stakeholders' views in relation to long-term planning deliverables is important and we have updated the licence to that effect, there are other areas, for example Gas Options Advice Document, Centralised Strategic Network Plan, High Impact Points of Failure, where National Gas will be requested to collaborate with NESO, and proactively share information with the energy system planner and other stakeholders.

#### Reporting

- 3.12 We have decided to remove the obligation on National Gas to report to us with feedback on stakeholder engagement every two years, accepting National Gas' point that reporting would be too onerous. National Gas should seek feedback from its stakeholders regularly and incorporate the lessons learnt from it in its business practice. We will request evidence of this on an ad hoc basis during the price control assessment process.

### **Greenhouse Gas Emissions (compressors) ODI-F**

---

**Purpose:** To incentivise National Gas to minimise the environmental impacts when making decisions regarding the venting of gas compressors.

---

**Benefits:** A reduced environmental impact from lower levels of compressor venting. A positive impact on reducing NTS shrinkage.

---

### **Final Determinations summary**

<b>Design</b>	<b>Final Determination</b>	<b>Draft Determination</b>
ODI type	Financial – reward and penalty.	Same as FD.
Measurement	Measured based on tonnes of methane emitted per year.	Same as FD.
Target and Improvement Factor	2,156 tonnes in year one, reducing by 75 tonnes each year.	Change - 2,224 tonnes in year one, reducing by 100 tonnes each year.
Incentive exposure	±£2m annually.	Same as FD.
Deadband	±100 tonnes to account for fluctuation in performance arising from unpredictable flow patterns.	Same as FD.
Incentive value	Each tonne of gas vented both above and below the deadband will be rewarded/penalised according to the central carbon price.	Same as FD.
Reporting	Performance will be reported annually in Regulatory Reporting Packs (RRPs)	Same as FD.

<b>Design</b>	<b>Final Determination</b>	<b>Draft Determination</b>
	as well as in its publicly facing Annual Environmental Report (AER).	

## **Final Determination rationale and Draft Determination responses**

### ODI type

- 3.13 We have decided to continue to financially incentivise National Gas for reducing venting from compressors. National Gas, an environmental organisation and a consumer organisation were supportive of our Draft Determinations position.

### Measurement

- 3.14 As in RIIO-GT2, National Gas' performance will be measured against the tonnes of methane emitted from NTS compressors. The value of the incentive reward/penalty will be measured against the government published central carbon price.

### Target

- 3.15 We have decided to implement a dynamic target for the RIIO-GT3 price control period. In the first year, the target will be based on the average performance during RIIO-GT2, and will decrease annually by 75 tonnes, as follows:
- a) 2026/27: 2,156 tonnes
  - b) 2027/28: 2,081 tonnes
  - c) 2028/29: 2,006 tonnes
  - d) 2029/30: 1,931 tonnes
  - e) 2030/31: 1,856 tonnes
- 3.16 In response to our Draft Determinations, National Gas argued that the proposed initial target of 2,224 tonnes with a 100-tonne annual reduction was overly ambitious and based on an inconsistent data series. It suggested using a seven-year average to set the initial target at 2,334 tonnes, with a more modest annual reduction of 20 tonnes.
- 3.17 Other stakeholders, including an environmental and consumer organisation, supported the introduction of a dynamic target and called for greater ambition in methane reduction targets. They questioned whether the proposed greenhouse gas (GHG) incentives, including the GHG compressor emissions incentive, was ambitious enough to deliver National Gas' commitment in its Environmental Action Plan to cut methane emissions by 90% (from the 2022/23 baseline),



including emissions from leaks, venting, and operational assets on the NTS. The consumer organisation emphasised that under the current incentive National Gas earned rewards despite National Gas having had to manage high levels of volatility, changing flow patterns and an increased need to run compressors during the gas crisis.

- 3.18 National Gas raised concerns that the proposed targets could hinder compliance with environmental, safety regulations and maintenance work. It noted that, on average, approximately 70% of emissions are asset health and compliance-related, while the remaining 30% are operational and influenced by network supply and demand. National Gas estimates that asset health and compliance-related emissions would average 1,770 tonnes annually under RIIO-GT3 compressor replacement plans.
- 3.19 We considered this minimum threshold when setting the target for the next price control. We also took into account the increased focus on methane emissions reduction and the implementation of new technologies for which National Gas will request funding during the RIIO-GT3 price control period, as these may further improve efficiency and reduce emissions from venting.
- 3.20 The dynamic targets for RIIO-GT3 are based on National Gas' average performance in RIIO-GT2, which ranged from 1,982 to 2,293 tonnes of natural gas vented from compressors per annum to date. We note that National Gas' performance in the year with the lowest vented gas was better than the target we are setting for the first three years of RIIO-GT3.

#### Improvement Factor

- 3.21 We have decided to apply an improvement factor that reflects National Gas' improvement rate in management activities (ie 300 tonnes over the price control period). This equates to a 75-tonne annual reduction starting in the first year of RIIO-GT3.
- 3.22 We consider the 20-tonne annual improvement factor proposed by National Gas to be insufficiently ambitious and unlikely to drive the behaviours needed to minimise non-compliance and asset-health-related emissions (see paragraph 3.20). Conversely, we acknowledge National Gas' concerns that a 100-tonne annual improvement factor would be overly challenging.

#### Deadband

- 3.23 We have retained the proposed deadband of  $\pm 100$  tonnes to account for performance fluctuations arising from unpredictable flow patterns. We reviewed

the current deadband in light of changes to the target and improvement factor, based on National Gas' RIIO-GT2 performance to date. National Gas agreed with our Draft Determinations proposal.

#### Incentive exposure

3.24 We have decided to retain the cap and floor from our Draft Determinations, ie £2.0m pa, given the more ambitious target and improvement factor.

### **Greenhouse Gas Emissions (pipeline) ODI-F**

**Purpose:** To incentivise the GSO to optimise the utilisation of recompression technology while conducting pipeline maintenance to reduce the levels of vented gas.

**Benefits:** A reduced environmental impact from pipeline venting. Lower levels of shrinkage.

#### **Final Determinations summary**

<b>Design</b>	<b>Final Determination</b>	<b>Draft Determination</b>
ODI type	Financial – reward and penalty.	Same as FD.
Measurement	Measured based on tonnes of recompressed gas during pipeline maintenance.	Same as FD.
Target	To be established in year two of RIIO-GT3 following National Gas' baselining, expected not to be lower than 90% of gas recompressed during pipeline maintenance by the end of the price control period.	Change - to be established after National Gas' baselining. Will tighten annually.
Incentive exposure	±£3.5m in total for years three to five of the RIIO-GT3 price control.	Change - years two to five.
Incentive value	Each tonne of gas recompressed (and not vented) both above and below the target will be rewarded/penalised according to the central carbon price.	Same as FD.
Survey scope and methodology	To be established in the first two years of RIIO-GT3 in accordance with the most recent greenhouse gas emissions calculation methodologies and standards, assured in accordance with International Auditing and Assurance Standards.	Change - annual independent audit ensuring compliance with International Auditing and Assurance Standards.
Reporting	Performance will be reported annually in RRP as well as in its publicly facing Annual Environmental Report. Data reported will have to be externally verified.	Change - RRP and AER.

## **Final Determination rationale and Draft Determination responses**

### ODI type

- 3.25 We have decided to continue to financially incentivise National Gas to maximise recompression of gas during pipeline maintenance. National Gas, an environmental organisation and a consumer organisation were supportive of our Draft Determinations position.

### Measurement

- 3.26 We have decided to implement the proposed financial incentive on National Gas to use its mobile recompression units to maximise recompression of gas (and thus minimise venting) during pipeline maintenance. This excludes unplanned, emergency maintenance works.
- 3.27 The incentive performance will be measured based on tonnes of recompressed gas expressed as a percentage of total tonnes of gas (recompressed and vented) during pipeline maintenance.

### Target

- 3.28 We expect significant environmental benefits from this incentive by the end of the RIIO-GT3 price control period; this means recompression of at least 90% of all gas from planned pipeline maintenance work.
- 3.29 However, despite our expectation with regard to the target, we acknowledge that recompression mobile units are novel technology and the need therefore for National Gas to complete the baselining for this incentive in the first two years of RIIO-GT3. This will determine the RIIO-GT3 target in year two of the Price Control Period.
- 3.30 We expect National Gas to have completed the baselining, consultation and external validation of data prior to its resubmitting the proposal for the target to us for approval.

### Incentive exposure

- 3.31 Relative to the environmental benefit from this incentive, we have decided that a cap/floor of  $\pm£3.5m$  should be set for the three-year period of RIIO-GT3. We will review and consult on this position once the baselining is completed in the second year of the Price Control and/or if an ambitious target cannot be established for this incentive.

### Reporting

- 3.32 National Gas will be required to report on its performance annually in RRP to us. Any data reported to us will have to be externally verified.

### **Greenhouse Gas Emissions (fugitive) ODI-R**

---

**Purpose:** To incentivise the Gas System Operator to identify and repair defects on the NTS more effectively year on year.

---

**Benefits:** Reduced environmental impact from leaks on the NTS, lower levels of NTS shrinkage, increased safety.

---

### **Final Determinations summary**

<b>Design</b>	<b>Final Determination</b>	<b>Draft Determination</b>
ODI type	Reputational.	Same as FD.
Measurement	Measured based on tonnes of methane emitted over the course of the price control.	Same as FD.
Target	A minimum of 10% year on year improvement in fugitive emissions reduction. Target Fugitive Emission Performance levels will be established in year two of RIIO-GT3 following National Gas' baselining.	Same as FD.
Survey scope and methodology	To be established in the first two years of RIIO-GT2 in accordance with the most recent Fugitive Emissions methodologies and applicable standards, assured in accordance with International Auditing and Assurance Standards.	Change - annual independent audit ensuring compliance with International Auditing and Assurance Standards.
Reporting	Performance will be reported annually, through the RRP, and in a Fugitive Emissions Report to us from year three of the price control.	Change - RRP and AER.

### **Final Determination rationale and Draft Determination responses**

#### ODI type

- 3.33 We have decided to reputationally incentivise National Gas for reducing its fugitive emissions. National Gas, an environmental and a consumer organisation were supportive of our Draft Determinations position. The consumer organisation advised that we should assess in period whether the ODI-R is working as intended to drive improved performance, but that if not, we should consider whether a PCD or ODI-F would be more appropriate.

### Measurement

- 3.34 The reputational GHG fugitive emissions incentive will be measured against tonnes of emitted gas from National Gas' operations.

### Target

- 3.35 As set out in our Draft Determinations, we expect at least a 10% improvement in fugitive emissions reduction year on year. However, we acknowledge that fugitive emissions monitoring on the NTS requires further baselining, expected to be completed in the first two years of RIIIO-GT3.
- 3.36 We expect National Gas to have completed the baselining, consultation and external validation of data prior to its resubmitting the proposal for the target to us for approval in year two of the price control.

### Reporting

- 3.37 National Gas will be required to report its performance annually in RRP to us. Additionally, from year three of RIIIO-GT3, National Gas must report, for each Regulatory Year, on its activities related to detecting fugitive emissions, repairing assets to limit fugitive emissions, and provide any other explanation or context for its performance.

### **NTS Shrinkage Package (GSO) (includes ODI-F and a LO)**

- 3.38 Shrinkage describes the energy that is consumed, lost or otherwise not accounted for in the operation of the gas network. There are two aspects to managing NTS shrinkage:
- Volume of energy (electricity and gas) that is lost in the operation of the NTS; and
  - Price paid for the NTS shrinkage energy in National Gas' procurement process.
- 3.39 Together, they define the total cost of NTS shrinkage that is paid by consumers through transmission charges. In RIIIO-GT3 we will be tackling both volume and price of NTS Shrinkage as follows:
- by introducing an ODI-F for the price element of the NTS shrinkage (See NTS Shrinkage ODI-F) and a licence obligation for National Gas to report on its NTS Shrinkage Management Strategy to us;

- by launching the NTS Shrinkage review, outside of RIIO-GT3, to address the volume aspect of NTS shrinkage.<sup>6</sup> In November this year, we called for evidence to investigate the key drivers behind Unaccounted for Gas (UAG) and Calorific Value (CV) Shrinkage with a view to consider options to reduce volumes.<sup>7</sup> In 2026, we will conduct further policy analysis and stakeholder engagement subject to the findings of the call for evidence;
- by providing Uncertainty Mechanisms to fund technological solutions to reduce volumes of NTS shrinkage (see Chapter 4); as well as introducing new ODIs to reduce venting during pipeline maintenance (see GHG pipeline emissions ODI-F) and overall fugitive emissions (see GHG fugitive emissions ODI-R); and
- by retaining overall NTS shrinkage costs as a pass-through item for National Gas.

### **NTS Shrinkage Procurement ODI-F (GSO)**

---

**Purpose:** To incentivise the GSO in efficient procurement of Own Use Gas (OUG) for the operation of compressors, Unaccounted for Gas (UAG) and gas that cannot be billed due to low Calorific Value (CV Shrinkage), whilst managing risk exposure.

---

**Benefits:** Reduced price paid for the NTS shrinkage gas and better managed risk exposure due to the obligation to have a procurement strategy in place.

---

### **Final Determinations summary**

<b>Design</b>	<b>Final Determination</b>	<b>Draft Determination</b>
ODI type	Financial – reward and penalty.	Same as FD.
Measurement	Price for the NTS shrinkage gas per product in p/th against the standard reference price per product published by a Price Reporting Agency (PRA) end of day. <sup>8</sup> Argus Media's reference prices.	Change - ICIS Heren's reference prices.
Target	Publicly available reference price per product p/th of the NTS Shrinkage gas purchased. Weighted price end of day	Same as FD.

---

<sup>6</sup> We have received four responses in support of the proposed scope of the NTS Shrinkage review, as outlined in our Draft Determinations consultation.

<sup>7</sup> [A review of shrinkage volumes on the National Transmission System \(NTS\) | Ofgem](#)

<sup>8</sup> Eg for gas purchases, this will be calculated as (Argus Media p/th reference price on the day-National Gas p/th price) \* volume th for that product.

---

<b>Design</b>	<b>Final Determination</b>	<b>Draft Determination</b>
	should be used where available. For other products, end of day, transparent price should be used as a reference.	
Incentive exposure	± £2.3m pa (calculated as app. 2% of the forecast average annual NTS Shrinkage costs).	Same as FD.
Reporting	Performance will be reported annually in RRP's to us only, as it contains confidential purchasing information.	Same as FD.

## **Final Determination rationale and Draft Determination responses**

### ODI type

- 3.40 Our Final Determination decision is unchanged from our Draft Determination position regarding the incentive. The two consultation responses we received were supportive of our approach to incentivise National Gas to procure NTS shrinkage gas at the lowest possible price. One respondent, a consumer organisation, stated that it was difficult to ascertain the best design of the ODI-F until the results of the shrinkage review are available.

### Incentive Target and Measurement

- 3.41 We have decided to change our position regarding the target price for short-term products and the Price Reporting Agency (PRA) publishing the reference prices, to take into account National Gas' response to our Draft Determinations consultation.
- 3.42 We have decided that Argus Media's reference price will be used as the benchmark to assess National Gas' purchasing and selling performance under this incentive.
- 3.43 For within-day, day-ahead, weekend, and month-ahead products, performance will be measured against Argus Media's volume-weighted reference price.
- 3.44 For longer-term products—including seasons, quarters, and month-two (M-2)—the end-of-day reference price from Argus Media will be used.
- 3.45 National Gas argued that the proposed NTS Shrinkage ODI-F would incentivise behaviours that are not likely to be in the best interest of consumers or market efficiency, as it would reward National Gas for purchases closer to the end of the day as opposed to trades during the day. For this reason, National Gas had proposed using only volume-weighted prices as references, and for products without such Argus-weighted pricing (ie seasons, quarters and M-2), National Gas

suggested calculating a weighted average reference price based on the data it receives from the trading platform Joule.

- 3.46 Whilst we agree that publicly available weighted average prices should be used where available, we disagree with National Gas' proposal to calculate the target based on Joule trading data. As set out in our Draft Determinations, transparency with regard to target setting is crucial for this incentive. We wish to ensure calculable, verifiable and transparent consumer benefits from National Gas' NTS shrinkage procurement activities. Any subsequent recalculation of data from trading platforms is unnecessarily complex but also less transparent: one of the benefits of using a PRA in the first place.
- 3.47 Further, as confirmed by the PRAs' methodology and modelling experts, end of day reference prices for the seasons, quarters and M-2 products are representative of the prices paid on the day and as such used by the industry to benchmark against.

#### Price Reporting Agency

- 3.48 We have decided that National Gas should use its existing PRA, Argus Media. In our Draft Determinations we proposed that ICIS Heren is used, but National Gas responded to say that it would incur a substantial cost from purchasing data from ICIS Heren in addition to its current subscription to Argus Media. We do not wish to impose additional costs on National Gas in respect of this incentive.

#### Incentive exposure and value

- 3.49 We have decided to retain our consultation position and introduce NTS Shrinkage Procurement ODI-F with cap/floor of  $\pm$  £2.3m pa (calculated as app. 2% of the forecast average annual NTS Shrinkage costs).
- 3.50 The incentive value will be set based on the sum of differences between the reference price and the price per product bought/sold per th of natural gas, multiplied by the volume purchased/sold.

#### Reporting

- 3.51 National Gas will be required to report on its performance annually in RRP to us. No information will be made publicly available due to its sensitive nature.

#### Other

- 3.52 Due to the nature of natural gas trading, long-term products (seasons, quarters, M-2) for the first year of RIIO-GT3 will have to be procured prior to the start date of the RIIO-GT3 price control. Consequently, the first Regulatory Year of RIIO-



GT3 will only measure performance of buy and sell trades completed after 1 April 2026 (ie after the start of the Price Control Period).

### **NTS Shrinkage Procurement Strategy LO (GSO)**

---

**Purpose:** To strengthen the requirement for National Gas' NTS Shrinkage Procurement Strategy in order to manage risk exposure for consumers from the procurement of NTS Shrinkage gas and electricity.

---

**Benefits:** Managed risk exposure due to the obligation to have a proportionate, appropriate and externally audited NTS Shrinkage Procurement Strategy in place.

---

### **Final Determinations summary**

<b>Design</b>	<b>Final Determination</b>	<b>Draft Determination</b>
Output type	Licence Obligation.	Same as FD.
Output scope	NTS Shrinkage Procurement strategy for management of electricity and gas NTS Shrinkage energy.	Same as FD.
Reporting	Performance will be reported annually in RRP to us only, as it contains confidential information.	Same as FD.

### **Final Determination rationale and Draft Determination responses**

3.53 We have decided to strengthen the obligations and oversight of National Gas' NTS Shrinkage procurement strategy to ensure it is effective in managing electricity and gas procurement as proposed in our Draft Determinations. We will be introducing a licence obligation to this effect. We have received no opposing responses to our consultation position.

#### Reporting

3.54 National Gas will be required to report on its performance annually in RRP to us on the implementation of this strategy and the results. Once every two regulatory years, the report will have to be accompanied by an Independent Examiner's statement validating the results submitted and opining on the implementation, and appropriateness more broadly, of the NTS Shrinkage procurement strategy.

### **Redundant Assets PCD (GTO)**

---

**Purpose:** To provide funding for National Gas to adequately dismantle and remove redundant assets from the NTS.

---

**Benefits:** Eliminate unnecessary maintenance burden, improve environmental conditions and address customer needs to disconnect and decommission assets.

---

### **Final Determinations summary**

<b>Design</b>	<b>Final Determination</b>	<b>Draft Determination</b>
PCD type	Evaluative.	Same as FD.
Output to be delivered	Adequate decommissioning and removal of a range of above ground assets across the NTS.	Same as FD.
Delivery date	31 March 2031 for £32.01m. 31 March 2036 for £0.91m. <sup>9</sup>	Same as FD.
Allowance	£32.01m (post-OE).	Change – £29.20m (post-OE).
Ability to change during RIIO-3	No.	Same as FD.
Reporting	There will be a PCD report submitted to us upon project completion.	Same as FD.

### **Final Determination rationale and Draft Determination responses**

#### PCD type

- 3.55 We have decided to retain the evaluative Redundant Assets PCD to fund disconnections and decommissioning of assets from the NTS with the outputs proposed by National Gas in its business plan. National Gas and a consumer organisation responded to our Draft Determinations consultation.
- 3.56 National Gas agreed with our Draft Determinations position to retain this evaluative mechanism as a separate PCD for redundant assets outputs. A consumer organisation warned against setting a precedent through this introduction of the Redundant Assets PCD for decommissioning of the gas grid, which it believed should be funded through general taxation.
- 3.57 The Redundant Assets PCD has a specific set of outputs to decommission a limited number of assets from the NTS. As such it is different to the large scale decommissioning that may result from the energy system transitioning to net zero, which will require further collaboration and alignment with the whole systems approach and the impact on future and vulnerable consumers.

---

<sup>9</sup> Note that Ongoing Efficiency has not been applied for RIIO-T4 values.

---

Output to be delivered

- 3.58 National Gas disagreed with our position on the outputs that are covered by this PCD - in particular with our proposal to remove investments for pipe-through of block valve site and pipe-through of single valve on a site. National Gas believed both that the piping through of valves which are redundant to operational requirements reduces potential environmental impacts (ie to prevent deteriorated valves leaking), and that decommissioning these assets now ensures that consumers who have had the benefit of a safe and reliable NTS pay for its removal.
- 3.59 Further, National Gas disagreed with the proposed position to not fund the removal of [REDACTED] and argued that the removal is necessary to avoid incurring maintenance costs for the building at [REDACTED]. Separate to this, National Gas was also unable to provide the exact locations for the [REDACTED] customer-driven disconnections and decommissionings for which it requested funding.

Allowance

- 3.60 The allowance for this PCD is set at £32.01m.
- 3.61 Following a review of the evidence submitted in National Gas' response, we have approved the decommissioning of [REDACTED]. This increases the allowance by +£0.5m relative to our Draft Determinations.
- 3.62 The evidential basis to fund the pipe through of Single/Block Valves remains low. We disagree with National Gas that - based on the single case of a leak - the pro-active removal of 16 similar valves is necessary under the 'polluter pays' principle. We do not see sufficient technical or economic justification for these expensive remediations and thus retain our Draft Determinations position.
- 3.63 In terms of cost allowances, please see Chapter 5 for further detail on the adjustments we have made to the Redundant Assets PCD.
- 3.64 We accept that at this point in time National Gas is unable to provide the location for the [REDACTED] disconnections and [REDACTED] decommissionings that are customer-led. The expected numbers for these sites have been assessed based on historic data.

### Reporting

- 3.65 National Gas will be required to report to us upon completion of the works in scope of this PCD. We acknowledge that delivery of some of these projects will run into RIIO-GT4.

### **Compressor Emissions PCD (GTO)**

---

**Purpose:** To fund compressor replacement / upgrades to comply with the Medium Combustion Plant Directive (MCPD).

---

**Benefits:** Protecting consumers by ensuring efficient investment to deliver compliance with the MCPD.

---

### **Final Determinations summary**

<b>Design</b>	<b>Final Determination</b>	<b>Draft Determination</b>
PCD type	Evaluative.	Same as FD.
Output to be delivered	The ongoing projects outlined in the licence condition to comply with the MCPD for this mechanism will be funded until completion.	Same as FD.
Delivery date	Variable based on project; completion expected in RIIO-GT3.	Same as FD.
Allowance	To be determined following our RIIO-GT2 re-opener process.	Same as FD.
Reporting	Performance will be reported annually in RRP to us and relevant industry fora.	Same as FD.

### **Final Determination rationale and Draft Determination responses**

#### PCD type

- 3.66 We will retain this evaluative PCD to ensure funding for gas-fired compressor units across the NTS that do not comply with the emission limits set out in the MCPD. National Gas, the sole respondent to our Draft Determinations consultation, agreed with our position.

#### Output to be delivered

- 3.67 This PCD is an example of cross-period projects and is related to ongoing works for which re-openers have been submitted as part of RIIO-GT2, including funding for Front End Engineering Design studies and site reconfigurations.
- 3.68 The existing projects which will be funded through this PCD in RIIO-GT3 are compressor replacement / upgrade / decommissioning at Peterborough,

Huntingdon and Kings Lynn, for which we have already received National Gas' submissions. By the end of the current price control, we expect to have received National Gas' submissions for the MCPD-related investment at St Fergus and Wormington.

### Allowance

- 3.69 We will determine allowances and outputs for the equivalent RIIO-GT2 PCD and re-opener mechanism by direction in the coming months.<sup>10</sup>
- 3.70 Whilst we have decided to retain the Compressor Emissions PCD to fund ongoing compressor works from RIIO-GT2 to comply with the MCPD, any new projects in RIIO-GT3 to comply with the MCPD<sup>11</sup> will be funded through the Network Decarbonisation and Emissions Compliance Reopener & PCD (see Chapter 4).

### Reporting

- 3.71 National Gas will be required to report on its performance annually in RRs to us and in a report to us upon completion of the works in scope of this PCD.

## **Biomethane Connections UIOLI (GTO)**

---

**Purpose:** To fund the costs of biomethane connections onto the NTS, for which no Government funding has been received.

---

**Benefits:** Helps achieve the UK government's ambition of increased biomethane injections into the gas networks.

---

### **Final Determinations summary**

Design	Final Determination	Draft Determination
Output type	UIOLI.	Same as FD.
Scope	All capex and opex costs of connecting biomethane plants onto the NTS, where no government funding has been received.	Change – only capex.
Funding level	Funding cap of £2.0m per biomethane connection. Total funding cap of £20m for UIOLI for the RIIO-GT3 price control.	Change – £1.2m per biomethane connection, total funding cap of £20m for UIOLI.

---

<sup>10</sup> To streamline processes, we are removing the opex escalator in RIIO-GT3 (see Chapter 5). We note that the re-opener funding requests for the Compressor Emissions Re-opener and PCD and Bacton Terminal Redevelopment Re-opener and PCD will have been submitted in RIIO-GT2 and would be covered by the current opex escalator. The project will continue to receive Closely Associated Indirects (CAI) funding in RIIO-GT3 and we will ensure that this is reflected in the allowances in our funding decision.

<sup>11</sup> Including funding for [REDACTED] if required.

---

<b>Design</b>	<b>Final Determination</b>	<b>Draft Determination</b>
Reporting	Performance will be reported annually in the RRP to us.	Same as FD.
Associated document	Biomethane UIOLI Governance Document.	Change - nothing proposed at DD.

**Final Determination rationale and Draft Determination responses**UM type

- 3.72 We have decided to retain our Draft Determinations position and introduce the UIOLI mechanism to fund the cost of biomethane connections onto the NTS in the RIIO-GT3 price control. This will give National Gas quick and flexible access to funding when it needs it. All four stakeholders who responded to our Draft Determinations consultation highlighted the need for a mechanism to support biomethane uptake, with the majority referencing the role for biomethane highlighted in NESO's June 2025 Future Energy Scenarios (FES)<sup>12</sup> and DESNZ's Clean Flexibility Roadmap.<sup>13</sup>
- 3.73 In its response to our Draft Determinations, National Gas proposed that in addition to the UIOLI fund, a biomethane re-opener is introduced to allow for an improved evidence base on actual costs associated with biomethane connections to the NTS; to assess the appropriateness and sufficiency of the proposed £20 million UIOLI funding cap in light of evolving market conditions; to mitigate the risks from the GGSS coming to an end in 2028, as well as to ensure there is a clear pathway for biomethane support beyond the closure of the GGSS in 2028.
- 3.74 We do not consider such a re-opener to be necessary given that the UIOLI funding provided will in itself enable National Gas to improve the evidence base on actual biomethane connection costs to the NTS.
- 3.75 We have engaged closely with the government, given that it is actively considering the future policy framework for biomethane in the context of the current Green Gas Support Scheme (GGSS) closing to new applications in March 2028.<sup>14</sup> We may review the appropriateness and size of the UIOLI mechanism in the second year of RIIO-GT2 if there are changes to government funding schemes for biomethane or significant market or technological developments (see Review of the mechanism below).

---

<sup>12</sup> [Future Energy Scenarios 2025 Pathways to Net Zero V.5 0.pdf](#)

<sup>13</sup> [clean-flexibility-roadmap.pdf](#)

<sup>14</sup> The government expects to publish a consultation on a holistic future policy framework for biomethane in this financial year 2025/26, to follow the current GGSS.

### Scope

- 3.76 We have decided that all connection costs (both capex and opex) incurred to facilitate biomethane entry onto the NTS should be covered by this mechanism, provided that the biomethane plants do not receive any government funding. This differs from our Draft Determinations proposal, which only included capex connection costs - such as compression, valves, and pipework - to enable the physical connection of the biomethane plant to the NTS.
- 3.77 Having considered the feedback, we agree it is appropriate to change the scope of the UIOLI to better address high connection costs as this is the main barrier to entry for biomethane producers wishing to connect onto the NTS. These costs are driven not only by the high capex associated with connecting to high-pressure tier networks but also by higher, non-standardised opex, such as costs feasibility studies, project management, procurement, planning and environmental consenting.

### Funding level

- 3.78 Given the cost uncertainty associated with the biomethane connections onto the NTS, we have decided to apply a funding limit of £2m per connection in response to National Gas' information that this would be more effective given recent connection offers it has made.
- 3.79 We have decided to apply a total funding limit of £20m for the UIOLI mechanism in RIIO-GT3. In making this decision we have considered the number of connections that National Gas estimates to be likely to connect onto the NTS in RIIO-GT3, regardless of likely GGSS funding. We consider this funding to be sufficient and that a re-opener is not required.

### Review of the mechanism

- 3.80 As noted above, we may review the use of the mechanism in year two of the RIIO-GT3 price control, including the total allowance and the caps per connection, if there are any changes to government policy, technological or market driven increases in the uptake of biomethane.

### Divergence with the scope of the Gas Distribution Biomethane UIOLI

- 3.81 The divergence between the scope of this UIOLI and the equivalent UIOLI in gas distribution is because the drivers and blockers of biomethane connections are sector-specific:

- In GD, stakeholders were clear on the need for support in funding network reinforcement costs, which biomethane connections do not incur in GT.
- No connections outside of the GGSS are expected in GD; therefore, there appears to be no clear funding gap that the proposed scope in our Draft Determinations was closing. This differs from GT, where National Gas estimates that connection applications will be submitted regardless of government funding received. The current GGSS covers all connection costs, and the biomethane mechanism will match this for connections outside the GGSS.

3.82 Whilst by default, we would want to have consistency in the scope of biomethane UIOLI mechanisms across the gas sectors, we are convinced by stakeholder feedback on the need to target these to sector-specific blockers. We have considered whether our approach in RIIO-3 will lead to distortions and have not seen evidence that it will do so.

#### Other

3.83 By introducing this mechanism into the RIIO-GT3 price control we expect that National Gas will initiate any changes to the Uniform Network Code (UNC) as required to accommodate the implementation of this measure.

### **Environmental Action Plan and Environmental Report ODI-R commitments and outputs**

---

**Purpose:** To oblige National Gas to outline its environmental commitments for the RIIO-GT3 price control and to demonstrate its performance against these commitments annually.

**Benefits:** A more environmentally sustainable network which focuses on mitigating emissions, limiting impact on the natural environment, and ensuring efficiency in operations.

---

#### **Final Determinations summary**

<b>Design</b>	<b>Final Determination</b>	<b>Draft Determination</b>
ODI type	Reputational.	Same as FD.
Measurement	RRPs and AERs analysed annually.	Same as FD.
Target	Commitments met, Science Based Target Initiative (SBTi) accredited where applicable.	Same as FD.
Survey scope and methodology	Environmental reporting on the BCF, emissions, NTS Shrinkage, biomethane and hydrogen blending.	Same as FD.



<b>Design</b>	<b>Final Determination</b>	<b>Draft Determination</b>
Reporting	Both the commentary and the KPI section of the AER will be publicly facing documents available on National Gas' website.	Same as FD.
Associated document	Environmental Reporting Guidance and KPIs.	Same as FD.

**Final Determination rationale and Draft Determination responses**

- 3.84 The Environmental Action Plan (EAP) and Annual Environmental Report (AER) ODI-R will be a cross-sector reputational output delivery incentive. RIIO-3 Final Determinations for this output are presented in the Overview Document (Chapter 4).
- 3.85 National Gas agreed with our Draft Determinations proposal to retain both the Environmental Action Plan (EAP) and the Annual Environmental Report (AER) as part of the RIIO-GT3 framework. National Gas added that it currently monitors environmental commitments and performance through key metrics, complemented by qualitative narrative which is presented in its AER.

Targets and Commitments

- 3.86 The Final Determinations position for each of the EAP areas is as follows:
- Business Carbon Footprint (BCF): the measure of National Gas' carbon emissions as a result of its business operations. Business Carbon Footprint targets that National Gas has committed to achieving by the end of RIIO-GT3 are as follows:
    - (1) 21% reduction of scope 1 and 2 emissions against a 2022/23 baseline.
    - (2) Methane emissions reduction by 90% from the 2022/23 baseline, from leaks, venting and operating assets on the NTS.
    - (3) Enhancing leak detection capabilities through innovative digital platforms, if viable. This includes a potential incorporation into the Digital Platform for Leakage Analytics.
  - Embodied carbon: emissions which arise as a result of construction/production including the use and disposal of raw materials. National Gas has committed to reducing its carbon intensity by 50% and using a minimum of 30% materials from sustainable sources on all projects with a budget in excess of £25m.
  - Biodiversity and natural capital: the diversity of plant and animal species along with the quality of the water, air and soil in a given area. Targets that

National Gas has committed to achieving by the end of RIIO-GT3 are as follows:

- (1) The development of a strategy and governance framework to address nature related risks and opportunities;
  - (2) The delivery of 10% net gain in environmental value across all non-operational land from a 2025 baseline;
  - (3) The development and implementation of natural capital improvement plans for new projects with a budget in excess of £25m where land has been permanently impacted; and
  - (4) reporting on action taken to assess and remedy the impacts of activities conducted within National Parks.
- Supply chain: emissions associated with the procurement of products and services not directly within the control of National Gas. National Gas has committed to ensuring that 80% of its top suppliers meet its Supplier Code of Conduct and that the environmental management requirements are to a high standard and align with National Gas' ambition and corporate strategy.
  - Resource use: related to the utilisation of disposal to landfill, recycling and reuse of materials used in National Gas' operations. By the end of RIIO-GT3, National Gas has committed to:
    - (1) Reduce waste through decreasing waste tonnage and increasing recycling rates, including (a) recycling 80% of office waste by the end of RIIO-GT3; (b) recycling 70% of waste from compressor and National Gas sites; and (c) reducing water consumption through re-use and water metering strategies.
    - (2) Increase percentage of waste recycled and reused from National Gas' construction projects with a budget in excess of £25m based on 2025/26 baseline.
    - (3) Embed circular economy principles by identifying and piloting further opportunities to implement and refine the framework from lessons learnt.
  - NOx: Refers to the nitric oxide (NO) and nitrogen dioxide (NO<sub>2</sub>) created during the combustion of gas in National Gas' compressors. National Gas has committed to reducing NOx emissions by deploying its compressor emissions strategy (DLE retrofit and new gas turbine unit installation).

### Reporting

- 3.87 National Gas will report on each of the metrics and performance indicators outlined above in respect of each Regulatory Year in the public facing AER at the end of October.

## **Secure and resilient supplies**

### **Network Asset Risk Metric (NARM) PCD**

---

**Purpose:** To fund asset health interventions to reduce the NARM risk.

---

**Benefits:** Adequate funding for a resilient and safe gas transmission system, ensuring consistent supply to network users.

---

### **Final Determinations summary**

<b>Design</b>	<b>Final Determination</b>	<b>Draft Determination</b>
PCD type	PCD (evaluative)	Same as FD.
Measuring outputs	Baseline Network Risk Outputs using a long-term risk measure.	Same as FD.
Delivery date	31 March 2031.	Same as FD.
Allowance	Baseline cost allowance (inclusive of ongoing efficiency challenge): £572.2	Change – baseline cost allowance (inclusive of ongoing efficiency challenge): £404.6
Ability to change during RIIO-3	Yes, see Asset Health Re-opener (Chapter 4). Network company ability to increase target by 5%.	Same as FD.
Reporting	Performance will be reported annually in RRP to us. There will also be a closeout report submitted to us as part of the closeout process.	Same as FD.
Associated document	The NARM Handbook.	Same as FD.

### **Final Determination rationale and Draft Determination responses**

#### PCD type and scope

- 3.88 The NARM PCD will fund asset health investment to keep the asset risk within reasonable bounds, including investment in valves, compressors, pipelines, sites and other network assets. In our Draft Determinations we proposed to retain the

NARM PCD to fund asset replacement or refurbishment of assets for which mitigation of asset risk is the primary driver. National Gas, the sole respondent to our Draft Determinations consultation, agreed with our position however, it provided extensive further evidence related to our engineering and cost assessment of the NARM categories.

- 3.89 Following a review of this evidence, we have decided to retain this PCD which funds £572.2m of the £848.6m Asset Health investment allowance.
- 3.90 Our Final Determination allowance is higher than the allowance proposed at Draft Determinations as a result of increases in allowances within Non-Load Asset Health (see Chapter 5).
- 3.91 For RIIO-GT3, our Final Determination is to apply the same Funding Categories as in RIIO-GT2. The Funding Categories set out the scope of the NARM Funding Adjustment Penalty Mechanism, and its interaction with other funding mechanisms. For further details on the funding categories, please see The NARM Handbook.<sup>15</sup>
- 3.92 For RIIO-GT3, National Gas has expanded its asset base that it reports monetised risk upon and has undergone a change in its equipment taxonomy. We have worked with National Gas to establish new Risk Sub-Categories<sup>16</sup> which better reflect the themes of work which National Gas will be delivering in RIIO-3. These Risk-Sub-Categories also provide assurance that interventions proposed by National Gas, which have a strong engineering justification based on a qualitative risk assessment, are not sacrificed during the price control period for other interventions with a strong network risk benefit.
- 3.93 For Final Determinations we have decided to segment A1 Funding Category into 15 Risk Sub-Categories. This will affect how the NARM Funding Adjustment and Penalty mechanism is applied. These categories are Cabs, Compressors, Compressor Overhauls, Mechanical – P&E + Civil, Mechanical – Valves, Mechanical – Pipeline, Electrical, St Fergus, Pipelines, Pipeline Defect Digs, GQMT, Metering, Safety, Cyber Control and Cyber.

---

<sup>15</sup> [NARM-Handbook-v4.0.pdf](#)

<sup>16</sup> The NARM Funding Adjustment and Penalty Mechanism will operate independently for each Risk Sub-Category, and network companies will not be permitted to automatically trade risk across Risk Sub-Categories.

---

- 3.94 We have also introduced a suite of new evaluative PCDs<sup>17</sup>, re-allocating some investments which were originally proposed by National Gas under the A1 NARM Funding Category, to be funded via new evaluative PCDs. Because these investments impact network risk, we expect the delivery of these interventions to be reported in the NARM framework.
- 3.95 As in Draft Determinations, our decisions on network companies' Baseline Network Risk Outputs (BNRO) are based on its Business Plan proposals and reflect any adjustments to asset intervention volumes to align with baseline funding allowances.
- 3.96 As we set out at Draft Determination, to ensure that BNRO, Baseline Allowances and ONRO and Outturn Allowances are comparable, we require network companies to recalculate their BNRO to reflect their Final Determination volumes. More detail on this process can be found in the NARM section in the Overview Document.

#### Allowance

- 3.97 Table 3 below summarises our Final Determination on the BNRO, associated Baseline Allowances and the Unit Cost of Risk for each Risk Sub-Category. The BNRO relates only to the A1 Funding Category and excludes interventions included in the four new PCDs: Compressor Acoustic Buildings (CABs) PCD; Easement Reinstatement PCD; Removal of Valve and Pipe Stabbings PCD; and Actuator Replacement PCD.

Table 3: Baseline Network Risk Outputs, Baseline Allowance and Unit Cost of Risk per NARM Risk Sub-Category

<b>Risk Sub-Category</b>	<b>Baseline Network Risk Output (R£m)</b>	<b>Baseline Allowance (£m)</b>	<b>Unit Cost of Risk Benefit, UCR (£/R£)</b>
AH Cabs	-	0.2	-
AH Compressors	71.4	25.7	0.4
AH Mechanical - P&E + Civil	0.8	79.9	100.7
AH Mechanical - Pipeline	0.0	54.3	11,006.8
AH Mechanical – Valves	23.8	102.7	4.3
Cyber	1.1	44.7	41.2

---

<sup>17</sup> For more detail, see the following sections in this Chapter: Compressor Acoustic Buildings (CABs) PCD; Easement Reinstatement PCD; Removal of Valve and Pipe Stabbings PCD; and Actuator Replacement PCD

Risk Sub-Category	Baseline Network Risk Output (R£m)	Baseline Allowance (£m)	Unit Cost of Risk Benefit, UCR (£/R£)
Defect Digs	10,028.1	28.3	0.0
GQMT	-	-	-
Metering	0.5	52.5	104.5
Overhaul	9.0	39.1	4.3
Pipelines	3,514.6	48.2	0.0
Safety	5.3	28.5	5.3
St Fergus	16.1	68.0	4.2
Total	13,670.7	572.2	

3.98 A further breakdown of the BNRO per asset category can be found in Appendix 2 of this document.

### Compressor Breakdown UIOLI (GTO)

**Purpose:** To fund unplanned compressor maintenance and repair work.

**Benefits:** Ensures that National Gas has the funds available for timely essential repairs and maintenance works on compressors, which cannot be reallocated to other areas of asset health. Provides funding to ensure resilient, safe system and consistent supply to consumers.

### Final Determinations summary

Design	Final Determination	Draft Determination
Output type	UIOLI.	Same as FD.
Scope	Asset health interventions to address compressor breakdown and HV Motor Stator re-wind.	Change - asset health interventions to address compressor breakdown, [REDACTED] and HV Motor Stator re-wind.
Funding level	£19.52m (post-OE).	Change – undecided.
Reporting	Performance will be reported annually in RRP to us.	Same as FD.

### Final Determination rationale and Draft Determination responses

#### Output type

3.99 We have decided to introduce a UIOLI mechanism into the RIIO-GT3 price control to allow National Gas to quickly fund compressor maintenance and prepare for repair or refurbishment of compressor trains where inspection/monitoring of the asset indicates that the condition has deteriorated to a point where it can no

longer be used. National Gas, the sole respondent to our Draft Determinations consultation, agreed with the introduction of the proposed mechanism.

### Scope

- 3.100 In the context of ensuring continued resilience of the NTS and security of supply for the energy system, we have set up a UIOLI mechanism to allow National Gas to quickly fund compressor maintenance work. Failures of items of equipment like compressor trains is difficult to forecast and requires a quick response to repair and return the asset to service to maintain the capability of the NTS. This Compressor Breakdown UIOLI mechanism is to fund major repairs and return to service compressor trains with a light administrative burden.
- 3.101 National Gas disagreed with the proposed scope in our Draft Determinations and considered that HV Stator Motor Rewind and the proposed [REDACTED] should not be included in this UIOLI.
- 3.102 As set out in Chapter 5, HV Stator Motor Rewind is a compressor repair, one that is overdue and one that fits, in our view, within the scope of the UIOLI. We agree with National Gas that the [REDACTED] should be included in the NARM PCD instead of the breakdown budget. See our engineering justification in Chapter 5 for further detail.

### Funding level

- 3.103 The allowance for this mechanism is set at £19.52m. This value equals the sum of allowances that National Gas requested in its Business Plan for the relevant interventions, with an OE adjustment.

### Reporting

- 3.104 National Gas will be required to report on its performance annually in RRP to us.

## Nitrogen Sleeves PCD (GTO)

---

**Purpose:** To fund nitrogen sleeve refurbishment and grouting work and ensure compliance with the pressure safety regulations.

---

**Benefits:** Ensures that National Gas has the funds available to address deteriorating nitrogen pipeline protection sleeves and maintain security of supply.

---

### Final Determinations summary

Design	Final Determination	Draft Determination
PCD type	Mechanistic.	Same as FD.

<b>Design</b>	<b>Final Determination</b>	<b>Draft Determination</b>
Output to be delivered	Refurbishment of 350 sleeves, grouting of 105 nitrogen sleeves.	Change – refurbishment of 359 sleeves, grouting of 182 nitrogen sleeves. <sup>18</sup>
Delivery date	31 March 2031.	Same as FD.
Allowance and unit costs	£34.36m (post-OE).	Change – £32.69 (post-OE). <sup>19,20</sup>
Reporting	Performance will be reported annually in RRP to us and in a PCD report at the end of RIIO-GT3 price control.	Same as FD.

## **Final Determination rationale and Draft Determination responses**

### PCD type

3.105 We have decided to retain our Draft Determinations position and introduce a mechanistic PCD to support National Gas in expanding its nitrogen sleeve group filling programme. National Gas, the sole respondent to our Draft Determinations consultation, agreed with our proposal.

### Output to be delivered

3.106 This PCD will focus on the nitrogen sleeves that are in an unsatisfactory condition, eliminating the need for future nitrogen top-ups and interventions.<sup>21</sup> It will enable National Gas to refurbish 350 sleeves and grout 105 sleeves, with a true-up mechanism to adjust funding if additional sleeves require intervention beyond those in the Business Plan.

3.107 A mechanistic PCD will ensure that National Gas is held to account for delivering a clearly defined scope of work with stable costs, aligned to actual intervention needs on a failure basis.

<sup>18</sup> In Draft Determinations, the numbers stated for refurbishment and groutings were incorrectly stated as 359 and 182 respectively, instead of 350 and 105 respectively.

<sup>19</sup> NB The figures shown are inclusive of OE, but do not include the small percentage of overall allowance scheduled for the first year of RIIO-GT4; we have not modelled OE beyond the end of RIIO-GT3.

<sup>20</sup> In Draft Determinations, the value of this PCD was stated as equal to National Gas' request with adjustment for Ongoing Efficiency at £34.76m. This value was incorrectly stated and should have been stated as equal to National Gas' request with an efficiency challenge on unit costs and adjustment for Ongoing Efficiency at £32.69m.

<sup>21</sup> Nitrogen sleeves are located under major roads and sensitive infrastructure (e.g. railways), making corrosion prevention essential for maintaining pipeline integrity and system resilience.



### Allowance and unit costs

3.108 The allowance for this PCD is set at £34.36m. This cap equals the sum of allowances that National Gas requested in its Business Plan, with an efficiency challenge on unit costs (see Chapter 5 for further detail) and an OE adjustment.

### Reporting

3.109 National Gas will be required to report on its performance annually in RRP to us and in a report to us upon completion of the works in scope of this PCD.

## **West Import Resilience Project (WIRP) PCD**

---

**Purpose:** To allow National Gas to increase network capability in South Wales.

---

**Benefits:** Increased network capability and resilience. Reduced capacity constraint costs in South Wales.

---

### **Final Determinations summary**

<b>Design</b>	<b>Final Determination</b>	<b>Draft Determination</b>
Output type	Evaluative PCD (and a re-opener).	Evaluative PCD.
Output to be delivered	High pressure pipeline between Wormington and Honeybourne Multijunctions (9km) and between Churchover Compressor Tee and Multijunction (2km).	Change – high pressure pipeline between Wormington and Honeybourne Multijunctions (9km) and between Churchover Compressor Tee and Multijunction (2km). A store of spares for Wormington Compressor Station Unit C.
Delivery date	31 December 2028.	Same as FD.
Allowance	Baseline cost allowance (inclusive of ongoing efficiency challenge): £84.91m for the PCD.	Change – baseline cost allowance (inclusive of ongoing efficiency challenge): £63.17m.
Ability to change during RIIO-3	Yes, through the WIRP re-opener. See Chapter 4.	Change – yes, through the network capability re-opener.
Reporting	Performance will be reported annually in RRP to us and in a PCD report at the end of RIIO-GT3 price control.	Same as FD.

### **Final Determination rationale and Draft Determination responses**

- 3.110 The WIRP is the only load-related capital expenditure project in the RIIO-GT3 price control.<sup>22</sup> Its outputs will increase network capability in South Wales and enhance network resilience. We received two responses to our Draft Determinations consultation, and both were supportive of the implementation of the project.
- 3.111 We are approving the project scope as proposed by National Gas in its response to our Draft Determinations, with cost adjustments to allowances as outlined in Chapter 5. We are introducing a WIRP PCD for the pipeline build and a WIRP Re-opener (see Chapter 4) to provide the required funding flexibility for all the work associated with this project, and to account for any increases in project costs which may arise due to the need to reapply for environmental and planning permits.
- 3.112 In its Business Plan, National Gas presented a full range of options to mitigate the risk of excessive constraint management costs in the South Wales region in future years. As set out in our Draft Determinations, following our review of the needs case and the submitted CBAs under different FES we have proposed funding for Option 11 (which includes the five components set out in paragraph 3.115) in RIIO-GT3. This approach received support from National Gas and other stakeholders, with NESO in particular recommending Option 11 for implementation.<sup>23</sup>
- 3.113 The RIIO-GT3 process runs in parallel with the long-term strategic planning timeline, as set out in the current National Gas' Transporter Licence (Special Condition 9.10). In June 2025 National Gas was obliged to respond to NESO's Gas Capability Needs Report (GNCNR) by putting forward its Strategic Planning Options Proposals (SPOP) to address the identified system need in South Wales. One of the options that National Gas proposed for implementation was the equivalent of Option 11. NESO is currently reviewing National Gas' SPOP and will

---

<sup>22</sup> See Chapter 4.

<sup>23</sup> We formally commissioned NESO to review and advise us on alignment of National Gas' RIIO-GT3 Business Plan with the long-term system needs as we undergo an energy transition. In its response ([REQ3-NGT BP-Executive Summary](#)) NESO confirmed that the underlying analysis that National Gas had undertaken aligns with NESO's detailed probabilistic modelling against the FES Pathways; and that it is supportive of National Gas' proposed investment for RIIO-GT3 to ensure network capability and resilience of the critical assets, including new investment to increase capability in South Wales.

opine, in its GOA, on the option that it believes we should endorse and allow the funding for.

3.114 We have engaged extensively with NESO and National Gas on the best option to progress in South Wales. Based on these discussions, we expect NESO's GOA to align with our RIIO-GT3 Final Determinations position, particularly regarding the net present value of the investment and the benefits to consumers from avoiding constraint management costs in light of increased LNG imports and reduced demand in the region.

#### Project scope

3.115 The WIRP project, Option 11, has the following five components:

- Component 1: Constructing 9km of 900mm pipeline (75 Barg) between Wormington and Honeybourne Multijunctions. We have decided that this should be funded through the WIRP PCD.
- Component 2: Constructing 2km of 900mm pipeline (70 Barg) between Churchover Compressor Tee and Multijunction. We have decided that this should be funded through the WIRP PCD.
- Component 3: Flow modifications at Churchover, including control system design and upgrade, and the review of associated pipework arrangements to facilitate reverse flows and running of the compressors. We have decided to retain our Draft Determinations position and include the costs of this component in the scope is part of the Asset Health Re-opener. See Chapter 4.
- Component 4: Creating a store of spares for the electric powered Wormington Compressor Station Unit C. We have decided to provide baseline funding for this component given its importance for the resilience of the NTS. See Chapter 5 for further information and cost adjustments we have made.
- Component 5: Pressure uprating (102 Barg) of the existing pipeline (Feeder 28) between Felindre Compressor Station / Multijunction and Three Cocks Above Ground Installation. This component is required to increase the capability of the pipeline and is included in the WIRP re-opener (see Chapter 4).

3.116 Since our Draft Determinations, National Gas has advised us that investment to refurbish Wormington impeller and purchase Felindre vent stack is also required due to the WIRP. Whilst these do not constitute WIRP project components, they are related to the network capability and increased resilience in South Wales. We have thus included them in the scope of the WIRP Re-opener.

3.117 [REDACTED].

#### PCD type

3.118 We have decided that Components 1 and 2 (the 11 km pipeline build) should fall within the scope of the evaluative WIRP PCD.

3.119 This decision is based on the following considerations:

- Pipeline construction accounts for ~80% of estimated total project costs and is a prerequisite for any subsequent upgrades, such as the pressure uprating of Feeder 28 (ie Component 5).
- We want National Gas to commence mobilisation and delivery of the new pipeline early in the RIIIO-GT3 period. Construction requires compliance with environmental and planning legislation. [REDACTED].
- Including the pipeline build within the PCD allows us to hold National Gas accountable for delivery and conduct an ex-post review of costs and deliverability.

#### Allowance

3.120 The allowance for Components 1 and 2 is set at £84.91m. This is higher than our proposed allowances for the WIRP PCD in Draft Determinations.

3.121 National Gas opposed the allowances we set in our Draft Determinations, claiming they were based on the outdated approvals of the Western Gas Network project. National Gas re-submitted evidence showing that the project detailed scope has evolved which required re-phasing of project delivery to new timescales, increasing the costs of the Main Works Contractor (MWC). Partly, this is related to the management of risks and mitigations, concerning the need to renew and/or extend the Western Gas Network project (previously, this project was driven by a National Gas customer) consents.

3.122 We have reviewed and adjusted the costs submitted by National Gas. See Chapter 5 for further information on the cost adjustments we have made to the proposed project costs for Component 1 and 2.

#### Reporting

3.123 National Gas will be required to report on its performance annually in RRP to us and in a report to us upon completion of the works in scope of this PCD.

### Baseline capacity

3.124 This investment will result in a material increase in physical entry capacity at the Milford Haven System Entry Point. Although this additional capacity has not been delivered through the established UNC process, as soon as key components of the project have been delivered, we expect National Gas to request us to consider increasing the level of Obligated Firm Entry Capacity that National Gas would be required to make available under Special Condition 9.13. We will continue to work with the industry throughout RIIO-GT3 to review the Baseline Obligated Entry and Exit capacities.

## **Bacton Terminal Site Redevelopment PCD**

---

**Purpose:** To allow National Gas to address long-term asset health issues at the Bacton Gas terminal.

---

**Benefits:** To ensure long-term asset health at the Bacton Gas terminal.

---

### **Final Determinations summary**

<b>Design</b>	<b>Final Determination</b>	<b>Draft Determination</b>
PCD type	Evaluative.	Same as FD.
Output to be delivered	Agreed asset health interventions including replacement of Cathodic Protection System, critical valves and components of the low voltage electrical system.	Same as FD.
Delivery date	31 March 2036.	Same as FD.
Allowance	To be determined following our RIIO-GT2 re-opener process.	Same as FD.
Reporting	Performance will be reported annually in RRP to us. There will also be a PCD report submitted to us upon project completion.	Same as FD.

## **Final Determination rationale and Draft Determination responses**

### PCD type

3.125 We have decided to retain this PCD for RIIO-GT3 to complete the asset health related refurbishments at Bacton Terminal, submitted to us for approval as part of the RIIO-GT2 re-opener. National Gas and an interconnector responded to our Draft Determinations consultation and were supportive of our Draft Determinations proposal.

3.126 The interconnector argued against the removal of the re-opener associated with the Bacton Terminal redevelopment work given the criticality of the terminal for the continued supply of gas from Europe. We disagree that a re-opener continues to be required, given the clearly defined output and delivery dates for the works to be completed to address the current need to replace the aging assets. Should National Gas identify any other asset health related need for investment in the RIIO-GT3 price control, these can be included in the scope of the Asset Health Re-opener.

#### Output to be delivered

3.127 National Gas submitted a re-opener application in October 2024 seeking funding for the following interventions:

- Replacement of the Cathodic Protection System;
- Replacement of 50 critical valves;
- Replacement of key components of the low voltage electrical system; including cables and Control and Instrumentation.

3.128 We will be making a decision on the above outputs and allowances before the start of RIIO-GT3 price control.

#### Allowance

3.129 Allowances will be set by direction, prior to the start of the RIIO-GT3 price control.

#### Reporting

3.130 National Gas will be required to report on its performance annually in RRP to us and in a report to us upon completion of the works in scope of this PCD.

#### Other

3.131 The interconnector that responded to our Draft Determinations consultation requested that National Gas organises the work at Bacton terminal in a way that causes minimal disruption to the market and adjacent Transmission System Operators. We note the interconnector's representation. Just like with any other maintenance and asset health replacement work, we would expect National Gas to deliver this in the least disruptive way feasible.

## Compressor Acoustic Building (CAB) PCD

---

**Purpose:** To allow National Gas to fund CAB asset replacement to address long-term asset health issues.

---

**Benefits:** To ensure long-term asset health related to CAB infrastructure.

---

### Final Determinations summary

Design	Final Determination	Draft Determination
PCD type	Evaluative.	Change – no mechanism proposed at DD.
Output to be delivered	CAB Ventilation Replacement, Air Intake Replacement and CAB Exhaust Replacement works.	Change – no mechanism proposed at DD.
Delivery date	31 March 2031.	Change – no mechanism proposed at DD.
Allowance	£51.79m (post-OE).	Change – no mechanism proposed at DD.
Reporting	Performance will be reported annually in RRP to us. There will also be a PCD report submitted to us upon project completion.	Change – no mechanism proposed at DD.

### Final Determination rationale and Draft Determination responses

#### PCD type

3.132 We have decided to introduce a new evaluative PCD to hold National Gas to account for delivery of CAB asset replacements, whilst protecting the risk to consumers of over-funding.

#### Output to be delivered

3.133 This PCD will cover CAB Ventilation Replacement, Air Intake Replacement and CAB Exhaust Replacement works, all of which were disallowed funding in our Draft Determinations.

3.134 In its Business Plan, National Gas did not include any optioneering for the refurbishment of these assets, and instead based all cost estimates on full system replacement. This risks therefore being a series of unnecessarily expensive proposals. We believe that a dedicated CAB PCD provides the best mechanism to ensure that this funding is contingent on delivering the most efficient and justified solution whilst protecting consumer interest.

#### Allowance

3.135 The allowance for this PCD is set at £51.79m. Further detail on our engineering and cost assessment is provided in Chapter 5.

---

### Reporting

3.136 National Gas will be required to report on its performance annually in RRP to us and in a report to us upon completion of the works in scope of this PCD.

### **Easement Reinstatement PCD**

---

**Purpose:** To allow National Gas to fund tree and scrub clearance as required to maintain access to buried pipelines and gas monitoring and control equipment.

---

**Benefits:** To allow National Gas to access its buried assets at all times as mandated by Health and Safety Executive (HSE) safety legislation.

---

### **Final Determinations summary**

<b>Design</b>	<b>Final Determination</b>	<b>Draft Determination</b>
PCD type	Evaluative.	Change – in Asset Health Re-opener.
Output to be delivered	Delivery of combined 438km of tree and scrub clearance to maintain access to buried pipelines and gas monitoring and control equipment.	N/A.
Delivery date	31 March 2031.	N/A.
Allowance	£19.48m (post-OE)	Change - in Asset Health Re-opener.
Reporting	Performance will be reported annually in RRP to us. There will also be a PCD report submitted to us upon project completion.	N/A.

### **Final Determination rationale and Draft Determination responses**

#### PCD type

3.137 We have decided to introduce a new evaluative PCD for Easement Reinstatement, since we believe that a dedicated PCD will enable an ex-post evaluation of the cost efficiency and delivery of these interventions with a view to creating methods to more effectively evaluate volumes in advance (eg by working with additional specialists to verify an estimation methodology).

#### Output to be delivered

3.138 This PCD will hold National Gas to account for delivery of combined 438km of tree and scrub clearance to maintain access to buried pipelines and gas monitoring and control equipment.

3.139 Our Draft Determinations proposed that the scope of this PCD be covered by the Asset Health Re-opener. In its response, National Gas requested that these



interventions be merged into a single UIOLI mechanism. However, the proposed amount of work is based upon forecast growth and earth observation data creating high levels of uncertainty. This method has limited validation which can be improved upon through the evaluative component of this PCD.

3.140 Despite this, National Gas highlighted risks to delivery of work that is already underway to meet the HSE-mandated timelines. We have therefore decided to introduce a dedicated PCD to provide additional protection to consumers in respect of both the ex-post evaluation of the cost efficiency and the delivery of the Easement Reinstatement interventions.

#### Allowance

3.141 The allowance for this PCD is set at £19.48m. Further detail on our engineering and cost assessment is provided in Chapter 5.

#### Reporting

3.142 National Gas will be required to report on its performance annually in RRP to us. We will request evidence that the accuracy of models used to plan these works have been verified independently and that costs incurred have been efficiently tendered across the many regions in which this work will be undertaken.

### **Removal of Valve and Pipe Stabbings PCD**

---

**Purpose:** To allow National Gas to seek out and remove a large number of stabbings located near existing works.

**Benefits:** To ensure long-term asset health regarding leaking stabbings.

---

#### **Final Determinations summary**

<b>Design</b>	<b>Final Determination</b>	<b>Draft Determination</b>
PCD type	Evaluative.	Change – no mechanism proposed at DD.
Output to be delivered	Removal of 88 stabbings located near existing works.	Change – no mechanism proposed at DD.
Delivery date	31 March 2031.	Change – no mechanism proposed at DD.
Allowance	£17.36m (post-OE).	Change – no mechanism proposed at DD.
Reporting	Performance will be reported annually in RRP to us. There will also be a PCD report submitted to us upon completion of the works.	Change – no mechanism proposed at DD.

## Final Determination rationale and Draft Determination responses

### PCD type and scope

3.143 We have decided to introduce a new evaluative PCD to allow National Gas to seek out and remove a large number of stabblings (88) located near existing works, on the basis that they may leak.

### Output to be delivered

3.144 In its Business Plan, National Gas proposed the removal of 88 stabblings. This was submitted without any supporting evidence of asset failure, and without any satisfactory justification based on safety, supply resilience or economic analysis. We believe that these works should only be funded where there is evidence that stabblings are failing (ie leaking).

3.145 Our concern is that high volumes of stabblings removals without a clear need will later be sacrificed to record an efficiency gain, creating the appearance of cost savings and leaving consumers having funded unnecessary or unjustified work. An alternative concern is that such funding could be redirected to investments that are less demonstrably in consumer interests.

3.146 We have introduced this PCD specifically for the removal of valve and pipe stabblings to manage this risk and ensure that only necessary and justified work is funded. The PCD will ensure that National Gas demonstrates the need and value of this work before funding is released, thereby protecting consumers from inefficient or speculative investment.

### Allowance

3.147 The allowance for this PCD is set at £17.36m. Further detail on our engineering and cost assessment is provided in Chapter 5.

### Reporting

3.148 National Gas will be required to report on its performance annually in RRP's to us and in a report to us upon completion of the works in scope of this PCD.

## Actuator Replacement PCD

---

**Purpose:** To allow National Gas to replace faulty actuators to address long-term asset health issues.

---

**Benefits:** To ensure long-term asset health related to actuators.

---

**Final Determinations summary**

<b>Design</b>	<b>Final Determination</b>	<b>Draft Determination</b>
PCD type	Evaluative.	Change – no mechanism proposed at DD.
Output to be delivered	Replacement of 170 actuators.	Change – no mechanism proposed at DD.
Delivery date	31 March 2031.	Change – no mechanism proposed at DD.
Allowance	£9.38m (post-OE).	Change – no mechanism proposed at DD.
Reporting	Performance will be reported annually in RRP to us. There will also be a PCD report submitted to us upon project completion.	Change – no mechanism proposed at DD.

**Final Determination rationale and Draft Determination responses**

PCD type

3.149 We have decided to introduce a new evaluative PCD to hold National Gas to account for replacing 170 actuators on the NTS, whilst protecting the risks to consumers of over-funding and of the work not being completed.

Output to be delivered

3.150 In its Business Plan, National Gas proposed a near-blanket actuator replacement strategy with very limited evidence. In our Draft Determinations we proposed to remove 124 of 204 volumes for actuator replacements on the NTS. We continue to hold the view that obsolescence alone is an insufficient driver for replacement, which appears to be the case for 34 of the proposed replacements. We agree however (see Chapter 5) that additional actuator replacements may be needed where justified by asset condition or operational requirements.

3.151 We also recognise the need for compliance with the Dangerous Substances and Explosive Atmospheres Regulations (DSEAR), but we do not consider that the evidence provided by National Gas consistently supports full replacement as the most cost-effective solution. Alternative approaches may achieve compliance at lower cost.

3.152 In order to protect consumers from unnecessary expenditure, we are introducing an evaluative PCD. This requires National Gas to provide clear, asset-specific evidence that each replacement is necessary and cannot be addressed through a lesser intervention. A dedicated PCD also enables an ex-post evaluation of the cost efficiency and delivery of these interventions.

### Allowance

3.153 The allowance for this PCD is set at £9.38m. Further detail on our engineering and cost assessment is provided in Chapter 5.

### Reporting

3.154 National Gas will be required to report on its performance annually in RRs to us and in a report to us upon completion of the works in scope of this PCD.

### **Other outputs: Asset Health Non-Lead Assets PCD (Removed)**

3.155 The majority of assets on the NTS are covered by NARM. Other assets such as electrical infrastructure, civils, and miscellaneous items not covered by NARM have been funded through the Non-Lead Assets PCD in the current RIIO-GT2 price control.

3.156 In our Draft Determinations, we proposed retaining the Non-Lead Assets PCD in the next price control. Given the significance and materiality of the work we considered it important we continued to have in place the monitoring capability the mechanism provides.

3.157 National Gas was the only respondent to this proposal, and agreed with our Draft Determinations position; however, it proposed changes to both the NARM PCD outputs and the Non-Lead Assets PCD outputs. We have reviewed the evidence provided and, as set out earlier in this chapter (see NARM PCD), we have decided to adjust the NARM funding categories across several interventions. In addition, we have introduced four new evaluative PCDs to ring-fence funding related to CABs and actuators, removal of valves and pipe stabbings, and easement reinstatement (see the respective PCDs in this chapter).

3.158 These decisions have rendered the Non-Lead Assets PCD redundant; therefore, we have decided to remove it from the suite of PCDs for the RIIO-3 price control. A few miscellaneous interventions — includes funding for 24 interventions that are surveys, testing, monitoring, or cyber interventions re-allocated to asset health by us, totalling £35.5m — are included in baseline allowances without a PCD. This is because of the variability in scope and the relatively low materiality for each type of investment. Where possible we will track the delivery of these interventions in the NARM reporting framework.

## **High quality of service from regulated firms**

## Entry and Exit Constraint Management ODI-F

---

**Purpose:** To incentivise National Gas to minimise the cost and frequency of capacity constraint events, while maximising the release of capacity.

---

**Benefits:** Reduces consumer exposure to constraint costs and increases market access to entry and exit capacity.

---

## Final Determinations summary

Design	Final Determination	Draft Determination
ODI type	Financial – reward and penalty.	Same as FD.
Measurement	Performance will be measured through comparison of actual annual constraint costs against a performance measure.	Same as FD.
Target	Costs of £6.7m per year.	Change - costs of £2.5m per year.
Incentive exposure	± £5.2m pa. Reward using the TIM rate of the net underspend against the CCM target (taking account of constraint costs and applicable revenue), and similarly a penalty using the TIM rate of the net overspend against the CCM target.	Same as FD.
Reporting	Performance will be reported annually in RRP to us and biannually via relevant industry fora.	Change – performance will be reported annually in RRP to us and biannually via relevant industry fora. This biannual engagement will be enforced through a licence requirement.

## Final Determination rationale and Draft Determination responses

### ODI type

3.159 We have decided to retain the structure of the current financial incentive. National Gas, the sole respondent to our Draft Determinations consultation, agreed with our proposal.

### Measurement

3.160 The performance measure will be calculated in the same way as in RIIO-GT2 – through comparison of actual annual constraint costs against a performance

measure – but with the additional inclusion of the commodity value of locational sell actions.<sup>24</sup> This is in line with proposals in National Gas' Business Plan.

### Target

- 3.161 We have implemented an annual target for costs of £6.7m. This is an increase from the £2.5m target proposed in Draft Determinations, where we noted that a tightening of the target from National Gas' proposed value of £10.5m would reflect the higher standards expected.
- 3.162 The increase in the target value is based on additional analysis provided by National Gas in response to our Draft Determinations. Specifically, National Gas highlighted the increased risk of constraints estimated in National Gas' scenarios using FES 2024 data.<sup>25</sup> It also showed that the additional cost associated with the inclusion of locational actions in the constraint cost calculation would lead to unavoidable losses against the incentive had the initial target of £2.5m pa been retained.
- 3.163 We note that have National Gas argued that historical performance is not an appropriate indicator of the potential risks based on an oversell regime. However, we also note that previous estimates of constraint costs, including but not limited to those presented in National Gas' RIIO-GT2 Business Plan, were not borne out. We believe this either represents systemic errors in the forecasting of constraints, or National Gas' ability to successfully minimise their impact.
- 3.164 With this in mind, and taking into account National Gas' evidence, we set the new target at a challenging level of £6.7m, rewarding improvement in performance. The set target is significantly above the highest constraint costs seen during RIIO-GT2 and is in line with the minimum forecast constraint costs in the scenarios provided by National Gas in response to our Draft Determinations, taking into account the increased constraint risk at Isle of Grain and the implementation of WIRP.

### Incentive exposure

- 3.165 The maximum reward and penalty have been set at an equal distribution around the target score, at a value of ±£5.2m pa. This is consistent with the reward and penalty scheme under RIIO-GT2 and our proposal in Draft Determinations.

---

<sup>24</sup> Locational actions are commercial actions in which National Gas will trade energy at a specific entry or exit point. These are used to relieve potential system constraints.

<sup>25</sup> FES 2024 data relates to data shared as part of the Future Energy Scenarios publication in 2024.

- 3.166 A value of £5.2m reflects the degree of consumer benefit that can be achieved through this incentive and should provide sufficient incentive to drive performance above that which is required under National Gas' licence and legislation.
- 3.167 Beginning in RIIO-GT2, the TIM rate was applied to the incentive, with the intention of minimising the potential for trade-offs between SO and TO actions in the management of constraints. In its Business Plan, National Gas proposed disapplying the TIM sharing factor (set at 39%) from the sales on non-obligated Entry and Exit capacity and remained of this view in its Draft Determination response. Given that the current arrangements have been evidenced to encourage the release of non-obligated capacity so far in the RIIO-GT2 price control, we do not see benefit in disapplying the TIM and have rejected the request.

#### Reporting

- 3.168 National Gas will be required to report on its performance annually in RRP to us. We also expect that National Gas will engage with industry directly on a biannual basis; in its Draft Determination response, it gave support for the principle of greater transparency benefitting both us and industry.
- 3.169 We have opted not to create a licence obligation to this effect in order to give flexibility to both National Gas and industry, which National Gas agreed with. However, we will monitor the development and delivery of this engagement closely to ensure its suitability.

### **Quality of Demand Forecasting ODI-F and ODI-R**

---

**Purpose:** To incentivise National Gas System Operator to make improvements in the accuracy of its gas demand forecasts.

---

**Benefits:** Improved accuracy of National Gas' forecasts of gas demand support the industry in making efficient decisions about its use of the network, increasing system efficiency.

---

#### **Final Determinations summary**

<b>Design</b>	<b>Final Determination</b>	<b>Draft Determination</b>
ODI type	Financial, reward and penalty for D-1; Reputational for D-2 to D-5.	Same as FD.
Measurement	Demand forecast measured against actual daily demand.	Same as FD.
Target	D-1 annual average absolute forecast error target of 6.79mcm/d, and a	Change – D-1 annual average absolute

<b>Design</b>	<b>Final Determination</b>	<b>Draft Determination</b>
	demand forecast wind generation adjustment up to +2mcm/d. D-2 to D-5 annual average absolute forecast error of 13.5mcm/d.	forecast error target of 8mcm/d, decreasing by an efficiency factor of 15% across RIIO-GT3, and a demand forecast wind generation adjustment up to +2mcm/d.
Incentive exposure	Each incremental 1mcm/d movement in performance is worth $\pm$ £567k, with a symmetrical cap/floor of $\pm$ £1.7m for D-1. D-2 to D-5 will be reputational only.	Same as FD.
Reporting	Performance will be reported annually in RRP to us.	Same as FD.

### **Final Determination rationale and Draft Determination responses**

3.170 National Gas delivers NTS demand forecasts covering the period of one day ahead (D-1) to five days ahead (D-5). During RIIO-GT2, National Gas has been incentivised to increase the accuracy of its demand forecasts through two incentive schemes for its D-1 and D-2 to D-5 forecasts.

#### ODI type

3.171 We are retaining the current incentive structure: a financial incentive for D-1 forecasting and a reputational incentive for D-2 to D-5 forecasting, in line with the proposal in National Gas' Business Plan. This is broadly in line with our Draft Determinations proposal; however, we have made some minor adjustments based on the feedback we received from two respondents to our Draft Determinations consultation.

3.172 One respondent noted that GDNs were unlikely to benefit from this ODI-F for D-1 and would prefer forecasting of gas quality. We note the interest in gas quality forecasts; however, this does not detract from the need for, and consumer value derived from, accurate demand forecasting. We will therefore retain the incentive structure proposed in our Draft Determinations.

#### Target

3.173 Contrary to our Draft Determinations position, we decided to remove the efficiency factor from the D-1 and D-2 to D-5 incentive scheme targets. We determined that the efficiency factor would have limited benefit over a fixed target while introducing significant complexity.

3.174 In our Draft Determinations, we proposed introducing an efficiency factor into the target for the D-1 and D-2 to D-5 demand forecasting incentive, which would



reduce the targets by a set value each formula year. National Gas strongly disagreed with our Draft Determinations position, stating that the RIIO-GT2 static targets had already been challenging given the changing demand and supply patterns and weather changes. National Gas argued that given the expected increase in demand volatility over time, achieving a fixed target year on year would represent an improvement in performance.

- 3.175 We will instead impose a fixed target for day ahead forecasting of 6.79mcm/d, and 13.5mcm/d for D-2 to D-5 forecasts.
- 3.176 We are including a demand forecast wind generation adjustment up to +2mcm/d, as proposed in our Draft Determinations. This is due to the increasing significance of wind generation as a source of forecasting variability. National Gas agreed with this in its response.
- 3.177 During RIIO-GT2 the incentive was weighted to give more prominence to days on which demand forecasting was expected to be more valuable. This meant that a higher weighting was given to performance during winter months and a lower weighting to summer months. We proposed retaining this weighting in our Draft Determinations.
- 3.178 In its response to our Draft Determinations consultation, National Gas reiterated that they felt the weighting should be removed, given that summer months have become as relevant to shippers as winter months.
- 3.179 As stated in our Draft Determinations, we recognise that forecasting in summer has become more relevant due to the increase in LNG. However, we still consider forecasts on high demand days (ie. colder months) to be more valuable to customers and therefore deserve greater attention. Therefore, weighting will be retained as under RIIO-GT2.

#### Incentive exposure

- 3.180 The symmetrical cap/floor of  $\pm$  £1.7m for the D-1 scheme will be retained as under RIIO-GT2, with D-2 to D-5 remaining reputational only, in line with our Draft Determinations proposal. The performance cap and floor for the D-1 scheme will be 4.15mcm/d and 10.15mcm/d respectively, meaning that each incremental 1mcm/d movement in performance is worth  $\pm$  £567k.
- 3.181 By narrowing the range of the target band, National Gas will be more exposed to changes in their forecasting performance. This should mean that it is more inclined to push for improvements in performance, and more wary of allowing forecasting accuracy to fall.

## Reporting

3.182 National Gas will be required to report on its performance annually in RRP to us.

## **Residual Balancing ODI-F**

---

**Purpose:** To incentivise the residual balancing of supply and demand of the System Operator while minimising the impact of any actions on market prices.

---

**Benefits:** A more balanced supply and demand with minimised impact on market prices and cost to consumers.

---

## **Final Determinations summary**

<b>Design</b>	<b>Final Determination</b>	<b>Draft Determination</b>
ODI type	Financial – reward and penalty.	Same as FD.
Measurement	Reward/penalty for performance against the targets in both schemes, Price Performance Measure (PPM) and Linepack Performance Measure (LPM). Incorporating a performance range (2.8mcm/d to 5.6mcm/d) within which no incentive would apply for the LPM mechanism during the shoulder months.	Same as FD.
Target	PPM: 1.5% of System Average Price (SAP). LPM: 2.8mcm/d (non-shoulder months) and 5.6mcm/d with a 2.8mcm/d to 5.6mcm/d zero performance dead-band during shoulder month.	Same as FD.
Incentive exposure	+£2.4m/-£4.2m. A stepped incentive with tiered daily payments up to £1.75k (PPM scheme) and £4.7k (LPM scheme) and penalties down to -£24k for performance against the PPM and LPM targets.	Change – +£2.4m/-£4.2m. A stepped incentive with tiered daily payments up to £1.2k (PPM scheme) and £3.2k (LPM scheme) and penalties down to -£24k for performance against the PPM and LPM targets.
Reporting	Performance will be reported annually in RRP to us.	Same as FD.

## **Final Determination rationale and Draft Determination responses**

3.183 The residual balancing incentive has two elements: a) LPM encouraging National Gas to optimally manage its linepack levels each day such that minimal imbalance is carried over from day-to-day; and b) Price Performance Measure PPM encouraging National Gas to execute any residual balancing trades at prices that are close to the System Average Price (SAP) for the day.

ODI type

- 3.184 We have decided to retain the structure of the Residual Balancing ODI-F. National Gas, the sole respondent to our Draft Determinations consultation, agreed with our proposal.

Target

- 3.185 We are retaining our Draft Determinations consultation position for the daily targets of 1.5% of SAP for the PPM component, penalising National Gas for any underperformance up to 76 percentage points above the target. The daily target of 2.8mcm/d (and 5.6mcm/d during the shoulder months) for the LPM component will apply, rewarding National Gas for the difference in linepack that is lower than the target. National Gas considered the targets proposed in our Draft Determinations to be challenging given its current RIIO-GT2 performance.

Measurement

- 3.186 National Gas' performance for this incentive will be measured against the targets for PPM and LPM, referred to above.
- 3.187 We have decided to retain the deadband of 2.8mcm/d to 5.6mcm/d within the defined shoulder months, which National Gas agreed with.

Incentive exposure

- 3.188 We have decided to retain our Draft Determinations position with regard to the caps and collars for this incentive, which National Gas agreed with in its response. The annual cap and collar of this incentive across both components will be £2.4m and -£4.2m respectively, which represents increased exposure compared to the current RIIO-GT2 incentive. Daily caps and collars have increased compared to our Draft Determinations position to £1.75k/-£24k for the PPM and £4.7k/-£24k respectively for the LPM component.
- 3.189 We recognise the value that this incentive can provide by encouraging National Gas to go above and beyond its legislative requirements. National Gas has had to enter the market more frequently (on 70% of the days) to perform residual balancing actions in RIIO-GT2 compared to RIIO-GT1 (58% of the days). The value of trades also increased, from a peak of £67.8m in RIIO-GT1, to £452.8m in RIIO-GT2.
- 3.190 The higher number of expected trade actions and the increased value of these suggest an increase in the consumer impact that is at risk through this incentive. We believe this justifies the proposed increase in incentive value.

## Reporting

3.191 National Gas will be required to report on its performance annually in RRP to us.

## **Maintenance ODI-F**

---

**Purpose:** To incentivise the System Operator in efficient planning of network maintenance at direct exit connections from the NTS.

---

**Benefits:** Minimised impact of maintenance work on National Gas' customers and minimised disruption to customer operations.

---

## **Final Determinations summary**

<b>Design</b>	<b>Final Determination</b>	<b>Draft Determination</b>
ODI type	Financial – reward and penalty.	Same as FD.
Measurement	Performance in relation to: RVO Scheme: the target 5 days for completion of maintenance work; Non-RVO Scheme: 90% customer alignment for the non-RVO work; Changes scheme: number of changed days in relation to the total number of maintenance days.	Same as FD.
Target	RVO Scheme: 5 days; Non-RVO Scheme: 90% customer alignment; Changes Scheme: 3.5% of all maintenance days changes	Same as FD.
Incentive exposure	RVO Scheme: downside only, penalty of - 20k/day from the target up to - £0.5m (25 days); Non-RVO Scheme: reward of ±£50k per 1% alignment change above target, up to +350k (97%) and down to -0.7m (76% alignment); Changes Scheme: reward of +£50k for each 0.7% less changes made from 3.5% target up to +250k (for 0% changes), and penalty of - £70k per each 0.7% change from 4% to the floor of -£0.5m pa (for 11% changes).	Same as FD.
Incentive value	+£0.6m/-£1.70m pa.	Same as FD.
Reporting	Performance will be reported annually in RRP to us.	Same as FD.

## **Final Determination rationale and Draft Determination responses**

3.192 We have decided to retain the financial Maintenance incentive as proposed in our Draft Determinations, with the parameters set out in the table above. National gas and an industry stakeholder responded to our Draft Determinations consultation.

---

3.193 Although National Gas agreed with our Draft Determinations position, it reminded us that the asset health replacement programme will increase, which will in turn make performance under this incentive more challenging. National Gas also reminded us of the value this incentive brings to its customers.

3.194 Recognising the current level of outperformance on all three maintenance schemes, we maintain our Draft Determinations position that the targets should be challenging and only reward National Gas where improvements in customer maintenance management have been achieved.

#### Reporting

3.195 National Gas will be required to report on its performance annually in RRP to us.

#### Other

3.196 One industry stakeholder strongly opposed the extension of the maintenance window, as proposed by National Gas and as referenced in our Draft Determinations. It argued that under current UNC arrangements, maintenance can take place outside the designated maintenance window (April to October), provided that the affected users give their consent. The stakeholder expressed its concern that extending the maintenance window would limit National Gas in scheduling maintenance work outside the peak summer period.

3.197 We note that the current maintenance arrangements provide flexibility to industry stakeholders. We do not consider that extending the maintenance window would adversely impact the flexibility that National Gas is able to provide to its customers now or in the future. Further, any modifications to the UNC will have to follow the industry governance processes and will ultimately require our approval outside of the RIIO-GT3 price control.

### **Customer Satisfaction Survey ODI-F**

---

**Purpose:** A financial output delivery incentive to drive improvements in the quality of customer service through customer satisfaction surveys.

**Benefits:** Increased customer satisfaction and stakeholder engagement and improved service.

---

#### **Final Determinations summary**

<b>Design</b>	<b>Final Determination</b>	<b>Draft Determination</b>
ODI type	Financial – reward and penalty.	Same as FD.
Measurement	Performance will be measured through the mean numerical score of	Same as FD.

<b>Design</b>	<b>Final Determination</b>	<b>Draft Determination</b>
	all valid responses within a survey area. The survey areas of Day-to-day Customer Activities, Market Facilitation, and Long-term Customer Activities are weighed at 30% each; Other Activities is weighed at 10%.	
Target	Day-to-day Customer Activities: 9.1, Market Facilitation: 9.2, Long-term Customer Activities: 8.4, and Other Activities and Events: 8.7.	Change - Day-to-day Customer Activities: 9, Market Facilitation: 8.9, Long-term Customer Activities: 8.5, and Other Activities and Events: 8.7.
Deadband	±0.2 of the target score.	Same as FD.
Incentive value	The maximum reward and penalty will be set at ±£2.8m pa.	Same as FD.
Reporting	Performance will be reported annually in RRP's to us.	Same as FD.

### **Final Determination rationale and Draft Determination responses**

#### ODI type

3.198 We have decided to retain this financial incentive in RIIO-GT3, but with a restructured design of four survey areas as proposed in our Draft Determinations. National Gas, the sole respondent to our Draft Determinations consultation, agreed with our proposed structure.

3.199 The four survey areas which National Gas will collect data on will be Day-to-day Customer Activities, Market Facilitation, Long-term Customer Activities, and Other Activities and Events. National Gas' performance will be measured through the mean score it has received for each survey area. Each survey area will then contribute a percentage of this to the total financial incentive (30% for all areas except Other Activities and Events, which will contribute 10%).

#### Target

3.200 We have decided to set the following challenging targets per survey area:

- Day-to-day Customer Activities: 9.1
- Market Facilitation: 9.2
- Long-term Customer Activities: 8.4
- Other Activities and Events: 8.7

- 3.201 We have considered National Gas' performance in RIIO-GT2 in setting these targets. We have used averages of National Gas' performance in RIIO-GT2, and increased these by 0.2 points to drive further improved performance.
- 3.202 Our Final Determinations position is more stretching than the Draft Determinations position in two out of four areas. Our methodology applied to set the targets has not changed since the Draft Determinations, but we have updated the targets to take account of the last year RIIO-GT2 reported data which was not available for the Draft Determinations.
- 3.203 Further, National Gas argued that setting the target at average performance plus an uplift of 0.2 points, combined with an additional deadband of  $\pm 0.2$ , would effectively require an uplift of 0.4 points before it could start earning a reward or incurring a penalty. It argued that this would be demotivating and therefore could lead to adverse impacts. We considered this response when deciding on our Final Determinations position. However, we disagree. While the targets are based on its average performance in RIIO-GT2, National Gas has exceeded these targets in individual years of the current price control, demonstrating that rewards are achievable and so will appropriately incentivise further improvements.

#### Deadband

- 3.204 A  $\pm 0.2$  deadband has been implemented around the target score for each survey area to ensure minor statistical variations do not result in a financial reward/penalty. None of the responses to our Draft Determinations disagreed with this position.

#### Number of responses

- 3.205 We have decided that National Gas will need to obtain the following minimum number of responses per survey area to qualify for a reward/penalty:
- Day to day Customer Activities: 30.
  - Market Facilitation: 25.
  - Long-term Customer Activities: 25.
  - Other Activities and Events: 25.
- 3.206 This is different from our Draft Determinations, where we consulted on a minimum requirement of 30 responses per survey area. National Gas argued that this would be challenging to achieve across all survey areas, given historic performance.

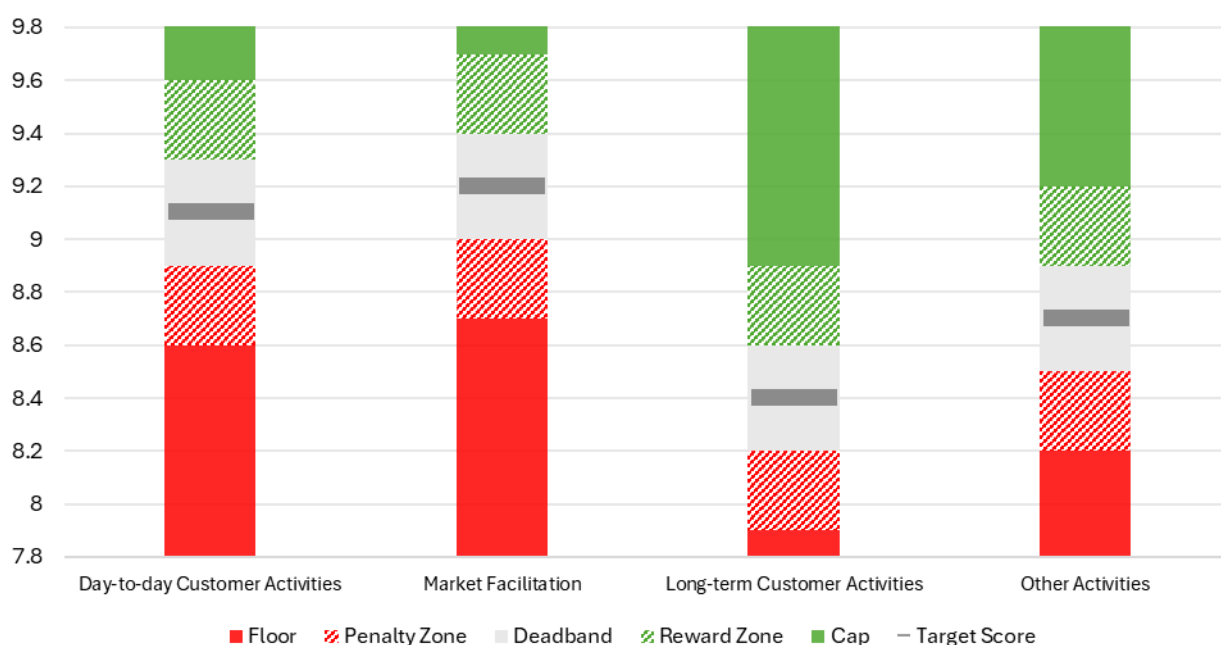
3.207 Looking at the data shown in RIIO-GT2, the number of responses per survey area in individual years is often below 25. We do not wish to introduce a perverse incentive in setting the minimum requirement level, for National Gas to opt out from gathering further responses if its performance dips (ie to avoid a penalty).

3.208 We consider the above number of minimum responses to be an achievable target for National Gas.

#### Incentive exposure

3.209 The penalty and reward zones in Figure 2 show the areas where National Gas would earn/lose money, with anything greater than  $\pm 0.5$  from the target score subject to the cap/floor amount.

Figure 2: Incentive parameters for Customer Satisfaction Survey per survey area



#### Incentive value

3.210 We have decided to retain our Draft Determinations position and set the maximum reward and penalty at  $\pm \text{£}2.8\text{m}$  per annum to take account of past improvements and outperformance. We consider that the value of the restructured Customer Satisfaction Survey incentive appropriately rewards National Gas for exceptional performance and will continue to drive further improvement for customers.

#### Reporting

3.211 National Gas will be required to report on its performance annually in RRP to us.





## 4.Managing uncertainty

- 4.1 Business Plans and price controls are based on a set of assumptions of what is required over the forthcoming period. There may be significant uncertainty over some of these assumptions, and where appropriate it may be better to use mechanisms that adapt certain elements of the price control during the period. These are referred to as Uncertainty Mechanisms (UMs).
- 4.2 As set out in the Overview Document, the UMs that we will use in RIIO-GT3 are re-openers, UIOLIs, pass-through, and indexation mechanisms.
- 4.3 Table 4 and Table 5 outline all the UMs we are proposing for RIIO-GT3 and set out where you can find full details. UMs specific to a particular company are covered in that company's respective annex.

Table 4: Cross-sectoral UMs in RIIO-3

UM name	UM type	Sector(s)	Further detail
Business Rates (prescribed rates)	Pass-through	ET, GD, GT	Overview Document
Cost of debt indexation	Indexation	ET, GD, GT	Finance Annex
Cost of equity indexation	Indexation	ET, GD, GT	Finance Annex
Inflation Indexation of RAV and Allowed Return	Indexation	ET, GD, GT	Finance Annex
Ofgem licence fee costs	Pass-through	ET, GD, GT	Overview Document
Pension Scheme Established Deficit	Pass-through	ET, GD, GT	Finance Annex
Tax Review	Re-opener	ET, GD, GT	Finance Annex
Real Price Effects (RPEs)	Indexation	ET, GD, GT	Overview Document
Digitalisation	Re-opener	ET, GD, GT	Overview Document
Resilience	Re-opener	ET, GD, GT	Overview Document
Cyber Resilience	UIOLI and PCD	ET, GD, GT	Overview Document
NIS-R Cyber Resilience	Re-opener	ET, GD, GT	Overview Document
Co-ordinated Adjustment Mechanism (CAM)	Re-opener	ET, GD, GT	Overview Document
Decarbonisation and Environmental Policy (DEP)	Re-opener	ET, GD, GT	Overview Document
Small Decarbonisation Projects (SDP)	Re-opener	GD, GT	Overview Document
Decarbonisation Project Development (DPD)	UIOLI	GD, GT	Overview Document

Table 5: Sector specific UMs in RIIO-GT3

UM name	UM type	Sector(s)	Further detail
Gas Strategic Planning	Re-opener	GT	This document

<b>UM name</b>	<b>UM type</b>	<b>Sector(s)</b>	<b>Further detail</b>
Network Decarbonisation and Emissions Compliance	Re-opener and PCD	GT	This document
Pipelines Diversion	Re-opener	GT	This document
Asset Health	Re-opener	GT	This document
Office, Gas National Control Centre (NCC) and Emergency Control Room (ECR) Relocation	Re-opener	GT	This document
Network Capability	Re-opener	GT	This document
Bacton Enhanced Filtration	Re-opener	GT	This document
Funded Incremental Obligated Capacity (FIOC)	Re-opener	GT	This document
West Import Resilience Project (WIRP)	Re-opener	GT	This document
HyNet FEED Study Funding	Pass-through	GT	This document
Policing Costs	Pass-through	GT	This document
PARCA Termination Value	Pass-through	GT	This document
Small Decarbonisation Projects (SDP) Re-opener	Pass-through	GT	This document
NTS Transportation Owner Activity	Pass-through	GT	This document
Gas Conveyed to Independent Systems	Pass-through	GT	This document
System Operator Other Revenue Allowances	Pass-through	GT	This document
Central Data Service Provider (CDSP) Costs	Pass-through	GT	This document
NESO Gas Strategic Planning Costs	Pass-through	GT	This document

## **Re-opener cost forecasting and planning expectations in gas transmission**

- 4.4 We have observed significant increases in costs during RIIIO-GT2, specifically from the time of the submission of the Final Options Selection Report (FOSR), when we approve the needs case and option for an intervention through assessing a Cost Benefit Analysis (CBA), to when the actual funding request is sent to us for approval. This trend highlights the need for stronger forecasting discipline in National Gas' future re-opener submissions, especially for large, multi-year investments, as well as the need for National Gas to find cheaper ways to deliver its work as a rule.
- 4.5 In RIIIO-GT3 we will apply greater scrutiny to these costs and will expect National Gas to demonstrate, to a high standard, that all future forecasts have been subject to rigorous internal challenge, verification and – to the extent possible –

benchmarking. Where we are not confident that this is the case, we will reject any funding request. At the re-opener stage, we will expect National Gas to demonstrate a line-by-line justification for cost increases from FOSR with evidence.

- 4.6 We expect National Gas to improve its tendering processes to extract better value for consumers through improved competition in the supply chain. This approach is intended to deliver further cost efficiency and improve contracting outcomes across multi-year investments. Where appropriate, we expect National Gas to consider projects of similar nature that can be grouped together to create economies of scale and attract stronger market competition. This approach is intended to deliver further cost efficiency and improve contracting outcomes across multi-year investments.
- 4.7 Further, and in particular for the re-openers which include several relatively smaller projects (ie Network Decarbonisation, Network Capability), we expect National Gas to carefully consider project timing and delivery requirements to ensure that funding requests are appropriately scheduled and reflect a well-structured, efficient investment plan.

## **Infrastructure fit for a low-cost energy transition**

### **Gas Strategic Planning Re-opener**

---

**Purpose:** To account for any changes required following the publication of the GNCNR, GOA document and the CSNP, including any changes required due to the Clean Power 2030 plan and Security of Supply considerations such as High Impact Points of Failure (HIPFs).

---

**Benefits:** This re-opener will allow a case-by-case assessment of project need and cost, and support delivery of key infrastructure to support wider energy plans and resilience of the NTS, at efficient cost to the consumer.

---

#### **Final Determinations summary**

<b>Design</b>	<b>Final Determination</b>	<b>Draft Determination</b>
UM type	Re-opener.	Same as FD.
Scope	Investment required following the publication of NESO's energy system planning deliverables, including GOA and CSNP, taking into account the CP2030 plan and GB security of supply. Investment required to mitigate the risks of HIPFs on the NTS.	Same as FD.

<b>Design</b>	<b>Final Determination</b>	<b>Draft Determination</b>
Authority triggered	Yes.	Same as FD.
Materiality threshold	None.	Same as FD.
RPEs	Applied to all projects (see Chapter 6 of the Overview Document).	Change – not specified.

**Final Determination rationale and Draft Determination responses**UM type and Scope

- 4.8 We have decided to implement our Draft Determination proposal to introduce the Gas Strategic Planning Re-opener as an Authority-triggered re-opener. We received four responses to our Draft Determinations consultation, which agreed that a re-opener is an appropriate mechanism for investment related to gas strategic planning. A gas distributor argued that this re-opener should be extended to all gas transporters (ie including GDNs).
- 4.9 Taking consultation responses into account, we have decided to retain the scope of this re-opener as proposed in our Draft Determinations, ie to include investment required following the publication of NESO's energy system planning deliverables, including GOA and CSNP, taking into account the CP2030 plan and GB security of supply. The re-opener will also cover investment required to mitigate the risks of HIPFs on the NTS.
- 4.10 NESO in particular recognised that additional investment may be requested by National Gas due to a range of potential uncertainties at play within the price control period. NESO also recognised the important role it will play in supporting assessment of any such investments.

Network company re-opener windows

- 4.11 We have decided that the Gas Strategic Planning Re-opener will be an annual, Authority triggered re-opener, with a re-opener window in January of each Regulatory Year, or any other time as required by the Authority. In making our decision, which aligns with our Draft Determinations, we have considered ongoing current gas strategic planning timelines and need for HIPFs, CP2030 and other investment.
- 4.12 In its response to our Draft Determinations, National Gas proposed that the Gas Strategic Planning Re-opener should be triggered in a similar way to the Funded Incremental Obligated Capacity (FIOC) Re-opener, ie "when key decisions, frameworks or recommendations are published by NESO or the Government" that

would impact National Gas' network capability and asset needs. National Gas also suggested that if an annual window approach were to be retained, then the timing of the licensee window should be moved to October to align with its staggered approach for re-opener windows.

- 4.13 Unless explicitly defined, we consider there to be too great an ambiguity in what constitutes a key decision, framework or recommendation, that would trigger the Gas Strategic Planning Re-opener. At the same time, attempting to define a list of decisions, frameworks or recommendations in advance in the licence could be unduly restrictive.
- 4.14 We have decided the Gas Strategic Planning Re-opener will be an annual, Authority triggered re-opener, with a re-opener window in January of each Regulatory Year, or any other time as required by the Authority. In making our decision, which aligns with our Draft Determinations, we have considered ongoing current gas strategic planning timelines and need for HIPFs, CP2030 and other investment.

### Materiality threshold

- 4.15 We have decided not to apply a materiality threshold for this re-opener. National Gas agreed with our proposed Draft Determinations position on this.

## Network Decarbonisation and Emissions Compliance Re-opener & PCD (GTO)

---

**Purpose:** To address uncertain costs and fund the delivery of technological upgrades on compressors and other assets along with any other environmental compliance legislation related investment, and the utilisation of more refined practices (eg flaring, autotune Dry Low Emissions (DLE)) across the NTS.

**Benefits:** A reduction of carbon emissions on the NTS. A positive impact in the form of reduced shrinkage levels.

---

### Final Determinations summary

Design	Final Determination	Draft Determination
UM type	Re-opener and PCD.	Same as FD.
Scope	Reducing NTS carbon emissions and complying with emissions legislation through the rollout of new technologies on compressors and other assets, including zero loss seals and recompression. Subject to Health and Safety Executive (HSE) legislative changes associated with hydrogen	Change - no DLE at DD.

<b>Design</b>	<b>Final Determination</b>	<b>Draft Determination</b>
	blending, we propose that the re-opener also includes the proposed investment for Hydrogen metering readiness. Scope also includes interventions related to [REDACTED].	
Authority triggered	Yes.	Change – was not.
Network company re-opener windows	April 2027 and April 2028.	Change – was January 2028.
Materiality threshold	Default materiality threshold (see Chapter 6 of the Overview Document).	Same as FD.

## **Final Determination rationale and Draft Determination responses**

### UM type and Scope

- 4.16 We have decided to retain our Draft Determination position and introduce a licensee- and Authority-triggered, Network Decarbonisation and Emissions Compliance Re-opener and Price Control Deliverable. We received two responses to our Draft Determinations consultation, from National Gas and an environmental organisation, and both were supportive in their responses to our Draft Determination.
- 4.17 We have decided to widen the scope of this re-opener to include interventions related to [REDACTED].
- 4.18 In its response, National Gas indicated that the [REDACTED] work had previously been discussed with us through RIIO-GT2 emissions compliance submissions and supported by our RIIO-GT2 Final Determinations on those submissions. It noted that this investment would help National Gas understand the benefits and challenges of integrating the technology into its network, which feed into the CBA for rolling it out to more sites. We agree this would benefit consumers.

### Network company re-opener windows

- 4.19 We have decided to increase the number of re-opener windows to two, in April 2027 and April 2028. The re-opener month is aligned with our approach to re-opener windows set out in the Overview Document (see Chapter 6).
- 4.20 In our Draft Determinations we proposed only one National Gas triggered re-opener in RIIO-GT3. In its response to our Draft Determinations, National Gas requested three re-opener windows due to the interactions of the works that are in scope of this re-opener with the innovation programme. We accept that the additional window has merit because of the need to capture smaller, innovation-

related funding. If additional funding for the network decarbonisation work is required, we also have the ability to trigger this re-opener to provide additional application flexibility.

#### Materiality threshold

- 4.21 The materiality threshold for this re-opener will align with our standard re-opener policy as set out in Chapter 6 of the Overview Document. National Gas disagreed with our position, citing the need to fund fragmented investment linked to innovation funding. As with all other re-opener work, we expect National Gas to optimise its plan ahead of each re-opener window and consider when the projects need to be delivered, and how this impacts the timing of the request for re-opener funding.

### **Pipelines Diversion Re-opener (GTO)**

---

**Purpose:** To allow National Gas to recover costs of diverting a pipeline in response to a force majeure event, quarry and loss development claims, to mitigate the effects of a significant environmental disturbance or to manage third-party encroachment, that are outside of its control.

**Benefits:** Consumer money is not spent on projects with uncertain costs and/or scope of work.

---

#### **Final Determinations summary**

<b>Design</b>	<b>Final Determination</b>	<b>Draft Determination</b>
UM type	Re-opener.	Same as FD.
Scope	To cover the costs of diverting a pipeline as a result of existing obligations taken on by the Gas Council or British Gas plc, or in response to a force majeure event, quarry and loss development claims, to mitigate the effects of a significant environmental disturbance or to manage third-party encroachment.	Same as FD.
Authority triggered	Yes.	Same as FD.
Network company re-opener windows	None.	Change – annual, January.
Materiality threshold	Default materiality threshold (see Chapter 6 of the Overview Document).	Same as FD.



## **Final Determination rationale and Draft Determination responses**

### UM type and Scope

4.22 We have decided that this re-opener will be for the costs of diverting a pipeline which arise as a result of existing obligations or liabilities taken on by the Gas Council or British Gas plc, and costs for which National Gas has done everything in its power to recover from the relevant party requesting the pipeline diversions. It will also be for the costs of diverting a pipeline in response to different events, including a force majeure, significant environmental disturbance, and quarry and loss development claims. We have received two responses to our Draft Determinations consultation. National Gas agreed with our proposal for this re-opener. An electricity distributor provided a response in relation to the materiality threshold (see below).

### Authority triggered

4.23 We have decided to remove the annual re-opener window, which we proposed in our Draft Determinations that National Gas could use to request funding for the works that are in scope of this re-opener. Contrary to our proposal, this will now be an Authority-triggered re-opener only, when the need arises. In making this decision we have considered:

- that there has been no need to trigger this re-opener in RIIO-GT2; and
- that this re-opener is prompted by external events, such as a force majeure event, major infrastructure developments (eg roads, railways, housing), planning authority requirements, or third-party land use, changes that give rise to material impacts on pipeline routing or result in compensation claims related to land access or asset presence. We expect National Gas to make representations to us if it considers that the trigger is met.

### Materiality threshold

4.24 We have decided to retain our Draft Determinations position and apply a default materiality threshold for this re-opener, as set out in Chapter 6 of the Overview Document. National Gas and an electricity distributor were supportive of this.

## **Secure and Resilient Supplies**

### **Asset Health Re-opener**

---

**Purpose:** To ensure funding for adequate maintenance and management of aging assets on the NTS.

---

---

**Benefits:** Safe and reliable operation of assets on the NTS.

---

**Final Determinations summary**

<b>Design</b>	<b>Final Determination</b>	<b>Draft Determination</b>
UM type	Re-opener.	Same as FD.
Scope	Asset health related investments that were uncertain prior to the start of the RIIO-GT3 price control, as well as other, new asset health related investment, should the need for it emerge during the price control.	Change - asset health related investment works not covered by NARM which were previously covered by this re-opener (eg above ground Plant & Equipment and CAB Infrastructure assets), [REDACTED], Welded/Buried NRV overhauls, Cyber Control System Roll-over, Cyber Station and Cyber Unit Control System replacement.
Authority triggered	Yes.	Same as FD.
Network company re-opener windows	April 2027, April 2028 and April 2030.	Change - January 2027 and January 2029.
Materiality threshold	Default materiality threshold (see Chapter 6 of the Overview Document).	Same as FD.
RPEs	Applied to all projects (see Chapter 6 of the Overview Document).	Change – not specified.

**Final Determination rationale and Draft Determination responses**

4.25 We received three responses to our Draft Determinations consultation. These were from National Gas, an interconnector and a consumer group; all expressed support for this re-opener.

UM type and Scope

4.26 We have decided to expand the scope of this re-opener beyond the proposed scope in our Draft Determination. The types of investment included in this re-opener are:

- control systems and impacted ancillary assets;

- updating of the risk model relating to AC accelerated corrosion in Scotland not funded elsewhere and urgent interventions on pipeline assets identified by such analysis;<sup>26</sup>
  - pipeline interventions associated with AC accelerated corrosion, provided that other mitigation activities have been pursued but led to unsuccessful outcomes;
  - new valves intervention programmes triggered by new needs case;<sup>27</sup> and
  - new site assets intervention programmes triggered by a new needs case and a revised submission for painting above ground pipework to protect against corrosion that accounts for newer available technologies and the lifetime cost of a pipework maintenance programme.
- 4.27 This re-opener may also cover other, new asset health related investment, should the need for it emerge during the price control due to the change in asset health condition or due to a clearly demonstrable need for additional volumes with a clearly demonstrable need. In our Draft Determinations, we consulted on a much more specific scope of this re-opener, which was based on the projects that National Gas submitted in its Business Plan. In its response to our Draft Determinations, National Gas proposed that the scope is broadened to include other investment in assets, should the need arise.
- 4.28 Although National Gas did not identify in detail what broadened scope it had in mind, we do accept that, given the importance of asset health to network resilience, a broadened scope is desirable so that funding is available to National Gas in additional circumstances to those set out at Draft Determinations.
- 4.29 In its response to our proposal at Draft Determinations in respect of the scope of this re-opener, the interconnector requested clarity on whether works at the Bacton terminal are included. The Bacton Terminal Redevelopment PCD funds the

---

<sup>26</sup> NGT008 AC Inspection and Remediation was fully funded, see Appendix 1. We agree that National Gas needs to do further work on the issue of AC accelerated corrosion and so we have widened the scope of the reopener to include: 1) circumstances where the licensee has updated its risk assessment tool to include data supplied from Scottish electricity Transmission Owners and addressing any urgent findings, and 2) cases where the licensee has had to introduce changes as a result of the expansion of electricity transmission infrastructure in GB. There are a range of options to address this latter issue and we expect that National Gas will have explored efficient and effective options with the electricity industry before requesting additional funding via this reopener. We will continue to work with National Gas and the electricity industry to allocate costs to the appropriate party and to minimise costs to consumers.

<sup>27</sup> We expect funding requests for valves, requested in scope of this re-opener, to be limited given that the majority of the work has been approved for baseline funding.

---

current asset health-related investment at Bacton (see Chapter 3). Beyond this, there are currently no Bacton-specific works envisaged in the scope of this re-opener. However, should the need arise, the scope of this re-opener allows such investment to be put forward.

#### Network company re-opener windows

- 4.30 We have decided that there will be three re-opener windows in RIIO-GT3 during which National Gas can trigger this re-opener, namely April 2027, April 2028 and April 2030. This is aligned with National Gas' response to our Draft Determinations and with our cross-sector approach to re-opener windows (see Chapter 6 of the Overview Document).
- 4.31 We may direct National Gas to apply during subsequent windows at our discretion.

#### Materiality threshold

- 4.32 We have decided that the default materiality threshold should apply for this re-opener given the scope and materiality of the work for which funding will be requested. This is set out in Chapter 6 of the Overview Document. As with all other re-opener work, we expect National Gas to plan ahead of each re-opener window and consider all potential investments and eventualities that may impact its funding request.
- 4.33 In its response, the consumer organisation requested that we apply rigorous scrutiny and needs assessment for any costs submitted as part of the Asset Health Re-opener due to the materiality and unpredictability of cost increases that could occur for consumers. As mentioned in the introduction to this chapter, we expect better forecasting discipline in National Gas' re-opener submissions and we will be providing greater close scrutiny of these costs in RIIO-GT3.

### **Office, Gas National Control Centre (NCC) and Emergency Control Room (ECR) Relocation Re-opener**

---

**Purpose:** The purpose of the re-opener is to relocate National Gas' offices, National Control Centre (NCC) and Emergency Control Room (ECR).

---

**Benefits:** Provides the opportunity to ensure that National Gas' Critical National Infrastructure is designed to the latest security standards and best practise.

---

### **Final Determinations summary**

<b>Design</b>	<b>Final Determination</b>	<b>Draft Determination</b>
UM type	Re-opener.	Same as FD.
Scope	Relocation of National Gas' offices, National Control Centre (NCC) and Emergency Control Room (ECR).	Change - relocation of National Gas' offices and NCC.
Authority triggered	No.	Same as FD.
Network company re-opener windows	April 2026 for National Gas' offices and NCC, April 2028 for Emergency Control Room.	Change – one, in August 2026.
Materiality threshold	None.	Change – default materiality threshold (see Chapter 6 of the Overview Document).

### **Final Determination rationale and Draft Determination responses**

#### UM type and Scope

- 4.34 We have decided to retain this re-opener to cover investment associated with the move of National Gas' offices and NCC, given that the lease is due to expire and a relocation will be necessary.
- 4.35 National Gas was the sole respondent to our Draft Determinations consultation. Following its response, we have decided to expand the scope of this re-opener to include a relocation of the ECR in 2028, should this be necessary.

#### Network company re-opener windows

- 4.36 This will be a licensee-triggered re-opener with two mid-price control windows—in April 2026 and April 2028. Our decision regarding the first re-opener window (ie to fund the office and NCC relocation) has changed from our Draft Determinations to give effect to National Gas' representation that it should be able to request funding in April 2026 rather than in August 2026.
- 4.37 The need and timing of funding for the relocation of National Gas' ECR is currently unknown. National Gas proposed adding a second re-opener window in January 2028. To maintain consistency with our cross-sector approach, we have decided that the re-opener should be scheduled for April 2028, or at any other time by Direction.

#### Materiality threshold

- 4.38 We have decided that no materiality threshold should apply to this re-opener. Although we consider that the office, NCC, and ECR relocation will be material enough to meet the threshold, we have taken National Gas' response to our Draft

Determinations into account. National Gas argued that no materiality threshold should apply to this re-opener, given that the nature of the investment will ensure the control room design complies with the highest standards for security barriers. This will protect National Gas' Network and Information Systems (NIS) in-scope systems, enabling compliance with advancements in security and cyber legislation. Since no materiality threshold applies to the Cyber Resilience re-opener, for consistency, no threshold should apply to the Office, NCC, and ECR relocation.

## **Network Capability Re-opener**

---

**Purpose:** To allow National Gas to improve the performance envelope of existing compressor units, upgrade site configurations and decommissioning of redundant compressor units.

---

**Benefits:** Ensuring appropriate capability and resilience to deal with alternating flow patterns.

---

### **Final Determinations summary**

<b>Design</b>	<b>Final Determination</b>	<b>Draft Determination</b>
UM type	Re-opener.	Same as FD.
Scope	Site reconfiguration, compressor re-wheeling, decommissioning of redundant compressor units and other network-capability related investment.	Change – site reconfiguration, installation of low NOx burner retrofits, re-wheeling, decommissioning of redundant compressor units, uprating of Feeder 28 for WIRP and other network-capability related investment.
Authority triggered	Yes.	Change – no.
Network company re-opener windows	April 2028 and April 2029.	Change – one, in January 2027.
Materiality threshold	Default materiality threshold (see Chapter 6 of the Overview Document).	Same as FD.

### **Final Determination rationale and Draft Determination responses**

#### UM type and Scope

- 4.39 We have decided to retain the Network Capability re-opener as proposed in our Draft Determinations. National Gas, the sole respondent, mostly agreed with our intended scope but proposed several modifications.
-

4.40 We have decided to change the scope of this re-opener for the following reasons:

- Rescoping of low NOx burner retrofits, which are now covered by the Network Decarbonisation and Emissions Compliance Re-opener. Although these retrofits deliver enhanced network capability, they also importantly reduce environmental impact.
- Removing the WIRP related investment, ie Feeder 28 uprating, as this is now part of the new WIRP PCD and re-opener.

#### Authority triggered

4.41 We have decided to change our Draft Determination position and introduce this reopener as an Authority- and licensee-triggered re-opener, as proposed by National Gas. This is to allow for additional re-opener windows, if the need to increase network capability arises.

#### Network company re-opener windows

4.42 We have decided to introduce a second window for National Gas to trigger this re-opener. This is in response to National Gas' feedback for staggering the investment required and to be able to request funding mid-price control period, ie in January 2028 and 2029. However, in line with the approach to re-opener windows set out in the Overview Document (Chapter 6), we have decided that the re-opener windows should be April 2028 and April 2029.

#### Materiality threshold

4.43 We retain our Draft Determinations position that the default materiality threshold, as in Chapter 6 of our Overview Document, should apply for this re-opener. National Gas supported this in its response.

### **Bacton Enhanced Filtration Re-opener**

**Purpose:** To provide funding for the installation of additional filtration equipment at Bacton Gas Terminal to remove dust from gas entering the terminal prior to being supplied to the Interconnector UK pipeline system.

**Benefits:** Installation of additional equipment at Bacton to support international flows.

#### **Final Determinations summary**

<b>Design</b>	<b>Final Determination</b>	<b>Draft Determination</b>
UM type	Re-opener.	Same as FD.
Scope	Filtration equipment at Bacton Terminal for all feeders.	Change – filtration equipment [REDACTED].

<b>Design</b>	<b>Final Determination</b>	<b>Draft Determination</b>
Authority triggered	Yes.	Same as FD.
Network company re-opener windows	When required.	Same as FD.
Materiality threshold	Default materiality threshold (see Chapter 6 of the Overview Document).	Same as FD.

## **Final Determination rationale and Draft Determination responses**

### UM type and Scope

- 4.44 We have decided to retain our Draft Determination position to introduce a re-opener to cover potential investment in filtration equipment at Bacton Terminal. We accept that National Gas' current mitigation measures may need future enhancement to further reduce the risk of dust disrupting export flows to Belgium.
- 4.45 We received two responses to our Draft Determinations consultation, from National Gas and an interconnector. Considering these responses, we have decided to expand the scope of this re-opener to include all feeders at Bacton Terminal, should the need arise in the RIIO-GT3 period.

### Authority triggered

- 4.46 We have decided that this will be a licensee-triggered and Authority-triggered re-opener. Any amendments to the re-opener term will be issued by a direction when the need arises.

### Materiality threshold

- 4.47 We have decided to retain our Draft Determinations position and apply the default materiality threshold for this re-opener, as set out in Chapter 6 of the Overview Document. This threshold reflects that this re-opener is intended for material needs defined within the scope, not for routine or low-cost interventions. National Gas should manage smaller, unplanned works through its baseline allowances and the TIM, which is designed to provide flexibility for such cases.

## **Funded Incremental Obligated Capacity (FIOC) Re-opener**

---

**Purpose:** To provide funding for network reinforcement that will increase the level of Baseline Licence Obligated Entry or Exit Capacity to meet a request for additional capacity from a network user.



**Benefits:** This will allow National Gas to increase the level of obligated entry or exit capacity in response to customer demand.

---

**Final Determinations summary**

<b>Design</b>	<b>Final Determination</b>	<b>Draft Determination</b>
UM type	Re-opener.	Same as FD.
Scope	Any network reinforcement required to increase the level of Baseline Licence Obligated Entry or Exit Capacity following an associated Planning and Advanced Reservation of Capacity Agreement (PARCA) request from a network user.	Same as FD.
Authority triggered	No.	Same as FD.
Network company re-opener windows	When and if a need arises, following the PARCA process.	Same as FD.
Materiality threshold	None.	Same as FD.
RPEs	Applied to all projects (see Chapter 6 of the Overview Document).	Change – not specified.
Associated document	FIOC Guidance Document.	Same as FD.

**Final Determination rationale and Draft Determination responses**

4.48 We propose to retain the re-opener mechanism as proposed in our Draft Determinations and as it currently exists in RIIO-GT2. This is to ensure that National Gas can deliver Incremental Baseline Licence Obligated Entry or Exit Capacity in response to requests for additional capacity from customers, following submission of a PARCA application from a reservation party. Such applications and the investment required to deliver the necessary level of incremental capacity cannot be forecast accurately. National Gas, the sole respondent to our Draft Determinations consultation, supported our proposal.

**West Import Resilience Project (WIRP) Re-opener**

---

**Purpose:** To allow National Gas to increase network capability in South Wales.

---

**Benefits:** Increased network capability and resilience. Reduced capacity constraint costs in South Wales.

---

### Final Determinations summary

Design	Final Determination	Draft Determination
UM type	Re-opener.	Network Capability Re-opener.
Scope	Pressure uprating between Felindre Compressor Station / Multijunction and Three Cocks Above Ground Installation, Wormington impellor refurbishment and Felindre vent stack purchase.	Change - Pressure uprating between Felindre Compressor Station / Multijunction and Three Cocks Above Ground Installation.
Authority triggered	No.	Same as FD.
Network company re-opener windows	April 2027 and April 2028.	January 2028.
Materiality threshold	Default materiality threshold (see Chapter 6 of the Overview Document).	Same as FD.

### Final Determination rationale and Draft Determination responses

4.49 This section should be read alongside the WIRP PCD in Chapter 3, which sets out the breakdown of WIRP components and explains the rationale for the RIIIO-GT3 funding flexibility for this project.

#### UM Type and Scope

4.50 We are introducing a WIRP Re-opener to ensure appropriate resilience and capability of the NTS in South Wales. The following components are within scope:

- Component 5: Pressure uprating (to 102 barg) of the existing pipeline (Feeder 28) between Felindre Compressor Station / Multijunction and Three Cocks Above Ground Installation;
- refurbishment of the Wormington impeller;
- purchase of the Felindre vent stack; and
- [REDACTED].

4.51 [REDACTED].

4.52 The scope of this Re-opener has expanded compared to our Draft Determinations. Previously, Feeder 28 uprating (Component 5) was proposed under the Network Capability Re-opener, and the Wormington impeller refurbishment and Felindre vent stack purchase were not identified as WIRP components. In its response, National Gas argued for a dedicated WIRP Re-opener to include all these elements, as they collectively enhance resilience and network capability in South Wales.

4.53 [REDACTED].

4.54 We agree with National Gas’ suggestion that, to allow full cost maturity for Component 5 and account for [REDACTED].

## GT specific pass-through costs

---

**Purpose:** Where National Gas has costs that are substantially outside of its control we use pass-through mechanisms. For these items, any change in the costs of gas transmission (TO and SO) is recovered fully from customers.

---

**Benefits:** To protect National Gas from costs that are outside of its control.

---

4.55 This section covers GT sector specific pass-through mechanisms. For cross-sector uncertainty mechanisms see Chapter 6 of the Overview Document.

### Final Determinations summary

Design	Final Determination	Draft Determination
UM type	Pass through.	Same as FD.
Scope	Costs relating to the following items: <ul style="list-style-type: none"><li>• HyNet FEED Study Funding;</li><li>• Policing costs;</li><li>• PARCA Termination Value;</li><li>• Small Decarbonisation Projects (SDP) Re-opener;<sup>28</sup></li><li>• NTS Transportation Owner Activity;</li><li>• Gas Conveyed to Independent Systems;</li><li>• System Operator Other Revenue Allowances; Central Data Service Provider (CDSP) Costs; and</li><li>• NESO Gas Strategic Planning Costs.</li></ul>	Change – no HyNet FEED Study Funding.

### Final Determination rationale and Draft Determination responses

4.56 We have decided to retain scope of the GT specific pass-through costs as set out in our Draft Determinations, with one change which is to retain HyNet FEED Study Funding costs as pass-through costs for two years of the next price control. We have also decided to add System Operator Other Revenue Allowances as categorised in Special Condition 5 to the list of pass-through costs.

---

<sup>28</sup> The Small Decarbonisation Projects (SDP) Re-opener was previously referred to as the Net Zero Pre-construction Work and Small Projects Re-opener.

---

- 4.57 National Gas was the only respondent to our Draft Determinations consultation question and was supportive of the proposed scope with the following proposed amendments:
- HyNet FEED Study Funding: National Gas requested retention of the HyNet pass-through term for the first year of RIIO-GT3 to allow return of unspent funding to consumers, avoiding financial penalties due to timing constraints in the RIIO-T2 model. We had proposed in our Draft Determinations to remove this pass-through.
  - System Operator Costs: National Gas supported categorisation of NTS Shrinkage, operating margins, and residual balancing costs as pass-through, but recommended that they remain under “System Operator Other Revenue Allowances” as in RIIO-GT2.
- 4.58 National Gas also proposed changes to the terminology for the Small Decarbonisation Projects (SDP) Re-opener term, to highlight that it is a standalone funding mechanism, not an adjustment, and proposed renaming NTS Transportation Owner Activity term to match RIIO-T2 terminology or include “licence” to clarify it refers to licence fees.
- 4.59 National Gas agreed that the other Pass-through categories, including NESO Planning Costs, should remain pass-through categories in RIIO-GT3 as proposed in our Draft Determinations and as it is currently set out in National Gas’ Transporter Licence and in the Independent System Operator and Planner’s (ISOP) licence.

## **Other Uncertainty Mechanisms Proposals**

- 4.60 This section outlines the Uncertainty Mechanisms which we have decided to reject or include in a broadened scope elsewhere. National Gas was the sole respondent to our Draft Determinations consultation.
- 4.61 We have decided to retain our Draft Determinations position to:
- Include Quarry and Loss related UM costs in the scope of the Pipeline Diversions Re-opener. National Gas agreed with our Draft Determinations position.
  - Include High Impact Points of Failure-related investment in the scope of the Gas Strategic Planning Reopener. National Gas agreed with our Draft Determinations position.

- Include compressor re-wheels in the Network Capability Re-opener. National Gas agreed with our Draft Determinations position.
- Reject the asset health volume drivers for pipeline cathodic protection and valve bypass installations. Whilst National Gas supported our Draft Determinations consultation position to treat pipeline cathodic protection investment as baseline expenditure and remove the volume driver, it disagreed with our proposal to reject valve bypass interventions as a volume driver. It stated that the installation of the bypass pipework is critical for safety, regulatory compliance, and network efficiency and that failure to complete the work required would put National Gas in violation of safety legislation.

- 4.62 As set out in Chapter 5, we find sufficient evidence to justify 3 of the 8 installations of bypass pipework resubmitted by National Gas in its Draft Determinations response. We have increased baseline allowance by approximately £6.2m before unit cost adjustments and ongoing efficiency. For the remaining volumes, the ability to isolate further up/downstream (especially given successful recent closures) mean this is sufficient.
- 4.63 National Gas accepted our Draft Determinations position to reject a volume driver for the modification of the bypass pipework but proposed addressing defective valves as part of the block valve replacement (see Chapter 5).

## 5. Cost of service

### Introduction

- 5.1 A key part of the RIIO-GT3 price control is setting totex allowances for National Gas. These allowances represent a material component of customers' bills and it is important that they reflect efficient costs.
- 5.2 In its Business Plan, National Gas forecast totex for RIIO-GT3 of £4bn. To ensure National Gas receives the efficient level of costs needed to deliver the right programme of work we have applied a toolkit approach to our assessment of its forecast totex. This has involved assessing costs at the activity level, setting stretching efficiency targets, and subjecting proposals to engineering review.
- 5.3 We have sought to ensure that our approach to cost assessment for RIIO-GT3 builds on regulatory precedent, is consistent with the wider GB energy networks sector, and where appropriate utilises cost assessment tools that have been used in other regulated utility sectors.
- 5.4 In this chapter we set out the approach we have taken, the changes that we have made since Draft Determinations and the rationale for those changes.

### Ex ante totex allowances

- 5.5 We have set National Gas' ex ante totex allowance at £3.2bn, which is an increase of £0.7bn on the £2.5bn we proposed at Draft Determinations. This is based on adjustments we have made to our cost assessment approach following our review of significant additional information submitted by National Gas in its Draft Determination response and wider stakeholder feedback.
- 5.6 Table 6 below sets out the baseline totex allowances for National Gas in RIIO-3.

Table 6: Submitted costs and baseline allowances (DD vs. FD) (£m, 2023/24 prices)

Cost Area	Submitted <sup>29</sup>	Ofgem DD (£m)	Ofgem FD (£m) <sup>30</sup>	Difference (£m)	Difference (%)
Load Related Capex	101.1	63.2	84.9	-16.2	-16%

<sup>29</sup> Submitted Totex is net costs, excluding RPEs and ongoing efficiency. At Draft Determinations Submitted Totex was £4053.8. Final Determination Submitted Totex is 4054.3 due to updates to Western Import Resilience Project costs and non-load related capex and indirect costs as a result of corrections of volume and unit costs included in National Gas's response to our Draft Determinations.

<sup>30</sup> Our Final Determinations as shown here is net costs excluding RPEs but including our view of ongoing efficiency.

Cost Area	Submitted <sup>29</sup>	Ofgem DD (£m)	Ofgem FD (£m) <sup>30</sup>	Difference (£m)	Difference (%)
Non-Load Related Capex	1319.9	577.9	932.5	-387.4	-29%
Non Operational Capex	545.4	301.7	425.0	-120.4	-22%
Network Operating Costs	444.7	415.2	415.2	-29.5	-7%
Indirect Costs	939.7	632.0	801.6	-138.1	-15%
Other Costs	703.4	465.9	532.5	-170.9	-24%
Baseline Totex	4054.3	2456.0	3191.7	-862.5	-21%

Table 7: RIIO-GT3 allowed baseline totex (£m, 2023/24 prices)

Cost Area	Totex (£m)
Core Baseline Totex	3191.7
Network Innovation Allowance (NIA)	24.5
Pass-through, UIOLI and other ex ante allowance	1657.2
<b>Ex ante allowances</b>	<b>4873.4</b>

5.7 The remainder of this chapter sets out the specific approach we have taken to the assessment of the cost categories making up totex. This varies according to each area of expenditure and our approach is explained in each subcategory. The categories are: load related and non-load related capex, non-operational capex, network operating costs (NOCs), indirect costs and other costs. For our proposed approach to RPEs and ongoing efficiency (OE), see Chapters 6 and 8 of the Overview Document.

## Load related capex

### Background

- 5.8 Load related capex is investment to expand current network capacity and/or capability, as well as investment required to connect with new demand sources.
- 5.9 In its Business Plan submission for RIIO-GT3 National Gas requested a re-opener for the WIRP related investment (see Chapter 3) to increase entry capability in South Wales. At Draft Determinations, we proposed allowances of £63.2m (inclusive of OE) for load related capex in response.

## Final Determinations decision and rationale

### Final Determinations summary

Design	Final Determination	Draft Determination
Load related capex	Allowances for Component 1 and 2. MWC costs were adjusted to a consistent price basis with the rest of the price control (2023/24). Adjusted risk and contingency costs in a consistent manner to the approach described for Non-Load Related Capex RIIO-GT3 projects.	Change – allowances for Component 1 and 2 were based on the approved Western Gas Network's costs for the pipeline build, adjusted for inflation. Allowances also included Component 4.

### Final Determinations rationale and Draft Determinations responses

- 5.10 We have decided to increase the allowances for Load Related Capex by £21.7m for Component 1 and Component 2 based on the information submitted by National Gas in response to our Draft Determination proposal, which is displayed in Table 8 below.

Table 8: Load related allowances

Cost Area	Submitted (£m)	Ofgem DD (£m)	Ofgem FD (£m)	Difference (£m)	Difference (%)
Load	101.1	63.2	84.9	-16.2	-16%

- 5.11 The allowance for Components 1 and 2 is set at £84.9m. It includes investment to build a 11km pipeline in the South Wales region to expand the current network capability of the NTS. The investment and the outputs that National Gas is expected to deliver are set out in Chapter 3, WIRP PCD.
- 5.12 Our Final Determinations allowance is an increase of £21.7m when compared to our proposed allowances for the WIRP PCD in Draft Determinations. As set out in Chapter 3, National Gas opposed the allowances we set in our Draft Determinations, claiming they were based on the outdated approvals of the Western Gas Network project. National Gas re-submitted evidence showing that the project detailed scope has evolved which required re-phasing of project delivery to new timescales, increasing the costs of the Mains Works Contractor (MWC).
- 5.13 We have reviewed and adjusted the resubmitted costs. We have adjusted the cost submission for MWC costs in order to express this part of the allowance in a consistent price basis to the rest of the price control. The expected future value of this portion of the allowance is equal to that requested by National Gas. Further, we have adjusted risk and contingency costs in a consistent manner to the



approach described for Non-Load Related Capex RIIO-GT3 projects (detailed below).

## **Non-load related capex**

### **Background**

- 5.14 Non-load related capex are costs associated with the replacement or refurbishment of assets for safety or environmental reasons, or because they are at the end of their useful life due to their age or condition. This is a key area of expenditure in RIIO-GT3. The majority of National Gas' proposed capex spending plan relates to the asset health of its existing asset base, primarily work proposed to maintain the condition of the NTS (£1.1bn of baseline cost) with a smaller amount of the plan proposed under the new categories within the "other non-load" allowance.
- 5.15 We unequivocally supports the objective of maintaining the asset health and resilience of the NTS. However, in our Draft Determinations we identified significant concerns around large areas of work proposed by National Gas where there was limited optioneering, needs cases that were unclear or with supporting data that was inaccurate or incoherent.
- 5.16 These concerns led to significant adjustments to allowances (a reduction of 54%) in our Draft Determinations. At the same time our Draft Determinations were as clear and prescriptive as possible about what was missing or unclear. Since Draft Determinations, we have engaged closely with National Gas. Although we continue to have concerns in some areas, National Gas have provided substantial additional evidence, so that we now have sufficient confidence to allow material additional funding.
- 5.17 The adjustments made to non-load related capex at Draft Determinations were based on two distinct approaches: volumes were adjusted for each proposed intervention based on a detailed specialist review; and unit costs were assessed for inefficiencies. Our volume adjustments in our Draft Determinations removed approximately £0.5bn from baseline Asset Health allowances and £0.1bn from baseline other non-load allowances. In addition to this, a further £0.1bn was removed as a result of unit cost adjustments across approved volumes.

## Final Determinations decision and rationale

### Summary of Final Determinations decision

<b>Design</b>	<b>Final Determination</b>	<b>Draft Determination</b>
Volume Assessment	Needs case assessment supported by engineering review.	Same as FD.
Risk and contingency	Risk and contingency attributed to National Gas and contractors combined and the capped at 10% in line with RIIO-GT2 and Draft Determinations, proportionately down-rated to preserve National Gas' differential risk-scoring process with no additional allowances for risk and contingency attributed to contractors.	Capped at 10% in line with RIIO-GT2, proportionately down-rated to preserve National Gas' differential risk-scoring process with no additional allowances for risk and contingency attributed to contractors.
Costs based on historical outturn	The unit cost will be set at the minimum of the median historical cost plus 10% or the mean historical cost. In some instances, a bespoke calculation methodology has been accepted, where adequately justified.	Unit costs estimated based on the mean cost experienced for similar projects adjusted to median experienced cost.
Company Overheads and Project Management Costs	These allowances have been reinstated following satisfactory justification by National Gas for its approach to capitalising and embedding indirect costs into Capex unit costs.	Percentage uplifts attributed to company overheads or project management were removed.
Extrapolating unit cost adjustments to alternative methodologies.	Where an alternative methodology was used that we could not assess, the unit cost submission has been adjusted down by the median value of adjustments to estimates not based on historical outturn. At Draft Determinations this median adjustment was 4%.	Same method as FD. However, at Draft Determinations the median adjustment applied was 13%.

### Final Determinations rationale and Draft Determinations responses

#### *Assessment methodology - volume adjustments*

- 5.18 The cost assessment toolkit for RIIO-GT2 comprised an assessment of the proposed work volumes, driven by specialist review and a unit cost assessment,

supported by trend analysis and benchmarking where possible. In RIIO-GT3, this approach has been replicated closely. However, due to changes in how National Gas bundles and describes asset health interventions in its Business Plan (accepted by us as an improvement on RIIO-2) the extent to which trend analysis can be usefully applied is limited. To compensate for this, a bottom-up approach to the assessment of unit costs has been developed.

- 5.19 As in RIIO-GT2, our volume assessment has been primarily driven by technical review conducted by specialists, including our engineers. In National Gas' RIIO-GT3 Business Plan, as part of our technical review, the needs case, optioneering and scope confidence was assessed across 31 EJPs (see Appendix 1).
- 5.20 At Draft Determinations, we found that six EJPs were fully justified and recommended for full approval, 22 were recommended with adjustments and three EJPs were considered to be entirely non-justified expenditure. Following extensive engagement with National Gas and the review of substantial additional materials, we have now approved a much greater volume of these interventions, with seven EJPs being fully justified and recommended for full approval at Final Determinations and 24 recommended with adjustments. The reasons for this are set out in 5.38 onwards.
- 5.21 It is a positive outcome for consumers that much-needed investment in the health and resilience of the gas transmission system can be approved at this stage.
- 5.22 We still have concerns in some areas. We have considered how best to protect consumer interests whilst giving National Gas sufficient certainty to progress necessary work. The approach we have taken is to introduce evaluative price control deliverables (PCD-Es) and additional reporting requirements. This gives increased visibility over spend and progress against targets and ensures funding is available whilst providing consumers with protection against cost overruns. Our concerns and responses are summarised below, with further detail provided in our subsection on asset health from paragraph 5.38 onwards:
- **Insufficient optioneering resulting in potentially unnecessarily expensive interventions.** We identify this as a concern for work proposed by National Gas on CABs. To address this risk to consumers, we have introduced the CAB PCD (see Chapter 3).
  - **Risk of unnecessarily high work volumes.** To protect consumers against the risk of over or under delivery in a range of work areas, we have closely assessed the categorisations of work within the NARM framework (see

Overview Document), leveraging the existing framework to hold National Gas accountable for delivery. We have also introduced the Removal of Valve and Pipe Stabbings PCD and the Actuator Replacement PCD (see Chapter 3) to further manage risk in these specific instances on behalf of consumers (see Chapter 3).

- **Insufficient planning for preventative maintenance.** In our review of National Gas' asset management plan we have identified efficiency opportunities from greater use of preventative maintenance, which will be shared directly with National Gas. We will also modify the annual reporting templates to ensure that maintenance is undertaken when scheduled and in line with manufacturer's recommendations. This assists in the allocation of the correct funding for National Gas to undertake the maintenance work when required.
- **Unverified workload forecasts.** National Gas must do the necessary work to verify the accuracy of forecasted workloads and robustly tender work. For the work to reinstate easements, which is legally required, we do not find this to be the case and introduce the Easement Reinstatement PCD (See Chapter 3) to protect consumers.

#### *Assessment methodology - unit cost adjustments*

- 5.23 We have undertaken a detailed review of the unit costs submitted for each proposed intervention, sampling and assessing the methodology used by National Gas.
- 5.24 In our Draft Determinations, where National Gas estimated unit costs based on the mean cost experienced for similar projects, we adjusted those unit costs to the median to reduce the distortion caused by outlier costs.
- 5.25 Where National Gas estimated unit costs from first principles, based on a detailed review of a sample of unit cost estimations, we made the following adjustments:
- Percentage uplifts attributed to company overheads or project management were removed.
  - Risk and contingency allowances were capped at 10% in line with RIIO-GT2. We approve of the use of variable rates however, and as such these allowances were proportionately adjusted down.
  - Where unit costs include risk and contingency costs attributed to contractors, these were removed to prevent consumers insuring business risk for non-regulated businesses.

- 5.26 Where an alternative methodology was used that we were unable to assess, the unit cost submission was adjusted down by the median adjustment for unit costs derived from first principles (13%). This approach ensured our adjustments are consistent across all unit costs and incentivises National Gas to continue to develop a consistent estimation approach.
- 5.27 National Gas provided a detailed response to these adjustments, which included two commissioned reports from external consultants to address our adjustments to unit costs based on historical observations and our adjustments to risk & contingency allowances.
- 5.28 Regarding our use of the median to estimate unit costs using the limited historical data available, National Gas articulated two concerns: 1) that the median was first and foremost a poor reflection of the historical work-mix; and 2) that there is no accounting for the risk of unforeseen cost akin to the risk and contingency allowances provided elsewhere in the price control.
- 5.29 On the first challenge, in the majority of cases National Gas were unable to demonstrate that prospective workloads in RIIIO-T3 would contain a similar distribution of work and costs to the very limited data samples provided. During our engagement on realised costs, evidence of the cause for outliers was poorly articulated, and we regularly found inconsistencies in the data provided or estimation methodologies used, which further damaged our confidence in National Gas' ability to estimate efficient costs.
- 5.30 In a handful of cases we were satisfied that sufficient work had been undertaken to justify a bespoke methodology informed by the work-mix planned in RIIIO-T3. Where this occurred we have departed from a simple historical average, either by weighting historical data (eg electric vs non-electric actuators) or by accounting for the incremental cost of more extensive interventions.
- 5.31 On the second challenge, we have accepted the case for moderate uplifts to account for risk and contingency such that the unit cost will be set at the minimum of the median historical cost plus 10% or the mean historical cost. We believe that such an approach: is consistent with our broader position on risk and contingency; adequately limits the distortion of outlier costs; incentivises National Gas to separate costs with distinct cost drivers; and encourages a data-driven approach to justify higher costs where the balance of planned work justifies it.
- 5.32 For unit cost estimates based on a "first principles" methodology, we have carefully reviewed the evidence submitted challenging our positions at Draft Determinations. Regarding indirect costs that are embedded in unit cost

estimates, following close engagement with National Gas we are satisfied that there is no double-counting of cost as a result. These percentage uplifts are equivalent in value to the proportion of indirect costs which are capitalised.

- 5.33 We have also carefully reviewed the evidence set out by National Gas to justify higher risk and contingency allowances, including the associated guidance from the Association for the Advancement of Cost Engineering (AACE) and Infrastructure and Projects Authority (IPA), now replaced by the National Infrastructure and Service Transformation Authority (NISTA). We note that National Gas fundamentally disagree with our position.
- 5.34 Having reviewed the evidence, however, we retain our position from Draft Determinations with minor modification. The evidence cited by National Gas for significantly higher allowances is primarily applicable to project cost estimates that are at a significantly earlier stage of maturity than cost estimates submitted within baseline allowances at a price control and does not take account of mitigations built into the price control around funding certainty, independent engineering assessments and the availability of re-openers and uncertainty mechanisms to manage uncertainty.
- 5.35 National Gas has stated in its response to Draft Determinations that capped risk & contingency allowances have in one instance, caused a project start to be delayed, resulting in environmental breaches and higher cost. We are not persuaded by this: we note in this one instance the delay occurred mid-project (rather than before starting), coincided with the pandemic, and the broader context of widespread delays across National Gas' investment programme in the first three years of RIIO-GT2.
- 5.36 These allowances are built into unit costs and as a result are funded by consumers whether the risk materialises or not. As a result, we believe that increasing the allowance for risk and contingency from the position set out in our Draft Determinations would not only undo regulatory precedent, but would also systematically bias arrangements in National Gas' favour presenting additional cost without benefit to consumers. Our position regarding the 10% cap on risk and contingency allowances remains the same as at Draft Determinations.
- 5.37 In response to National Gas' feedback on our Draft Determinations, we agree to remove any distinction between risk and contingency for contractors and risk & contingency for National Gas. Our risk and contingency adjustments at Final Determinations are therefore based on the combined allocation, leaving the operational choice to hold or outsource project risk to National Gas as the asset

manager. This change results in a small increase in the overall amount awarded for risk and contingency across the full programme of work.

### **Asset health**

5.38 Asset health, which represents the majority (91%) of non-load related capex, is the most significant expenditure area of National Gas' submission. It is also the area with the most significant change as a result of our adjustments from Draft Determinations to Final Determinations. Determining the appropriate changes has required significant engagement with National Gas and reflects our commitment to investing in the enduring resilience of the gas transmission network.

5.39 We are now proposing to fund approximately 80% of the total expenditure proposed in National Gas' business plan submission relating to Asset Health, before applying OE. This allowance fully funds all interventions relating to security of supply.

Table 9: Final Determination allowances for asset health

<b>Cost area</b>	<b>Submitted (£m)</b>	<b>Ofgem DD (£m)</b>	<b>Ofgem FD (£m)</b>	<b>Difference (£m)</b>	<b>Difference (%)</b>
Valves	178.9	111.7	134.4	-44.6	-25%
Compressors	107.8	49.5	84.1	-23.7	-22%
Pipelines	208.7	156.4	183.5	-25.2	-12%
Sites	181.4	54.6	115.7	-65.7	-36%
Civils	18.8	0.0	13.5	-5.3	-28%
Electrical	71.9	36.0	47.7	-24.2	-34%
CABs	65.5	1.59	60.2	-5.3	-8%
Other	144.6	39.7	124.8	-19.8	-14%
St Fergus	167.8	66.3	84.7	-83.1	-50%
Total	1,145.5	522.5	848.6	-296.8	-26%

5.40 For the figures shown in the table above please note:

- The amount shown for 'other' includes £21m of costs that have been reallocated to asset health from National Gas' cyber submission.
- The figures shown may differ from the values shown in National Gas' original submission or in our Draft Determinations document because of adjustments or corrections made to National Gas' submission within National Gas' Draft Determination response.
- The proposed totex figures are inclusive of our OE challenge.

- 5.41 In the following paragraphs, we provide detail on some of the most financially significant decisions in our Final Determinations within each allowance category.
- 5.42 We have decided to increase allowances by £326m compared to our Draft Determinations. The most significant area of change is in the 'other' category. This allowance relates to maintaining the security of systems that monitor gas quality and control the flow of gas around the transmission system. We are now satisfied to approve the majority of these expenditures.

### Valves

- 5.43 The most significant change to allowances relates to an increase in the requested number of block valve replacements. In response to our Draft Determination decision to remove costly modifications that would support the maintenance of valves by re-routing gas, National Gas requested allowance for an additional eight block valve replacements, a lower cost alternative, of which we allow five. This adds £9.8m.
- 5.44 Within this allowance, National Gas proposed a programme of actuator work across its network, comprising both replacements and overhauls. In its submissions only 4% of actuators were proposed for overhaul, with 96% identified for full replacement based on four stated needs: safety surrounding specific Shafer actuators, DSEAR compliance, defects, and obsolescence. We fully accepted the replacement of Shafer actuators driven by the HSE mandate in its Draft Determinations.
- 5.45 In our Final Determinations, we also recognise that additional actuator replacements may be necessary where justified by asset condition or specific conditions. However, National Gas has not provided sufficient evidence to support a near blanket replacement strategy. Obsolescence is not a justification for replacement. In several cases, evidence indicates that a lesser corrective action would deliver a more efficient outcome. While we acknowledge the need for some works related to DSEAR compliance, we note that the evidence presented by National Gas does not uniformly support the case for replacement to ensure compliance. To protect consumers, funding for this activity will therefore be subject to an evaluative PCD. National Gas must evidence that each replacement is required due to asset condition rather than a lesser corrective action, considering whole life cost. Any removals and replacements undertaken where evidence is missing, inconclusive, or not provided will be subject to adjustments under the evaluative PCD, and associated funding may be recovered where works are not justified (see Chapter 3).



### Compressors

- 5.46 In our Draft Determinations we consulted on the introduction of a Compressor Breakdown UIOLI worth approximately £20.8m. Failures of items of equipment like compressor trains is difficult to forecast and requires a quick response to repair and return the asset to service to maintain the capability of the NTS. Historically, this is an area where administration got in the way of engineers rectifying major faults. Our proposed funding mechanism enables National Gas to fund major repairs and return to service compressor trains quickly and with a light administration burden because the scope of permissible works is pre-defined and the funding pre-approved.
- 5.47 In its consultation response, National Gas agreed with the output type but not the scope, arguing against our inclusion of two additional interventions, the proposed [REDACTED] and HV Motor Stator re-wind. For our Final Determinations, we remove the former from the scope of this UIOLI, but retain the latter (see Chapter 3).
- 5.48 We have not received meaningful analysis to justify funding to upgrade gas-powered starter motors to electric ones, however, we recognise that such investment could improve start reliability for critical assets. As a result we provide funding for one of the four volumes requested. This will support data collection on start reliability to inform a decision on the remaining three. This will also provide a spare gas-powered starter motor to support asset resilience and will be supported by additional reporting requests for National Gas to provide data on start reliability.
- 5.49 Because of the number of operating hours that the fleet has completed and is forecast to complete, GT3 will see a large number of compressor trains undergoing major maintenance events on drives and compressors. The volumes for this were approved at Draft Determinations because this is required to meet the manufacturers' recommendation. However, because it is difficult for National Gas to be certain which compressors will operate and how much they will operate over the next five years these volumes will be subject to controls and additional reporting requirements such that when assets reach the specified number of operating hours, maintenance is completed and where operating hours do not accumulate as expected, the funding for this work will carry over into future regulatory periods. We have also introduced controls associated with work justified on safety grounds such as refurbishment and replacement of fire detection and protection equipment.

### Pipelines

- 5.50 In our Draft Determinations, £21.7m of proposed work relating to tree and scrub clearance were moved into a UM due to a lack of cost and scope certainty. In its response, National Gas highlighted risks to delivery of work that is already underway to meet HSE-mandated timelines from this decision.
- 5.51 National Gas requested a single UIOLI to cover these interventions. The proposed work tender was based entirely upon forecast growth using satellite observations – we would expect National Gas to validate these forecasts, but it has made only limited attempts to do so. Due to the legal requirement to deliver this work in a timely manner, we approve this allowance, but with the protection of an evaluative PCD to facilitate an ex post evaluation of the cost efficiency and delivery of these interventions (see Chapter 3, Easement Reinstatement PCD).
- 5.52 We expect to see evidence that the accuracy of models used to plan these works have been verified independently and that costs incurred have been efficiently tendered across the many regions this work will be undertaken in.

### Sites

- 5.53 In our Draft Determinations, we removed a substantial amount (66%) from the allowance for Sites. This was due to either further survey evidence being required to approve investment, or because the interventions proposed by National Gas did not match the survey evidence provided. In National Gas' response, additional evidence has been provided or the original submission modified, sufficiently to warrant approval of a large portion of the requested workloads.
- 5.54 Approximately £14.2m was requested for a rolling programme of painting above ground pipework to protect against corrosion. While we have approved the necessary work to resolve known defects, we have challenged National Gas to explore the potential for improved efficiency from alternative coating methods that do not require such a re-investment every five to six years. As a result the submitted proposals have not been included in our Final Determinations. We invite National Gas to re-consider its proposals for pipework painting as part of the Asset Health Re-opener and encourage National Gas to consider the lifetime cost of any proposed approach.
- 5.55 Cathodic Protection (CP) is a corrosion prevention method that applies an electrical charge to an asset, typically using a sacrificial anode designed to corrode in place of the protected pipeline. In its Business Plan, National Gas proposed a programme of entire CP replacements across the network. In our

Draft Determinations, we removed these work volumes, as National Gas had not provided sufficient evidence to support the investment. In its Draft Determination response, National Gas submitted additional explanation and evidence, which we agree identifies genuine asset health issues requiring remediation. While we recognise that intervention is required, the evidence presented indicates that less extensive, localised interventions may be sufficient and at substantially lower cost than the full system replacements proposed by National Gas. To protect consumers, we will leverage the NARM framework to hold National Gas accountable for delivery.

- 5.56 Stabbings are small legacy sections of pipework that extend from the main pipeline. During RIIO-GT2, National Gas performed four removals of this type and proposed to undertake 88 of these in its RIIO-GT3 Business Plan. This volume is proportional to the number of valves it plans to work on. This proposed work volume is speculative, and is not supported by the evidence. As such, in our Draft Determinations, we did not approve funding for these works.
- 5.57 National Gas still has not provided a clear technical or economic justification for carrying out proactive excavations to locate and remove stabbings where there is no evidence of a leak. However, we recognise that instances may arise where a stabbing is uncovered during planned work, and is found to be leaking. In such cases, it is appropriate for National Gas to further excavate and address the defect and reinstate the pipe. We are therefore providing conditional funding through a PCD-E, limited to circumstances where a stabbing is found and requires remedial action due to failing. Any removals undertaken where evidence of a leak is missing, inconclusive, or not provided will be subject to adjustment under the evaluative PCD, and any associated funding may be recovered where works are not adequately justified (see Chapter 3, Removal of Valve and Pipe Stabbings PCD).
- 5.58 Pipe supports are structures that support pipelines from underneath, typically constructed from concrete or steel. In its Business Plan, National Gas proposed to deliver twice the number of interventions completed in RIIO-GT2, without providing supporting evidence to justify this increase or demonstrate benefits beyond those captured in NARM.
- 5.59 In response to our Draft Determination Response, National Gas reduced its proposed volumes to align more closely with historic delivery rates and submitted additional supporting evidence. However, our review indicates that a proportion of the proposed interventions remain unjustified, highlighted in Appendix 1. In many cases, the evidence points to conditions where lesser corrective action,

such as grit and blast, would be sufficient, rather than full-scale replacement programmes.

- 5.60 We recognise that some remedial work in this area is necessary but National Gas has not demonstrated that the overall volumes or scale of work proposed is efficient or proportionate. To protect consumers, we will leverage the NARM framework to hold National Gas accountable for delivery. We expect National Gas to be able to evidence that each replacement is required due to asset condition rather than a lesser corrective action.

### Civils

- 5.61 Within this allowance category are interventions on assets that include: access equipment, access roads and pathways, security fencing and gates, buildings, ducting, drainage, tanks and bunds that are not directly associated with work on an asset in another category.
- 5.62 Due to National Gas' failure to demonstrate with condition data what volumes, and where, required intervention, we removed all volumes in our Draft Determinations.
- 5.63 Having reviewed the additional evidence submitted in National Gas' response to Draft Determinations we have reinstated all requested amounts (except for where National Gas have removed workloads from their request). Due to the poor state of assets reported in this area, we also propose to increase the reporting requirements for assets in this allowance theme. For gate, fencing and road assets, we will now require annual condition data from National Gas as part of its regulatory reporting.

### Electrical assets

- 5.64 In our Draft Determinations, all volumes relating to replacing site lighting were moved to the Network Decarbonisation and Emissions Compliance Re-opener. In its response National Gas highlighted its concern that this would delay implementation of these works, which have been planned in coordination with other parts of the Asset Management Plan. In recognition of this we propose to fund these interventions through the Climate Change Adaptation allowance in Other Non-Load and require that these replacements are LED or similarly efficient alternatives suitable for the location and not like-for-like.

### Compressor Acoustic Buildings (CABs)

- 5.65 We have engaged closely with National Gas since publication of our Draft Determinations on these allowances. CABs are buildings that house compressor

trains to support their safe and efficient operation. We have paid special attention to this allowance category because of the criticality of these assets, and we began engaging with National Gas before publication of our Draft Determinations to support National Gas in providing the necessary supporting evidence. Nevertheless, the optioneering is still poor and the proposed interventions represent the maximum scope (and therefore cost) for each intervention, which we believe is unlikely to be necessary for all volumes. However, work on these critical assets is clearly necessary and therefore requires funding. We approve these allowances in baseline Totex at Final Determinations, but add the additional protection for consumers of an evaluative PCD (see Chapter 3, Compressor Acoustic Building (CAB) PCD and earlier comments in this chapter).

Other, which includes Gas Quality, Metering and Telemetry (GQMT)

- 5.66 A substantial adjustment was made to this allowance at Draft Determinations, due to insufficient evidence in the initial submission. However, National Gas' response has now provided this and we include a majority of National Gas' proposed volumes in allowances at Final Determinations.
- 5.67 Where National Gas have proposed replacing kiosks alongside the equipment contained within, we have not found evidence to support this decision in all cases, and as such have moved volumes in some instances from an intervention that includes the cost of a new kiosk, to an intervention that does not, reducing the cost by approximately £4.5m.

St Fergus

- 5.68 At Draft Determinations, we included adjustments to remove proposed interventions at St Fergus to address subsidence, refurbish site roads and paths, replace drainage and sewage assets and repair a cooling system. For each of these interventions, they were removed due to a lack of evidence, optioneering or because the proposed solution was poorly matched to the condition of assets or survey evidence. In its response to Draft Determinations, National Gas have accepted the misalignment of evidence, and proposed a modified intervention or survey in place of its original submission, which we approve at Final Determinations.
- 5.69 We have also made adjustments to the allowances relating to lighting and pipework coatings to maintain consistency with adjustments at other sites detailed above.

## Other non-load costs

5.70 Excluding asset health, National Gas submitted baseline non-load capex costs totalling £180.4m (after reconciliation adjustments) across five categories. These proposed expenditures were assessed in an identical manner to asset health expenditures.

5.71 We have decided to increase allowances by £28m compared to our Draft Determinations.

Table 10: Final Determination allowances for other non-load

Cost area	Submitted (£m)	Ofgem DD (£m)	Ofgem FD (£m)	Difference (£m)	Difference (%)
Redundant assets	48.7	29.2	32.0	-16.7	-34%
Climate change adaptation	3.3	0.1	16.6	13.3	+303%
Maintainability	78.7	0.8	6.2	-72.5	-92%
Network capability	27.2	22.3	25.3	-2.0	-7%
Security of supply	20.1	3.0	3.7	-16.4	-81%
TOTAL	178.1	55.5	83.9	-94.2	-53%

5.72 For the figures shown in the table above please note:

- The figures shown may differ from the values shown in National Gas' original submission or in our Draft Determinations document because of adjustments or corrections made to National Gas' submission within National Gas' Draft Determination response.
- The proposed totex figures are inclusive of our ongoing efficiency challenge.

5.73 In the following paragraphs, we provide detail on some of the most financially significant decisions in our Final Determinations within each allowance category.

## Redundant assets

5.74 Most of our adjustment at Draft Determinations was to pipe-through redundant valves. This work was initially proposed on the basis that it will deliver savings through reduced maintenance costs but that assertion was not adequately evidenced.

5.75 In its response to Draft Determinations, National Gas instead cited the 'polluter pays' principle, stating that the valves no longer in use should be decommissioned now to ensure costs are not borne by future consumers. However, we do not see sufficient technical or economic justification for these expensive remediations.

### **Climate change adaptation**

- 5.76 In our Draft Determinations, volumes relating to replacing site lighting were allocated to the Network Decarbonisation and Emissions Compliance Re-opener. In its response National Gas highlighted a concern that this would delay implementation of these works, which have been planned in coordination with other parts of the Asset Management Plan.
- 5.77 In recognition of this concern, but to ensure accountability for these volumes, we propose to fund these interventions through this Climate Change Adaptation allowance; accordingly these replacements should be LED or similarly efficient alternatives suitable for the location and not like-for-like.

### **Maintainability**

- 5.78 We find sufficient evidence to justify three of the eight installations of bypass pipework resubmitted by National Gas in its Draft Determinations response, which increases this allowance by approximately £6.2m before unit cost adjustments and ongoing efficiency.
- 5.79 For the remaining volumes, our view is that the ability to isolate further up/downstream and successful recent closures undermine the case for additional investment set out by National Gas.

### **Security of supply**

- 5.80 In accordance with decisions taken at Final Determinations for the Load allowance and the West Import Resilience Project (WIRP) PCD and Re-opener, we have increased this allowance to include the funding for the spares kit necessary for rebuilding a compressor at Wormington. The relatively large percentage reduction in this allowance is due to the removal of spare purchases or creation that were not adequately justified and the re-allocation of [REDACTED] work to the Network Decarbonisation and Emissions Compliance Re-opener.

### **Network capability**

- 5.81 Consistent with our Draft Determinations, we make no adjustments due to our volume assessment, only as a result of our unit cost assessment methodology.

### **Non-operational capex**

#### **Background**

- 5.82 Non-operational capex costs are the capital costs incurred from activities that are unrelated to core activities but support the general functioning of the business. In GT these costs fall under four categories: information technology and telecoms

(IT&T), small tools, equipment, plant and machinery (STEPM), vehicles and non-operational property.

- 5.83 At Draft Determinations we used trend analysis as the basis for assessment for STEPM and for vehicles and non-operational property. For IT&T assessment, we had an expert technical review from external consultants which built on the approach taken in RIIO-GT2. The IT&T assessment was conducted on a cross-sector basis which was also the case in RIIO-GT2.

### **Final Determinations decision and rationale**

#### Summary of Final Determinations decision

<b>Design</b>	<b>Final Determination</b>	<b>Draft Determination</b>
IT&T	Expert review of submitted National Gas IJPs. For projects not undergoing detailed review, we apply the same percentage of allowed expenditure as assessed projects submitted under the same IJP. For Closely Associated Indirects (CAI) & Business Support Costs (BSC) IT&T, assessed using trend analysis.	Same as FD, except for CAI and BSC IT&T where we applied the same average percentage of allowed expenditure as for National Gas's projects subject to expert review.
Data and Digitalisation	See Chapter 13 of the Overview Document.	Same as FD.
STEPM	Trend model using historical and forecast data (2014-2031) assessing submitted STEPM aggregated cost submission.	Same as FD.
Vehicles	Trend model using historical and forecast data (2014-2031) assessing submitted vehicles aggregated cost submission.	Same as FD.
Non-operational Property	Trend models using historical and forecast data (2014-2031) assessing disaggregated TO and SO submissions.	Same as FD.

- 5.84 We have decided to increase non-operational capex allowances by £123m compared to our Draft Determinations. All of this uplift is in IT&T, on the basis of resubmitted information and supporting evidence. The breakdown of these allowances can be found in Table 11 at the bottom of this section.

### **Information technology and telecoms**

- 5.85 For all networks in RIIO-3 (GDNs and TOs), we have decided to broadly retain the assessment framework for the IT&T technical review proposed at Draft Determinations with some minor refinements. We have also re-assessed network



- companies' submissions and re-calculated the allowances considering information provided in consultation responses and in subsequent clarification questions.
- 5.86 In our Draft Determinations we outlined our proposed cross-sector assessment framework for the technical review of IT&T expenditure, which built on the approach taken in RIIO-2. The assessment framework focused on the validity of the needs case, the strength and robustness of the economic case and the appropriateness of cost levels associated with the proposed work plans. Our review of the needs case considered IT strategy, linkage to technology architecture, appropriateness of proposal as well as potential complementarities or trade-offs with other costs.
- 5.87 We broke the economic case dimension down into 'value for money' and 'optioneering' components and the cost estimate dimension into 'scope definition', 'delivery certainty' and 'cost assurity' components. There were four stages to the assessment.
- 5.88 In the first stage, red-amber-green (RAG) ratings were determined for the components of the needs case, economic case and cost estimate, based on the assessment criteria.
- 5.89 In the second stage, projects with a green or amber needs case rating moved onto the next stage (with those rated red receiving no funding and projects within the assessment scope which had a value of less than £0.5m received full funding if the needs case was green or amber).
- 5.90 In the third stage, a combined average score was calculated from the five economic case and cost estimate component ratings. Red, amber and green ratings corresponded to a numeric score of, respectively, 1, 2 and 3. The combined average score was calculated by giving equal weight to each of the five component ratings.
- 5.91 In the fourth stage, the combined average score was mapped to a funding percentage allowance based on set thresholds. The combined score thresholds were 1, 1.5, 2 and 2.5 and the respective funding percentages 25%, 50%, 75% and 100%.
- 5.92 National Gas welcomed the approval of the needs case for most of the IT&T projects but disagreed with the application of the framework. It highlighted concerns over the clarity and coverage of the framework, along with the criteria and funding thresholds, which it said led to a disproportionate reduction in allowances at Draft Determinations.

- 5.93 In our Draft Determinations we provided National Gas with feedback on our IT&T assessment, enabling it to submit further information and supporting evidence for the assessed projects for re-assessment at Final Determinations. In addition, we held bilateral meetings with all GDNs and TOs and maintained regular engagement on IT&T, and continued engagement through the SQ process.
- 5.94 In cases where there was overlap between the Data and Digitalisation assessment and the IT&T assessment, or where input from the IT&T consultancy assessment was sought in areas covered by the Data and Digitalisation assessment, the IT&T assessment framework was overlayed as the primary approach. In our Final Determinations we have ensured a clear separation of projects, with each assessed under a single framework to provide clarity.
- 5.95 We accept the feedback that the lowest threshold of 25% may not be sufficient to support the funding of approved projects. In response, we have raised this minimum threshold to 40%, ensuring that the framework provides more sufficient funding when the needs case is approved. This is broadly in line with our lower threshold at RIIO-2 (35%). Even after this revision, projects will only receive such a large reduction in funding where the needs case has been clearly established but significant concerns remain regarding the associated cost or economic case for the project. We consider that 50% and 75% are proportionate as the top two thresholds so the third threshold should be below 50%. This change reflects that projects passing the needs case assessment (with a green or amber rating) have demonstrated a strategic and operational rationale for proposed expenditure. Due to sensitivity around the details of each company's proposed IT&T investments, we have not published the project-level assessments from our technical review. However, we intend to share a summary of project-level assessments directly with the licensees.
- 5.96 We have decided to model all IT Business Support costs and IT Closely Associated Indirect costs not included in the expert review, recognising National Gas' response on IT Run-the-Business costs, where it suggested the use of trend analysis. We consider trend analysis, similar to the approaches taken in BSC and CAI assessment, to be appropriate. However, where BSC have been submitted alongside investment costs in an assessed project, we consider that these costs have been afforded sufficient scrutiny to be included in the expert review.
- 5.97 We have decided not to make any further amendments to the methodology. The expert review framework we employed was built on an approach taken previously in RIIO-2 and has been further developed to ensure a pragmatic and proportionate method of assessing this type of expenditure. Our overall approach

strikes an appropriate balance between the accuracy of our assessment and the amount of time and resources required to undertake the technical review. The assessment approach is also fully aligned line with our EJP framework; a robust methodology focusing on needs case, optioneering and scope and cost confidence.

- 5.98 Resubmissions have materially moved ratings in many instances, where additional evidence has strengthened the economic case or improved cost certainty, resulting in higher combined scores and therefore increased allowances. The additional information and evidence provided, together with the constructive engagement through SQs and bilateral meetings has resulted in an increase of £123.3m in IT&T allowances from Draft Determinations. The expert review covered the detailed assessment of projects representing 87% of requested funding and results in allowances of £362.6m for IT&T<sup>31</sup> (inclusive of OE), comprised of £191.20m for TO and £171.6m for SO. Run-the-business IT allowances are captured within indirects, specifically within BSC and CAI.

### **Small tools, equipment, plant and machinery (STEPM)**

- 5.99 National Gas disagreed with the application of a trend model for STEPM costs on the basis that they believe it does not adequately capture costs in areas where incremental expenditure beyond historical levels is required.
- 5.100 National Gas proposed that surveillance strategy and double block and bleed investments be assessed separately outside of the trend model. National Gas instead proposed that age of network and asset capex should be considered as independent variables for increasing BAU STEPM spend. Following a qualitative review of these proposals we determined that continuing with trend analysis at the aggregated category level is more appropriate, as it provides a holistic view of expenditure, mitigates potential influence of sub-category volatility and ensures consistency and transparency across non-operational capex cost areas.
- 5.101 We consider that the integration of both historical and forecast cost data in our modelling of STEPM costs provides a comprehensive assessment basis that addresses the concerns raised in the response as it accounts for long-term expenditure patterns and avoids potential overweighting of short-term fluctuations in cost. This approach ensures that past trends are captured to reflect cost behaviours, while forecast data incorporates expected future increases in

---

<sup>31</sup>Includes IT&T and Data and Digitalisation costs which make up Non-Operational Capex, assessment of Data & Digitalisation is covered in Chapter 8.

costs from the submission. We therefore maintain our Draft Determination position on STEPM and are setting allowances of £32m (inclusive of OE).

## **Vehicles**

5.102 National Gas disagreed with the approach we have taken to assess the vehicles submission and proposed the inclusion of Full Time Equivalent (FTE) figures as a cost driver when assessing costs.

5.103 We considered FTEs as a potential cost driver but believe historic and forecast cost data provide a more stable basis for assessment in this area than operational metrics such as FTE numbers, which can vary in definition and consistency. We believe using trend analysis provides a better insight to activity over time than FTE numbers. In addition, use of historic data along with forecast data supports the identification of cost patterns over time, thereby ensuring our assessment remains focused on cost efficiency rather than variable operational measures. We are retaining trend analysis in vehicles as it provides a fair and balanced basis for assessment, enhances transparency through an aggregated view of the cost category, and ensures alignment across Non-Operational Capex.

5.104 We are therefore maintaining our Draft Determination position for Vehicles. This results in allowances of £10m for the Vehicles submission (inclusive of OE).

## **Non-operational property**

5.105 National Gas were supportive of the use of trend analysis in this area but stated that qualitative factors relating to specific investments should also be considered in setting allowances and proposed specific costs relating to Training Centres and Rotating Machinery/Logistics Centres investments be separately assessed.

5.106 In response to the points raised, we undertook a qualitative review of National Gas' proposals to separate specific costs but have concluded that their inclusion within the broader trend analysis provides a more robust and appropriate basis for assessment. Retaining these costs within the trend analysis avoids distortion of long-term patterns, enables comparability across price control periods and allows comprehensive assessment of overall expenditure rather than a fragmented view of individual elements. Separating these costs could introduce subjectivity and reduce transparency, whereas trend analysis provides a clear, evidence-based framework assessing cost patterns.

5.107 As a result we are implementing our Draft Determinations position. This results in allowances of £18.9m for Non-Operational Property TO and £1.6m for SO (inclusive of OE).

Table 11: non-operational capex cost allowances

<b>Cost Area</b>	<b>Submitted (£m)</b>	<b>Ofgem DD (£m)</b>	<b>Ofgem FD (£m)</b>	<b>Difference (£m)</b>	<b>Difference (%)</b>
IT & Telecoms (TO)	233.6	130.7	191.2	-42.4	-18%
Vehicles (TO)	14.8	10.0	10.0	-4.8	-32%
Non-Operational Property (TO)	28.7	18.9	18.9	-9.8	-34%
STEPM (TO)	47.7	32.0	32.0	-15.7	-33%
IT & Telecoms (SO)	217.3	108.7	171.5	-45.8	-21%
Non-Operational Property (SO)	3.3	1.6	1.6	-1.7	-52%
<b>Total</b>	<b>545.4</b>	<b>301.9</b>	<b>425.2</b>	<b>-120.2</b>	<b>-22%</b>

## Network operating costs (NOCs)

### Background

5.108 NOCs is expenditure on the day-to-day maintenance that is required to enable the safe running of the Gas Transmission network.

### Final Determinations decision and rationale

#### Summary of Final Determinations decision

<b>Design</b>	<b>Final Determination</b>	<b>Draft Determination</b>
Planned Inspections and Maintenance	Trend model assessing disaggregated TO submission.	Same as FD.
Faults	Trend model assessing disaggregated TO submission.	Same as FD.
Operational Property	Trend model assessing disaggregated TO submission.	Same as FD.
SO NOCs	Trend model assessing aggregated SO Direct Opex submitted costs.	Same as FD.

#### Final Determinations rationale and Draft Determinations responses

5.109 National Gas was generally in favour of the trend modelling approach to assessing NOCs, accepting the Draft Determinations SO allowances and expressing support for the TO methodology while proposing some adjustments.

5.110 National Gas argued that metering, telemetry and maintenance costs should be assessed independently from trend analysis. It supported using both forecast and historical data for faults, planned inspections, maintenance, and suggested consolidating these categories, while noting that any analytical impact would likely be minimal. Additionally, National Gas argued that RIIO-T1 data should be excluded when assessing operational property.

5.111 We have reviewed the proposals put forward by National Gas and concluded that retaining our methodology proposed in Draft Determinations is the most appropriate approach. The current levels of aggregation of the assessment provides a transparent framework for review and ensures comparability across price control periods while avoiding unnecessary complexity that could arise from disaggregating or combining categories. Furthermore, the inclusion of data from RIIO-1 to RIIO-3 (with forecasts) ensures consistency across NOCs and maximises the number of data points available, which enhances the robustness of our analysis. We therefore maintain our Draft Determinations position, setting Network Operating Cost allowances at £245.7m for TO and £169.6m for SO respectively (inclusive of OE).

5.112 Table 12 and Table 13 below summarise our Final Determination view of allowances for RIIO-3 Network Operating Costs.

Table 12: TO NOC Allowances

<b>Cost Area</b>	<b>Submitted</b>	<b>Ofgem DD (£m)</b>	<b>Ofgem FD (£m)</b>	<b>Difference (£m)</b>	<b>Difference (%)</b>
Planned Inspections & Maintenance	158.4	150.7	150.7	-7.7	-5%
Faults	55.9	49.3	49.3	-6.6	-12%
Operational Property	52.1	45.7	45.7	-6.4	-12%
Total	266.4	245.7	245.7	-20.7	-8%

Table 13: SO NOC Allowances

<b>Cost Area</b>	<b>Submitted</b>	<b>Ofgem DD (£m)</b>	<b>Ofgem FD (£m)</b>	<b>Difference (£m)</b>	<b>Difference (%)</b>
SO Direct Opex	178.3	169.6	169.6	-8.7	-5%

## **Indirect costs**

### **Background**

- 5.113 Indirect costs refer to internal support and overhead costs that are necessary to operate a transmission business, that could not, on their own, be classed as a direct network activity. These costs are grouped into two main categories: BSC and CAI.
- 5.114 BSCs cover key organisational activities that support the broader functioning of the business. This includes corporate support functions such as IT, finance, legal, human resources, property management, and procurement.
- 5.115 CAIs are more directly tied to construction and operation of network assets such as project management and network design. This also includes control centre operations, covering costs related to real time system operation and outage planning, as well as operational training and premises costs, such as office facilities.
- 5.116 We also cover Pension Scheme Administration and Pension Protection Fund (PPF) Levy and Quarry and Loss in this section.
- 5.117 In our Draft Determinations, indirect costs were assessed using a combination of econometric and non-econometric approaches. This methodology was consistent with the RIIO-GT2 approach and included refinements to the analysis. For BSCs, we used a historical regression model, while for CAIs we used forecast based trend analysis.
- 5.118 In our Draft Determinations, the BSC items IT&T and insurance and the pension scheme administration and PPF levy were deemed unsuitable for regression analysis and thus separately assessed. Within CAIs, operational training and health safety and environment costs were also separately assessed.

### **Final Determinations decision and rationale**

#### Final Determinations summary

<b>Design</b>	<b>Final Determination</b>	<b>Draft Determination</b>
CAI	A trend model to assess most of the CAI costs combined with qualitative review. RIIO-GT2 and RIIO-GT3 data used.	Same as FD.
BSC	A trend model to assess most BSC costs combined with qualitative review. RIIO-GT2 and RIIO-GT3 data used.	BSC: Historical POLS regression (2014-24) transmission cross-sector with GT dummy.

<b>Design</b>	<b>Final Determination</b>	<b>Draft Determination</b>
Separate assessments	Separate assessment for health, safety and environment, operational training, operational IT&T, insurance and non-operational IT&T. RIIO-GT2 and RIIO-GT3 data used.	Same as FD.

### Final Determinations rationale and Draft Determinations responses

#### *Closely Associated Indirects (CAI)*

- 5.119 In this section we discuss CAI costs excluding operational IT&T, operational training and health, safety and environment costs. National Gas proposed significantly higher CAI allowances in RIIO-GT3 to support planned asset related capital expenditure during the period, when compared to RIIO-GT2. In our Draft Determinations, we assessed these costs using a time trend model comprising RIIO-GT2 and RIIO-GT3 data. RIIO-1 data was excluded because of differences in the underlying cost drivers (the split between National Grid and National Gas Transmission happened during RIIO-GT2, January 2023). National Gas, in its business plan, noted that CAI costs should broadly track asset capital expenditure. It also said that it is not the sole causal factor, noting that other drivers, such as risk appetite and policy decisions, may also influence CAI costs. We broadly agree with these points.
- 5.120 National Gas, the sole respondent on this cost area at Draft Determinations, recommended that we look to adopt approaches used to assess indirect costs in other RIIO-3 sector Draft Determinations. These approaches included applying a linear time trend to reflect cost increases over time and using ratio benchmarking to link CAI costs to their underlying cost drivers, as implemented in RIIO-ET3.
- 5.121 In order to check the robustness of our assessment approach for RIIO-GT3 CAI costs, we tested the relationship between historical and forecast data covering CAIs, BSCs, total indirects, totex, capex and FTE levels, over multiple time periods.
- 5.122 Our testing confirmed that our Draft Determinations approach remains appropriate, therefore we have decided to maintain it and use trend analysis based on historical cost levels and National Gas's forecast costs (three years of historic data and seven years of forecast data, resulting in a 30:70 weighting). National Gas argued that our approach at Draft Determinations understated the differences between RIIO-2 and RIIO-3. We acknowledge this point but disagree that further weighting should be put on forecast costs. We do not expect the



future of the GT network to differ significantly from the past, certainly not to the extent seen in ET. Therefore, historical data remains important for providing a proxy for future efficiency, particularly given there are no direct comparators. While we acknowledge that greater project complexity and wider recruitment challenges may contribute to higher costs, we consider our approach takes these factors into account. In any event, we do not accept these factors fully justify the significant cost increases proposed by National Gas for this activity.

#### Opex escalator

5.123 National Gas agreed with our proposal to remove the RIIO-GT3 opex escalator, noting that its removal supports our objective to simplify RIIO price controls wherever possible. We therefore have decided to maintain our Draft Determinations position to eliminate the opex escalator mechanism for RIIO-GT3, consistent with the rationale set out in that document. Specifically, we consider most re-openers as not suitable for an opex escalator, either because the type of costs that are subject to the re-opener do not require a CAI uplift (eg digitalisation, property or cyber resilience) or because costs are linked to highly bespoke and potentially material projects (eg Bacton Enhanced Filtration). In the latter case, we expect any CAIs to be part of the overall project assessment. We also expect National Gas to be able to use ex ante allowances for CAIs related to low-materiality projects.

#### Business support costs (BSC)

5.124 In this section we discuss BSC excluding IT&T, insurance and pension costs. Business support functions are required to support reporting, monitoring and efficient delivery of operational activities. National Gas sought a significant increase in RIIO-GT3 BSCs compared to RIIO-GT2, noting that the separation from National Grid in RIIO-GT2 has increased costs in this area.

5.125 In our Draft Determinations we maintained a cross-sector approach to BSC assessment for ET and GT as applied in RIIO-GT2. We used a regression approach using historical data (2014-24) and a composite scale variable (CSV) as a driver. The CSV weightings between FTE, Totex and MEAV were the same as applied in RIIO-GT2. We deemed these to still be relevant drivers. We controlled for the difference between sectors by using a dummy variable for GT, as was done at RIIO-GT2. National Gas recognised our rationale for using a regression model across GT and ET companies but raised concerns with its implementation. National Gas argued that our Draft Determinations approach assumed intrinsic differences between the gas transmission and electricity transmission sectors. It

suggested that the regression approach and use of a dummy variable ultimately benchmarked National Gas against its own historical costs rather than considering cross sector performance. It argued that historical data largely reflected pre-separation from National Grid when BSC were lower due to shared services. National Gas proposed either including forecast data in the BSC regression model or using a forward-looking trend model.

- 5.126 After reviewing National Gas' feedback, we consider comparative assessment to not be the best approach for RIIO-GT3. As well as accepting National Gas concerns noted above, we are conscious of potential issues with the comparison with ET given the significant growth in that sector. As in our assessment of CAI costs, we analysed the relationship between historical and forecast data covering CAI, BSC, total indirects, totex, FTE levels, and capex over multiple time periods.
- 5.127 Based on our assessment, we believe that, considering the horizon we are looking at, this sector's future will closely resemble its past. As a result, continuing using historical data, which serves as a reliable proxy for future performance, is essential and enhances the robustness of our analysis. Like with CAI costs, this is particularly important given the absence of direct comparators within the sector. However, we do recognise that for our assessment to better reflect the specific circumstances of National Gas's separation from National Grid and be reflective of our approach to CAI, it is appropriate to assign more weight to the forward-looking analysis.
- 5.128 After testing alternative model specifications, we have decided to implement a trend model which uses RIIO-GT2 and RIIO-GT3 data (three years of historic and seven years of forecast data, 30:70), removing RIIO-1 data. The removal of the historical regression offers consistency with our approach to our assessment of CAI costs and other opex activities in RIIO-GT3. We also consider that this method offers a pragmatic way to reflect forward-looking cost pressures while retaining a measure of efficiency.
- 5.129 To validate our approach to both BSC and CAI, we compared the proportion of indirects to capex (and totex) resulting from our analysis with that proposed by National Gas in its business plan. We did not find the two proportions to be materially different to raise concerns of over- or underfunding. As such, we consider that our assessment of indirect costs strikes the right balance between managing costs and enabling National Gas to deliver its commitments under RIIO-GT3.

- 5.130 More broadly, we believe regression modelling remains a powerful, effective regulatory tool. We see significant potential in our comparative benchmarking as an assessment approach for GT and are committed to retaining it as a component of the cost assessment toolkit for future price reviews.
- 5.131 Finally, in our Draft Determinations, BSC was the only cost area in GT that underwent comparative analysis. Following the considerations outlined above, we no longer have any comparatively benchmarked costs within our RIIO-GT3 cost assessment. This change has been incorporated into the Business Plan Incentive, and its impacts are detailed in Chapter 6.

Separately assessed costs

- 5.132 For operational training costs, we have decided to maintain our Draft Determinations position to separately assess these costs and allow them in full.
- 5.133 In our Draft Determinations, we assessed health, safety, and environment costs using a trend model that incorporated RIIO-GT2 and RIIO-GT3 actual and forecast data, supported by a qualitative review. National Gas requested a substantial increase in TO HSE funding for RIIO-GT3, including allowances for several one-off projects at the start of the period. However, we concluded that insufficient detail had been provided on these projects to justify additional funding.
- 5.134 In its response to our Draft Determinations, National Gas disagreed with our assessment approach highlighting the critical nature of this area, and it proposed that a re-opener mechanism to manage immature project costings should be introduced. We do not support this re-opener proposal due to two key reasons: first, the evidence provided was insufficient to substantiate the suggestion; and second, there is a strong likelihood that National Gas costs would not meet the materiality threshold.
- 5.135 Nonetheless, National Gas response to our Draft Determinations also noted that the work detailed in its Safety Engineering EJP quantifies the areas of risk in RIIO-GT3 and that minimising ongoing process safety risks is likely to increase costs in RIIO-GT3. In response to this, we have decided to adjust our assessment methodology for TO health, safety, and environment costs by placing greater emphasis on forecast costs within our model for RIIO-GT3.
- 5.136 Moreover, we have decided to make no changes to our Draft Determinations position to fully fund National Gas' SO health, safety, and environment costs.

5.137 In our Draft Determinations, we evaluated the TO and SO Insurance costs using a trend model informed by actual and forecast data from RIIO-GT2 and RIIO-GT3. The dataset was selected to reflect the trends observed during RIIO-GT2, while also accounting for the differences evident in RIIO-3. National Gas argued that using trend analysis for insurance costs fails to consider the drivers of insurance costs. We maintain our approach because trend analysis preserves long-term patterns, supports comparability across price control periods, and provides a holistic view of total expenditure rather than a fragmented assessment of individual components. We consider our approach strikes the balance between recognising potential cost pressures in RIIO-GT3 and reflecting a stable asset base.

5.138 IT&T opex, both in the BSC and CAI categories, was assessed through expert review as set out in the section on non-operational capex. Where spending is associated with a specific project, the recommended deduction was made to the opex costs. The overall deduction was then applied to all remaining costs in the opex categories.

#### Modelled costs

5.139 Table 14 shows our modelled costs for indirects against National Gas's submissions and Draft Determinations modelled costs. The columns showing the differences compare our modelled costs at Final Determinations with National Gas submitted costs.

Table 14: Indirect cost allowances

<b>Cost Area</b>	<b>Submitted (£m)</b>	<b>Ofgem DD (£m)</b>	<b>Ofgem FD (£m)</b>	<b>Difference (£m)</b>	<b>Difference (%)</b>
Business Support Costs TO	356.4	225.2	302.5	-53.9	-15%
Closely Associated Indirects TO	341.1	260.4	276.2	-64.9	-19%
Business Support Costs SO	135.3	78.5	128.0	-7.3	-5%
Closely Associated Indirects SO	64.3	32.8	59.6	-4.7	-7%
Total Indirect costs	897.1	596.9	766.3	-130.8	-15%

## Quarry and loss

### Background

5.140 Quarry and Loss costs are incurred by National Gas in settling claims from landowners whose property contains NTS assets.

5.141 In our Draft Determinations we assessed the quarry and loss submission from National Gas using a mixture of qualitative assessment and quantitative analysis to reach a proposed baseline of £17.5m.

### Summary of Final Determinations decision

Design	Final Determination	Draft Determination
Quarry and Loss	Quantitative assessment overlayed with qualitative analysis	Same as FD.

### Final Determinations rationale and Draft Determinations responses

5.142 National Gas agreed with our proposed Draft Determinations methodology for establishing the Quarry and Loss baseline allowance. We have therefore decided to maintain the position set out in our Draft Determinations for RIIO-GT3 and confirming allowances of £17.5m, inclusive of the OE challenge.

Table 15: Quarry and Loss Allowances

Cost Area	Submitted	Ofgem DD (£m)	Ofgem FD (£m)	Difference (£m)	Difference (%)
Quarry & Loss	20.1	17.5	17.5	-2.6	-13%

## Pension Scheme Admin and PPF Levy

### Background

5.143 In our Draft Determinations, we assessed Pension Scheme Administration and PPF levy costs using trend analysis, with TO and SO costs considered separately.

5.144 The models drew on historic actual data from RIIO-GT2 and forecast data from RIIO-GT3. We excluded RIIO-GT1 data, as we considered it to be less comparable across price control periods for this cost area compared to others.

### Summary of Final Determinations decision

Design	Final Determination	Draft Determination
Pension Scheme Admin and PPF Levy	Cost trend model used in assessment combined with qualitative assessment [REDACTED].	Cost trend model used in assessment combined with qualitative assessment.

Final Determinations rationale and Draft Determinations responses

5.145 National Gas supported the assessment methodology outlined in our Draft Determinations. [REDACTED].

Table 16: Pension Scheme Admin and PPF Levy Allowances

<b>Cost Area</b>	<b>Submitted</b>	<b>Ofgem DD (£m)</b>	<b>Ofgem FD (£m)</b>	<b>Difference (£m)</b>	<b>Difference (%)</b>
Pension Scheme Administration and PPF Levy TO	21.4	16.9	16.9	-4.5	-21%
Pension Scheme Administration and PPF Levy SO	1.1	0.9	0.9	-0.2	-18%
Total	22.5	17.8	17.8	-4.7	-21%

## **Other Costs**

### **Background**

5.146 Other costs cover any expenditure which does not fall within the predefined categories listed above. For RIIO-GT3, these are physical security and cyber costs, both capex and opex related.

5.147 Physical security costs can be defined as costs associated with responding to government mandated security changes and to replace and refresh technical assets during the price control period. Cyber costs are not covered in this document, they are discussed separately in the Cyber Resilience Final Determinations document. The cyber costs are proposed for both TO and SO, while physical security costs are only proposed for TO only.

### Physical Security

5.148 Costs in this category for RIIO-GT3 relate to opex and capex costs for National Gas' Physical Security Programme, which mainly consists of civil assets (for example gates, barriers and fences), IT hardware assets and technical assets including cameras and Advances Access Control Systems (AACs).

### Summary of Final Determinations decision

<b>Design</b>	<b>Final Determination</b>	<b>Draft Determination</b>
Physical Security	Qualitative assessment of needs case and related costs in capex submission. Trend model assessing aggregated opex costs.	Same as FD

<b>Design</b>	<b>Final Determination</b>	<b>Draft Determination</b>
Cyber Security	See Chapter 11 of the Overview Document.	Same as FD.

### Final Determinations rationale and Draft Determinations responses

- 5.149 National Gas accepted our assessment of physical security capex but disagrees with the use of a trend model for assessing physical security opex, citing concerns that the methodology lacks transparency, does not distinguish between distinct cost drivers and overlooks operational growth forecasted for RIIO-GT3.
- 5.150 We disagree with the National Gas response as the model incorporates the forecasts provided by National Gas within its calculations, ensuring that future operational requirements are reflected alongside historic expenditure. The trend approach accounts for the predicted growth by including RIIO-3 forecast costs to ensure that future requirements are considered when setting allowances.
- 5.151 We maintain our proposed allowances from Draft Determinations for physical security in RIIO-GT3, which are detailed in Table 17 below. Physical security capex and physical security opex will be subject to the Physical Security PCD. This ensures delivery of National Gas' physical security outputs and allows allowances to be returned to consumers if changes to the CNI list mean National Gas are no longer required to deliver these outputs. Please see the 'Physical Security PCD – ET and GT' section of Chapter 4 in the Overview Document for details of this PCD.

Table 17: Physical security allowances

<b>Cost Area</b>	<b>Submitted (£m)</b>	<b>Ofgem DD (£m)</b>	<b>Ofgem FD (£m)</b>	<b>Difference (£m)</b>	<b>Difference (%)</b>
Physical security capex	141.9	135.2	135.2	-6.7	-5%
Physical security opex	70.1	59.7	59.7	-10.4	-15%
Total	220.0	194.9	194.9	-25.1	-11%

### **Ongoing efficiency (OE)**

- 5.152 We apply an ongoing efficiency challenge to all of totex (ie modelled costs plus technical assessment and bespoke assessment costs). This gives our final view of efficient totex.

5.153 We have set the OE challenge at 1.0% per annum for RIIO-GT3. See Chapter 8 of the Overview Document for further details and rationale on our approach to setting OE in RIIO-3.

5.154 National Gas proposed that OE should be set at 0.5% per annum in RIIO-GT3. Table 18 below compares our efficient totex allowances for RIIO-GT3 with National Gas' submitted costs, inclusive of its proposed OE target, and any accepted resubmitted costs since its original Business Plan was submitted in December 2024.

Table 18: OE comparison

<b>Submitted totex, excluding OE (£m)</b>	<b>Submitted totex, including OE at 0.5% pa (£m)</b>	<b>Our efficient totex, including OE at 1% pa (£m)</b>
4054.3	3954.5	3191.7

## **Engineering assessment overview**

5.155 This section outlines the methodology we adopted to complete the analysis of the licensee submissions, following our Draft Determination consultation.

5.156 Our technical assessment established whether further evidence and analysis provided in the response to our Draft Determinations sufficiently supported licensees' funding requests and represented an economic and efficient investment for consumers. We also provide a high-level summary of the main areas where we have proposed adjustments in RIIO-GT3.

5.157 Detailed summaries of our engineering review of each EJP are included in Appendix 1 of the document, as is our approach to reviewing the EJPs in RIIO-3.

### Background and context

5.158 We adopted three overarching principles when undertaking the technical review of the company Business Plan submissions, relating to: growth, hydrogen, and asset condition. We cover each in turn below.

#### *Growth*

5.159 RIIO-GT3 is a steady state price control. We have assumed that there is not expected to be any significant expansion in the gas transmission networks over the RIIO-3 period so we have deemed any submissions that were anticipatory investment, on the premise of future growth, as unjustified.

5.160 This does not apply to projects that are addressing existing issues surrounding resilience or security of supply.



### *Hydrogen*

5.161 As per the Investment Decision Pack Guidance, any submissions that supported the development of new hydrogen networks or the conversion of existing natural gas networks to hydrogen were outside the scope of RIIO-3 and have been deemed unjustified.

### *Asset Condition*

5.162 It is critical that the health of existing gas networks is maintained while the energy transition takes places and the licensees continue to provide safe and reliable supplies to customers.

5.163 We categorised the EJP submissions as either asset health or major projects. In assessing asset health submissions, we expected to see evidence of intervention requirements based on asset condition data. For major projects, our focus was on whether the project was required to maintain the integrity of network in the long term.

### Engineering engagement with companies

5.164 Throughout the Draft Determination process, we engaged extensively with National Gas to explain our assessment approach and ensure there was a high level transparency about the evidence required, or analysis necessary, to substantiate investment requests. We undertook detailed line-by-line reviews of each EJP, in advance of our Draft Determination publications, highlighting areas where evidence was incomplete or insufficient to support the proposed funding.

5.165 Consequently, in our Draft Determinations we proposed to reject a significant portion of the funding that National Gas had requested. Our Draft Determinations were also clear and prescriptive in explaining how the information we had received from National Gas was insufficient to justify the funding for volumes of work.

5.166 We remain committed to maintaining open and constructive engagement with National Gas throughout the GT3 period. This will include routine engineering meetings, targeted site visits, and quarterly asset health updates to ensure the ongoing alignment of investment delivery with approved funding and to provide early visibility of engineering asset condition trends.

### Reassessment for Final Determinations

5.167 In our Final Determinations, we have carefully assessed National Gas' Draft Determination Response. This consisted of a 305-page document along with more

than 100 additional appendices. We then reconsidered our position for each EJP considering this additional evidence. For each EJP, Appendix 1 sets out our FD position to increase or decrease allowable costs, or to maintain our Draft Determination decision.

### Thematic issues

5.168 There are three thematic issues identified in our engineering assessments, which are similar to points raised in the Draft Determination. We cover these in turn below.

#### *1. Volume Adjustment Categorisations*

5.169 In our Draft Determinations, we proposed multiple volume adjustments providing feedback on each relevant individual Investment ID (InvID), outlining our expectations for what should be included within National Gas' revised engineering justification. We assigned each relevant InvID with an adjustment to one of the following categories:

- **Needs case:** Where we did not see evidence to support the case for investment, either through a technical or economic justification. There were 19 InvIDs where evidence was insufficient to support the needs case.
- **Further justification:** Where we agree with National Gas that the need to perform work was satisfied, however, we had not been provided with adequate information to enable full analysis of the proposals. This was primarily due to immaturity in optioneering or in demonstrating that the most efficient and appropriate option was selected. There were 79 InvIDs where we required additional evidence, and further justification.
- **Economic:** Where we did not consider it appropriate for the consumer to fund this work, whether or not we agree that investment is required. In instances, where we agreed that investment is required, but have not approved funding, the work was related to the assets or activities that has already been paid for by consumers, and where poor forecasting had resulted in the need for further investment. There were 4 InvIDs where this was the case.<sup>32</sup>

5.170 In National Gas' response to our Draft Determinations, we received additional information for 66 of the 79 InvIDs requiring further justification, 15 of the 19

---

<sup>32</sup> In our Draft Determinations document further justification was denoted FJ, needs case NC and economic E.

that were categorised as not satisfying the needs case, and 2 of the 4 categorised as Economic.

5.171 These submissions only partially responded to clearly identified evidence and analytical gaps. In several cases, National Gas simply restated information already considered.

5.172 In its response to our Draft Determinations, National Gas did not respond to 13 of the 79 investments categorised as requiring further justification, omitting work from its revised submission that was previously presented as necessary, without explanation. These areas therefore remain unchanged from our Draft Determination. Where National Gas have not revised submissions but an intervention is necessary, we would expect them to utilise the Asset Health reopener.

## *2. Proportionality of Proposed Intervention Scope*

5.173 We consistently observed proposed network interventions that exceeded what was supported by evidence or justified by asset condition, indicating a tendency to over-scope work rather than apply targeted pragmatic engineering-led asset management. We observed multiple examples where National Gas defaulted to full asset replacement despite limited justification.

5.174 Where National Gas provided survey evidence to justify a chosen intervention, we find examples where the chosen intervention was significantly more comprehensive, and expensive, than that recommended by the survey.

5.175 In some instances, National Gas demonstrated an over-reliance on the NARM framework to justify interventions. However, NARM is only one tool in the licensee's asset management toolbox and we expect National Gas to present a wider range of justifications to make its case.

5.176 We expect funding requests to demonstrate clear engineering optimisation and the use of innovative approaches as well as differentiation between essential, risk-driven work, and broader discretionary replacement activities.

## *3. Quality of Optioneering and Option Assessment*

5.177 The quality of National Gas' optioneering, including the assessment of alternative ways to deliver the required scope of work, the robustness of decision making, and the justification for preferred solutions, has been poor. We found repeated instances where National Gas defaulted to higher cost solutions for a given scope of work.

- 5.178 In many instances, National Gas' Business Plan did not provide evidence of the options assessed, their relative costs, technical feasibility, or associated delivery risks. Where optioneering evidence was provided, it was often incomplete or limited to National Gas' preferred solution, with insufficient justification for the discounting of alternatives. The absence of robust comparative analysis constrained our ability to assess whether the proposed investments represented an efficient and economic solution for consumers. National Gas must demonstrate what alternative options were assessed, including the level of maturity to which these options were developed and the rationale for their exclusion. This expectation was clearly communicated through the Draft Determinations and subsequent bilateral engagements.
- 5.179 In general, whilst we understood the need for rectification work, in a number of places we disallowed this expenditure at the Draft Determination stage and requested more tailored interventions. Where National Gas have reverted with more appropriate work packages, funding has been approved.

#### Assessment conclusions

- 5.180 Following our technical review and analysis, and the further evidence provided, we have approved the majority of National Gas' proposed works, with seven EJPs being fully justified where we make no adjustments. We have applied additional controls (outlined in Chapter 3 and with further detail in Chapter 4) and reporting requirements to ensure that consumers are protected and that the approved activities are delivered within this price control.
- 5.181 While parts of the submission did not demonstrate the level of justification we expect, our adjustments and the associated controls have sought to address this.
- 5.182 We recognise National Gas' acknowledgement of the deteriorated asset condition and its commitment to improving its approach with a more strategic and transparent approach to asset management. We expect them to deliver against this commitment and will monitor progress closely through targeted site visits, and quarterly asset health updates.

### **Totex Incentive Mechanism (TIM)**

#### **Background**

- 5.183 The TIM is designed to ensure that National Gas and consumers appropriately share the risk of overspending and share any cost efficiencies that can be realised. It also acts an incentive on National Gas to deliver cost efficient projects, by exposing them to the impacts of cost overruns.

**Final Determinations rationale and Draft Determinations responses**

<b>Design</b>	<b>Final Determination</b>	<b>Draft Determination</b>
TIM	We have decided to set the TIM at 39% at for National Gas in RIIO-GT3.	Same as FD.

5.184 In line with the approach set out in our Draft Determinations we set the TIM at 39% for National Gas in RIIO-GT3. We think this results in an appropriate balance of risks between National Gas and customers and retains a strong incentive for National Gas to deliver cost efficient projects. National Gas were supportive of our proposed approach at Draft Determinations.

5.185 A consumer organisation disagreed with our proposed approach to TIM, arguing that sharing factors should be set on a consistent basis between sectors and at lower levels than previous price controls. It said that consumers were at risk of paying for a level of funding in excess of actual spend when allowances are set too high, and, further, that there was a consistent pattern of underspend across different sectors and price controls. It proposed lowering the TIM sharing factor to align with our proposed rate in the ET sector.

5.186 We have undertaken an extensive cost assessment process, including the application of an ongoing efficiency challenge, to set It is important to retain strong incentives for National Gas to outperform these cost allowances where possible, which benefits consumers. We have used a suite of PCDs to minimise the potential for unjustified outperformance in RIIO-GT3.

5.187 We think a 39% sharing factor, our robust methodological approach to setting efficient ex ante allowances and regulatory mechanisms such as PCDs, combined provide the right balance of incentives for National Gas to innovate and increase efficiency, whilst ensuring delivery of the projects and improvements that consumers are paying for, including around asset health and key resilience related investments.

## 6. Business Plan Incentive (BPI)

6.1 This chapter sets out National Gas' Final Determinations BPI results, including some of the key points raised by stakeholders, and our responses to these points. Where the results have changed from that published in the Draft Determinations, we have set out our reasoning for this change. For information on the overall results for the BPI for all companies, see the Overview Document.

Table 19: Final Determinations BPI results

<b>BPI Stage</b>	<b>Final Determinations result</b>	<b>Draft Determinations result</b>	<b>Further detail</b>
A	Pass	Pass	This chapter for specific views on the Final Determinations result.
B	-2.0 bps	-2.4 bps	This chapter for specific views on the Final Determinations result.
C	Same as DD	8.9 bps	This chapter for specific views on the Final Determinations result.
Total bps	6.8 bps	6.5 bps	
Total five-year monetary equivalent, £m	£9.5m	£8.4m	

### Stage A

6.2 National Gas, the sole respondent on this area, supported our Stage A assessment overall. We have decided to implement our Draft Determinations position that National Gas met all the minimum requirements, as set out in the Business Plan Guidance, and has passed Stage A of the BPI.

### Stage B

6.3 In its Draft Determinations response, National Gas expressed concerns relating to comparatively assessed costs. We received no other responses.

6.4 The overall Final Determinations result for National Gas is -2.0 bps, which is the weighted average of the outcomes from our bespoke assessment, rounded to one decimal point. The following provides details on the Final Determinations result for each cost category including the rationale for change from the Draft Determinations results.

6.5 In our Draft Determinations, only Business Support costs (BSC) were assessed on a comparative basis where we benchmarked these costs against the ET operators. We have now decided that a bespoke assessment is more appropriate. As set out

in the BSC section in Chapter 5, we consider the comparison with ET to be inappropriate, given the significant growth in the ET sector. This means that at Final Determinations there are no comparatively assessed costs in RIIO-GT3.

- 6.6 National Gas' score for BSC was previously benchmarking poorly when BSCs were assessed on a comparative basis, at -0.36bps. As shown in Table 20, under bespoke assessment, this score is now 0.0bps (an increase of 0.36bps).

### Bespoke costs

- 6.7 The table below sets out bespoke costs assessed along with the Final Determinations rationale and the Draft Determinations responses.

Table 20: Final Determinations BPI scoring for bespoke cost activities

<b>Bespoke Cost</b>	<b>Weighting</b>	<b>BPI reward/penalty (bps)</b>	<b>Rationale</b>
Network Capability	2%	0.00	Comprehensive cost evidence and adequate volumes.
Asset Health	29%	-1.9	The quality of cost evidence was comprehensive relative to other licensees. National Gas has been very open and forthcoming on the detail and condition of its assets. However, there were significant issues with accuracy, lack of a consistent methodology to estimate unit costs, low review scores for optioneering and scope confidence in many areas, and we rate National Gas poorly on the justification of efficient volumes and unit costs.
Other Non-Load	5%	-0.3	Evaluated using the same methodology as Asset Health.
Non-Op Capex IT & Telecoms	7%	0.0	Fair quality of cost evidence, good outcome for qualitative assessment however limited justification of costs other than based on existing contractual pricing. Unit cost and volumes criterion not applicable.
Non-Op Capex (Non-IT)	2%	0.0	Fair quality of cost evidence. Unit cost and volumes criterion not applicable.
Data & Digitalisation	4%	0.0	Adequate cost evidence and all projects approved. Unit cost and volumes criterion not applicable.
Network Operating Costs	11%	0.0	Fair cost evidence. Unit cost and volumes criterion not applicable.

<b>Bespoke Cost</b>	<b>Weighting</b>	<b>BPI reward/ penalty (bps)</b>	<b>Rationale</b>
Cyber Security	12%	0.0	Adequate evidence provided. Unit costs and volumes largely derived from initiatives and experience from RIIO-GT2. Costs found to be high.
Physical Security	5%	0.0	Fair cost evidence and adequate volumes, all schemes fully justified.
Closely Associated Indirects (CAI)	5%	0.0	Fair cost evidence. Unit cost and volumes criterion not applicable.
Business Support Costs (BSC)	6%	0.0	Fair cost evidence. Unit cost and volumes criterion not applicable.
Operational Training	2%	0.2	Quality of cost evidence met the requirements and good supporting annex provided. Costs have been allowed in full.
Health, Safety and Environment	1%	0.0	Fair cost evidence. Unit cost and volumes criterion not applicable.
Operational IT CAI	2%	0.0	Fair cost evidence. Unit cost and volumes criterion not applicable.
IT & Telecoms Business Support Costs	4.6%	0.0	Fair cost evidence. Unit cost and volumes criterion not applicable.
Pension	1%	0.1	Comprehensive cost evidence. Unit cost and volumes criterion not applicable.
Insurance	1%	0.0	Fair cost evidence. Unit cost and volumes criterion not applicable.
Quarry and Loss	0.5%	0.0	Fair cost evidence. Unit cost and volumes criterion not applicable.
<b>Total</b>	<b>100%</b>	<b>-2.0</b>	

#### Final Determinations rationale and Draft Determinations responses

6.8 In its response to Draft Determinations, National Gas, as the only respondent, pointed to evidence submitted in each individual cost area and requested this evidence be considered.

6.9 Following review of additional evidence from National Gas, we have decided to implement our Draft Determination position on the assessment of bespoke costs with one adjustment: as above, we now include Business Support costs in our bespoke assessment at Final Determinations. This assessment used three criteria: quality of cost evidence, justification of unit cost efficiency, and justification of



volume efficiency. The scores for each criterion were equally weighted except where unit costs or volumes were not applicable.

6.10 This aligns with our position on Business Support costs for the ET operators.

### **Stage C**

6.11 In its Draft Determinations response, National Gas supported our assessment overall, and we received no other responses. National Gas agreed with our approach of applying equal weightings across criteria in the Clarity and Business Plan Commitments Scorecards for Stage C, as it ensures transparency and consistency.

6.12 However, National Gas disagreed with our application of sector specific outcome weightings in favour of equal rating weightings across the assessment areas. Throughout the RIIIO-GT3 price control setting process we maintained the position that maintaining a safe and resilient network is paramount for National Gas and thus prioritising these, security and resilience related outcomes in Stage C of the BPI assessment is appropriate for National Gas. We therefore make no adjustment to our Draft Determinations. Further discussion and our decision on the Stage C commitment weightings is set out in the Final Determinations Overview document, Chapter 5.

## 7. Innovation

### Background

- 7.1 The SSMD, Business Plan Guidance (BPG), Draft Determinations and Overview Document identify the criteria and process that we have used to assess NIA funding requests. The Overview Document also details our decisions for future of gas related innovation, NIA oversight, the SIF, increasing third party involvement and innovation deployment.
- 7.2 We set out below our Final Determinations on National Gas' RIIIO-3 NIA funding.

### Summary of Final Determinations decision

Design	Final Determination	Draft Determination
<b>Level of Network Innovation Allowance (NIA) funding</b>	£21.47m	£11.2m

### Rationale for Final Determinations decision

- 7.3 We have decided to allow National Gas £21.47m of NIA funding. In its Business Plan, National Gas requested £40m of funding. In our Draft Determinations, we proposed allowing National Gas £11.2m of NIA funding.
- 7.4 We proposed deducting £25.6m because of our position that future of gas related projects should no longer be eligible for NIA funding, as set out in the Overview Document. We proposed further reducing its funding by 22% to reflect shortcomings in its Business Plan submission against the criteria set out in the BPG.
- 7.5 In its Draft Determination response, National Gas provided further detail on its proposed NIA workstreams and broke these out into 27 themes focusing on the NTS (£26.5m) and 12 themes related to the future of gas (£13.5m). We have decided to fund the workstreams relating to the NTS and reject those relating to the future of gas.
- 7.6 Additionally, National Gas provided further evidence against the criteria set out in the BPG. It explained in further detail its NIA areas of focus, how its innovation work meets the NIA eligibility criteria, how it ensures that its work is not duplicative, the processes in place to disseminate innovation and why its proposed areas of innovation cannot be funded by totex.
- 7.7 While we were satisfied with some of the evidence provided, we would have expected further detail on:

- NIA areas of focus: while National Gas provided additional information, we expected further detail on its proposed workstreams, such as a comprehensive explanation of the problems it is trying to solve, the solutions identified and why these were chosen.
- Meeting eligibility criteria and scoping guidance: National Gas did not provide substantively more information in their Draft Determinations response compared to its Business Plan on how its workstreams meet the NIA eligibility criteria.
- Why innovations cannot be funded by Totex: National Gas provided further information as to why, at a portfolio level, NIA projects cannot be funded by Totex, but did not break this down per workstream, as requested in the BPG.

7.8 Based on its response and the further information provided, we decided to decrease National Gas' NIA reduction from 22% to 11%.

## 8.Data and Digitalisation

### Introduction

- 8.1 The SSMD, BPG and Overview Document identify the criteria and process that we have used to assess the funding of proposed data and digitalisation investments. The Overview Document also details our proposals for further digitalisation of the sector through the existing Digitalisation licence condition and a Digitalisation Re-opener.
- 8.2 We have set out below our Final Determinations position on National Gas' RIIO-3 data and digitalisation funding.

### Summary of Final Determinations decision

Design	Final Determination	Draft Determination
<b>Level of Data and Digitalisation funding</b>	£215.4m	£197.4m

### Rationale for Final Determinations decision

- 8.3 We have decided to allow National Gas £215.4m in Data and Digitalisation funding. In its Business Plan, National Gas requested £359.7m of Data and Digitalisation funding (including miscategorised investments). We proposed to fund £197.4m at Draft Determinations. National Gas disagreed with our position and felt strongly that funding cuts to projects across Data and Digitalisation and IT&T would undermine energy security and its compliance with Data Best Practice.
- 8.4 National Gas' investment in digitalisation is driven by two key factors in RIIO-GT3; separation from National Grid, and the need for increasing visibility and control of the gas transmission system. The proposed changes to internal architecture will allow National Gas to better exchange data between parts of its organisation and with external participants. This will allow the sector to function more effectively, in a whole-system approach. Separation from National Grid has driven some necessary investments over both RIIO-GT2 and RIIO-GT3.
- 8.5 National Gas clearly linked its investments to an improvement in compliance with the Data Best Practice (DBP) principles. The investments proposed help improve compliance across all 11 principles. National Gas also provided a summary of its current progress with the DBP principles.
- 8.6 We required all licensees to signpost investments that would allow them to connect and utilise the Data Sharing Infrastructure (DSI) effectively. We are confident that the proposed investments being made by National Gas will allow

them to effectively connect to and utilise the DSI. In particular, investment IT040 “Enhanced data driven interoperability for an intelligent, harmonised, network” allows National Gas to prepare data to key internal standards, meaning that data will be ready for DSI exchange in a timely manner for other DSI participants.

8.7 We identified 20 investments totalling £120.4m, or 33.4% of the original submission, that were miscategorised as Data and Digitalisation and thus assessed separately. These were mostly IT&T.

8.8 At Draft Determinations, we proposed to reject costs relating to ten investments totalling £38.7m, driven predominantly by either a lack of clear quantitative assessments of options for delivery, or by an unclear needs case from stakeholders inside and outside the business. Following further review and evidence submitted, we have decided to approve two investments totalling £18m – IT018 “Operational Safety and Compliance” and IT029 “Supply Chain Optimisation” – which were rejected at Draft Determinations. Further information is detailed below. Other Data and Digitalisation investments that have been rejected will not be precluded from being submitted in the re-opener process with revised justifications.

- IT018 was initially rejected due to a lack of information and financial justification; new evidence submitted highlighted the fundamental nature of this investment through a programme plan with outputs, staff costings, and improved information about the risks of inefficiencies resulting from errors, reporting delays, and safety protocol breaches. This investment totals £12.1m.
- IT029 was initially rejected due to a lack of detail when comparing the benefits of different options. National Gas provided further information on why a phased implementation could not deliver a majority of the benefits, with the risks of higher costs of procuring parts a key risk. From the additional information submitted, it was clearer why outsourcing and basic implementations were ruled out. This investment totals £5.8m.

## Appendices

### Appendix 1 – Summary of Engineering Review

Table 21: Summary of Engineering Approvals

<b>Ofgem Scheme Reference (OSR)</b>	<b>Title</b>
NGT001	Site Assets: Asbestos, Stabbing and Redundant Assets
NGT005	Network Capability: Western Import Resilience Project
NGT008	AC Inspection and Remediation
NGT017	Pipelines
NGT018	Pressure Vessels
NGT019	Civils
NGT026	Pipeline Protection

Table 22: Summary of National Gas EJP Recommendations

<b>EJP Title</b>	<b>Our Draft Determination Position</b>	<b>Response to Draft Determination</b>	<b>Our Final Determination Position</b>
NGT002: Site Assets: Preheating, Filters & Pipework	Partially justified. Reduced volumes. We understand that National Gas has taken a proactive approach; however, we do not agree with the proposed strategy of proactively replacing the primary coating system ahead of its design life, even accounting for the expected deterioration of sections of coating prior to the expiry of the design life. We encourage National Gas to explore alternative coating methods or materials and expand its database of qualifying materials and contractors if required. National Gas has not completed surveys and undertaken the necessary work to provide us with sufficient confidence in key parameters such as locations, volumes, or asset condition - for example steel pipe supports. As a result, we do not have the confidence to support the investment where this is not clear. The draft decision is a volume reduction pending the receipt of further justifications of scope and solution.	National Gas did not seek reinstatement of all volumes removed at Draft Determination, focusing its response on selected areas of reduction. National Gas proposed reinstatement for line-of-site, modular boilers, enhanced proactive pipe coatings, pipe supports, and pre-heat. National Gas submitted some new information for proposed reinstated investments, however, in other areas, National Gas simply reiterated their Business Plan submission. National Gas did not seek reinstatement for enhanced monitoring of pipe supports.	Partially justified. Reduced volumes. We have decided to increase volumes from our Draft Determinations position. We maintain our Draft Determination findings and do not find that the approach for repeated coatings every five to six years provides value to the consumer against other relevant industry standards. Where National Gas has shared evidence of defects we have provided the funding to resolve these through CM/4 defect resolution. We would encourage National Gas to review its internal standard against industry-leading standards. National Gas did not submit substantial new evidence to support line of site detection. We agree with the revised volume for pipe supports, however, we note that the defect often requires relatively minor intervention yet National Gas' proposed intervention is replacement.
NGT003 CABs	Partially justified with reduced volumes. The fleet of CABs (buildings that enclose gas compressors and their drives as well as the associated air intakes, exhaust systems and ventilation) have not received sufficient maintenance priority over recent years. A number of CABs are	National Gas did not seek reinstatement of all volumes removed at Draft Determination, focusing its response selected areas of reduction.	Partially justified. Reduced volume. We have decided to increase volumes from our Draft Determinations position. Our final review identified little improvement in the justification for the proposed work as it is not well matched to

EJP Title	Our Draft Determination Position	Response to Draft Determination	Our Final Determination Position
	<p>in a poor state of repair with some loss of structural integrity. This cannot persist and we intend to provide efficient and effective funding to address these issues. National Gas has not demonstrated consumer value in funding the proposed investments, requesting interventions which exceed that which is necessary or not demonstrating that an intervention will address the root cause of the issue. We have already engaged directly with National Gas about the additional evidence or optioneering we require to adequately assess their plans for these critical assets. We have engaged early in this area to ensure they have sufficient time to collect and submit the necessary information for us to approve necessary, efficient investment in these critical assets. CAB maintenance is a mix of day to day repairs and refurbishment plus the periodic refurbishment of major items. National Gas appears to have not undertaken the level of routine and minor maintenance that would be expected and has proposed to cluster this work into capitalised refurbishment schemes eg external painting, weeding and moss clearance, cleaning, etc. The proposed Draft Determination position is a volume reduction alongside a request for revised submission to justify a protected and comprehensive CABs remediation programme.</p>	<p>National Gas requested full reinstatement for their original submission of air intakes, exhaust, and ventilation. Some limited additional survey evidence was provided and National Gas attempted to match known asset condition with proposed interventions. National Gas did not seek reinstatement where volumes had been rejected or removed for cab food repairs, lifting beams, cranes, cab doors, or upgrades to electric cranes.</p>	<p>the asset's current and likely condition at the end of RIIO-GT3. We approved volumes for investment IDs C-001, C-004 and C-005 based solely on our belief that it is necessary to do some work on these assets as not granting the requested volumes would have led to unacceptable risks to the safety and security of the network. Therefore, we believe that we have taken a pragmatic decision that is in the best interests of consumers. To protect consumer interests these volumes are subject to additional controls outlined in Chapter 3 (Compressor Acoustic Building (CAB) PCD) and provide us with the ability reduce costs where we believe that this is not efficient or effective. This is further discussed in Chapter 5 of this document.</p>



<b>EJP Title</b>	<b>Our Draft Determination Position</b>	<b>Response to Draft Determination</b>	<b>Our Final Determination Position</b>
NGT004 Rotating Machinery	Partially justified with reduced volumes. This EJP covers all fleet compressor trains and ancillary equipment and apparatus but excludes CABs and any equipment located at the St Fergus import terminal. Much of the work proposed interleaves with work covered by allied EJPs. An evaluation of each intervention has been undertaken and it is clear that work needs doing but the justifications provided by National Gas do not always make a sufficiently robust case for consumers to fund expenditure.	National Gas did not seek reinstatement of all volumes removed at Draft Determination, focusing its response on selected areas of reduction. National Gas provided additional evidence related to a mix of original volumes and slightly reduced volumes compared to their business plan submission for investment IDs; C-073, C-079, C-132, C-145, C-224, C-274, C-278, C-279, C-314, C-316 National Gas accepted the Draft Determination position with respect to the following investment IDs where volumes had been rejected or reduced; C-118, C-127, C-186, C-234, C-307, and C-332.	Partially justified. Reduced volume. We have decided to increase volumes from our Draft Determinations position. We maintain our Draft Determination findings for investment IDs; C-274 and C-278 as National Gas has not demonstrated an economic case for the chosen intervention. Following a review of National Gas' additional evidence we agree with the revised volumes for C-132, C-224, C-279, C-314, & C-316. We agree with National Gas' request to include C-145 within the WIRP reopener as the design is dependent on the completion of this project. We agree that some work is required in relation to investment IDs; C-073 and C-079 although there is a volume reduction and engineering controls applied.
NGT006 Gas Quality, Metering, and Telemetry	Unjustified. This EJP covers the whole network including St Fergus. The data was provided in a confidential form meaning little of the analysis can be discussed in public. National Gas failed to make a robust argument for consumer funding of these interventions.	National Gas requested reinstatement of the full original EJP volumes removed at Draft Determination. In response to our engagement and information requests National Gas provided a robust set of evidence and	Partially justified. Reduced volume. We have decided to increase volumes from our Draft Determinations position. We accept the need to perform this work in line with NIS guidance. Where we have applied volume adjustments, this does not impact the core work itself but ancillary areas where we did not see sufficient evidence ie we have

**Decision** – RIIIO-3 Final Determinations – National Gas Transmission

<b>EJP Title</b>	<b>Our Draft Determination Position</b>	<b>Response to Draft Determination</b>	<b>Our Final Determination Position</b>
		requirements to support the investment for this EJP.	reduced the volumes for Se-49, but increased volumes for Se-7.
NGT009 Sites: Cathodic Protection	Partially justified with reduced volumes. National Gas did not provide sufficient evidence for the entire replacement of its CP systems where surveys suggest remediation action would be sufficient. National Gas, where possible, should complete surveys to support its T3 investment proposals, where this is not possible National Gas should articulate why.	National Gas did not seek reinstatement of all volumes removed at Draft Determination, focusing its response on selected areas of reduction. National Gas provided a revised volume for interventions around CP systems at compressor stations and AGIs, focusing on those with the highest priority. This was supported with new substation condition and location data. National Gas did not seek reinstatement for insulation joint volume adjustments.	Partially justified. Reduced volume. We accept the revised and evidenced volumes proposed by National Gas. We have decided to increase volumes from our Draft Determinations position. We note wholesale replacement for CP systems while the core issue being around ground bed depletion. This is an area in which we propose enhanced reporting and being recategorized within NARM to ring fenced funding.
NGT010 Electrical Infrastructure: Switchgear and Transformers	Partially justified with reduced volumes. National Gas has not sufficiently demonstrated a needs case for some of the proposed investments in this category. Some assets appear in good condition and have only been operational for a short period of time. Other assets are proposed for replacement based on obsolescence, or age alone. In some instances, condition	National Gas did not seek reinstatement of all volumes removed at Draft Determination, focusing its response on selected areas of reduction. National Gas proposed revised volumes for transformers.	Partially justified. Reduced volume. We accept the revised and evidenced volumes proposed by National Gas. We have decided to increase volumes from our Draft Determinations position.

<b>EJP Title</b>	<b>Our Draft Determination Position</b>	<b>Response to Draft Determination</b>	<b>Our Final Determination Position</b>
	reports have indicated that replacement is not necessary.	National Gas did not seek reinstatement.	
NGT011 Electrical Infrastructure: Standby Power Systems and LV Distribution	Outcome proposed: Partially justified with reduced volumes. Numerous assets appear to be in relatively good condition and have not reached their end of life or have only been in operation for a relatively short period. National Gas has not adequately demonstrated why these cannot continue in their current operation.	National Gas did not seek reinstatement of all volumes removed at Draft Determination, focusing its response on selected areas of reduction. National Gas provided revised volumes for its proposed works on distribution boards.	Partially justified. Reduced volume. We accept the revised and evidenced volumes proposed by National Gas.
NGT012 Electrical Infrastructure: Site Lighting, Earthing, and Lightening Protection	Partially justified with reduced volumes. National Gas has proposed investment for work contingent on surveys that have not yet been completed, and therefore, unable to evidence the volume, location, or condition to justify the work proposed. It is proposed to move all lighting to the wider network decarbonisation package given advances in low energy lighting.	National Gas did not seek reinstatement of all volumes removed at Draft Determination, focusing its response on selected areas of reduction. National Gas proposed a revised strategy stating they will be prioritising investment towards assets that are both among the oldest in the network and demonstrably in poor condition.	Partially justified. Reduced volume. We accept the revised and evidenced volumes proposed by National Gas. We agree with National Gas' revised approach for this investment, which now focuses on directing expenditure towards assets in demonstrably poorer condition. This approach reflects a more proportionate and evidence-based strategy, consistent with the expectations set out in Draft Determinations. It represents a necessary correction to National Gas' earlier approach and illustrates the type of targeted prioritisation that should have been applied from the onset.
NGT013 Compressor Fleet - Network Investments	Network capability needs to be seen as a whole and although each EJP has been analysed on its own merit, an overall evaluation has also been completed. Our	National Gas did not seek reinstatement of all volumes removed at Draft Determination, focusing its response on selected areas	Partially justified. Reduced volume. NESO provided us with their assessment of compressor need after we had completed Draft Determinations but before it was

<b>EJP Title</b>	<b>Our Draft Determination Position</b>	<b>Response to Draft Determination</b>	<b>Our Final Determination Position</b>
and Zone 1 (Scotland)	work has been completed alongside the NESO analysis. At the point of the evaluation NESO and National Gas had not finalised a single network capability plan and therefore final decisions cannot be made with respect to applications to improve compressor performance and to add flexibility to the network. It is proposed to provide an uncertainty mechanism to take account of the evolving analysis of the network. Further evidence is required to justify the proportionate level of spares holding and to optimise the investment in low NOx technology.	of reduction. National Gas sought the reinstatement of the volumes for C-081 and amalgamated and revised their proposals for C-119 and C-270.	published. This final decision takes that analysis into account. We accept the needs case and provide a view of volumes proposed by National Gas for C-119. We accept the revised and evidenced volumes proposed by National Gas for C-270. We maintain our Draft Determination findings for C-081. Although we understand the logic for spares provision in this area National Gas has not demonstrated that the chosen option is the most economic or efficient as no alternative options were considered. We maintain our Draft Determination findings for compressor performance and network capability.
NGT014 Compressor Fleet – Zones 2 and 3 (Central)	Network capability needs to be seen as a whole and although each EJP has been analysed on its own merit, an overall evaluation has also been completed. Our work has been completed alongside the NESO analysis. At the point of the evaluation NESO and National Gas had not finalised a single network capability plan and therefore final decisions cannot be made with respect to applications to improve compressor performance and to add flexibility to the network. It is proposed to provide an uncertainty mechanism to take account of the evolving analysis of the network.	National Gas did not seek reinstatement for any of the adjustments in our Draft Determination.	We maintain our Draft Determination position.

<b>EJP Title</b>	<b>Our Draft Determination Position</b>	<b>Response to Draft Determination</b>	<b>Our Final Determination Position</b>
	Further evidence is required to justify the proportionate level of spares holding and to optimise the investment in low NOx technology.		
NGT015 Compressor Fleet Zones 4 and 5 (South Wales and South West)	Network capability needs to be seen as a whole and although each EJP has been analysed on its own merit, an overall evaluation has also been completed. Our work has been completed alongside the NESO analysis. At the point of the evaluation NESO and National Gas had not finalised a single network capability plan and therefore final decisions cannot be made with respect to applications to improve compressor performance and to add flexibility to the network. It is proposed to provide an uncertainty mechanism to take account of the evolving analysis of the network. Further evidence is required to justify the proportionate level of spares holding and to optimise the investment in low NOx technology.	National Gas did not seek reinstatement for any of the adjustments in our Draft Determination.	Partially justified. Reduced volume. We maintain our Draft Determination position.
NGT016 Compressor Fleet Zones 6 and 7 (East Midlands and South East)	Partially justified with reduced volumes. Network capability needs to be seen as a whole and although each EJP has been analysed on its own merit, an overall evaluation has also been completed. Our work has been completed alongside the NESO analysis. At the point of the evaluation NESO and National Gas had not finalised a single network capability plan and therefore final	National Gas did not seek reinstatement for any of the adjustments in our Draft Determination.	Partially justified. Reduced volume. We maintain our Draft Determination position.

<b>EJP Title</b>	<b>Our Draft Determination Position</b>	<b>Response to Draft Determination</b>	<b>Our Final Determination Position</b>
	decisions cannot be made with respect to applications to improve compressor performance and to add flexibility to the network. It is proposed to provide an uncertainty mechanism to take account of the evolving analysis of the network. Further evidence is required to justify the proportionate level of spares holding and to optimise the investment in low NOx technology.		
NGT020 Pipeline Cathodic Protection	Partially justified with reduced volumes. National Gas has sufficiently demonstrated the needs case of this work with suitable data. We are proposing a small reduction in the number of transformer rectifiers.	National Gas did not seek reinstatement for any of the adjustments in our Draft Determination.	Partially justified. Reduced volume. We maintain our Draft Determination position.
NGT021 Network Decarbonisation Investments	National Gas did not provide sufficient evidence for work relating to CH4RGE and Dry-low emissions.	National Gas agreed with our position regarding a Network Decarbonisation and Emissions Compliance Re-opener and proposed so limited additions.	Partially justified. Reduced volume. See above section Network Decarbonisation and Emissions Compliance Re-opener & PCD (GTO)
NGT022 Valves: Valves	Outcome proposed: Partially justified with reduced volumes. National Gas did not present a technical, economic or efficient case for pipe through of block valves sites or pipe through single valve (uncongested). Furthermore, National Gas did not sufficiently demonstrate a site-by-site approach and lowest cost solution for replacing block valve assemblies - we invite further discourse into an efficient approach from National Gas.	National Gas requested reinstatement of the full original EJP volumes removed at Draft Determination. Of the valves removed based on predictive analytics alone, National Gas sought to substitute the volumes of valves with live defects to support the case for replacement.	Partially justified. Reduced volume. We have decided to increase volumes from our Draft Determinations position. We found there is sufficient supporting evidence to support the investment of additional four valves. We do not find there is sufficient evidence to support the additional investment of Pipethroughs, either through condition assessment or through CBA and reasonable payback period to the consumer.

<b>EJP Title</b>	<b>Our Draft Determination Position</b>	<b>Response to Draft Determination</b>	<b>Our Final Determination Position</b>
		National Gas provided an example for a single site where a leak occurred to justify investment at a further eleven sites where there is no evidence of leaks.	A single example for a valve that has previously leaked at a different site does not provide robust evidence for a no, or low regret spend.
NGT023 Valves: Actuators	Partially justified with reduced volumes. It was challenging for us to understand the drivers behind the volumes presented. Furthermore, the data presented did not provide us with confidence in the requested volumes beyond those for Shafer actuators, for example, the dates of some defects being marked as resolved, and other defects appearing to be relatively minor when compared to the proposed intervention.	National Gas confirmed the number of actuators subject to HSE legal action. National Gas provided clarity around the needs case, location, and location for specific groups of actuators being Dangerous Substances and Explosive Atmospheres Regulations (DSEAR), defects, and obsolesce.	Partially justified. Reduced volume. We have decided to increase volumes from our Draft Determinations position. We agree with the volume of interventions for Shafer actuators. We agree that DSEAR and defects are suitable needs case for intervention. We note that the level of intervention does not match the defect or corrective action in some of these instances. We find the optioneering to be insufficient for the entirety of these volumes. We have introduced the Actuator Replacement PCD to ensure that all replacements are suitably justified.
NGT024 Valves: Pressure Control and Flow Control Valves	Partially justified with reduced volumes. National Gas did not sufficiently justify the volumes for replacing regulator streams (single), and the replacement of multistage pressure reduction skids resulting in recommended volume reductions.	National Gas did not seek reinstatement of all volumes removed at Draft Determination, focusing its response on selected areas of reduction. National Gas accepted some volume adjustments for the replacement of the regulator stream, acknowledging	Partially justified. Reduced volume. We have decided to decrease volumes from our Draft Determinations position. We identified inconsistent and incomplete evidence supporting the replacement of regulator streams and pressure reduction skids. Surveys were missing or contradictory, with assets alternately being described as present or absent. In several cases, forecast flows of 0 mcm/d were reported

<b>EJP Title</b>	<b>Our Draft Determination Position</b>	<b>Response to Draft Determination</b>	<b>Our Final Determination Position</b>
		discrepancies between its Business Plan and Draft Determinations, and belatedly recognising that two assets were redundant.	alongside funding requests and National Gas did not provide credible optioneering evidence to justify full stream rather than replacement. Where evidence remains inconsistent or unclear, we cannot justify consumer funding.
NGT025 Valves: Valve Bypass and Modifications	Partially justified with reduced volumes. National Gas has not sufficiently demonstrated the needs case for this work and why this must be done. We asked National Gas to provide a site-by-site specific CBA demonstrating consumer benefit, rather than an isolated CBA based solely on monetised risk, for both modification and installation of bypasses.	National Gas did not seek reinstatement of all volumes removed at Draft Determination, focusing its response on selected areas of reduction. National Gas Submitted site-by-site extrapolations for the monetised risk. National Gas accepted our removal for bypass modifications but asked for an increase in block valve replacements with supporting evidence.	Partially justified. Reduced volume. We have decided to increase volumes from our Draft Determinations position. We find that sufficient condition data supports some increase in block valve replacements. We also find suitable evidence to support the investment in some bypass installations. However, we were not provided with sufficient evidence to justify further volumes based on condition assessment or economic justification.
NGT027 St Fergus: Rotating Machinery	Partially justified with reduced volumes. See comments on EJP NGT004: Rotating Machinery.	National Gas did not seek reinstatement of all volumes removed at Draft Determination, focusing its response on selected areas of reduction. National Gas submitted a new investment ID, C-375 with a revised scope to address the issues	Partially justified. Reduced volume. We have decided to increase volumes from our Draft Determinations position. We find that the revised submission supports investment ID C-375 instead of the previously requested C-143.



<b>EJP Title</b>	<b>Our Draft Determination Position</b>	<b>Response to Draft Determination</b>	<b>Our Final Determination Position</b>
		addressed by the rejected investment ID C-143.	
NGT028 St Fergus Gas Terminal: Electrical Assets	Partially justified with reduced volumes. National Gas did not sufficiently demonstrate the timing of the proposed work. National Gas is proposing investments on age related programmes, which is not considered to be an appropriate justification. Some assets proposed for replacement appear to have relatively good health scores. National Gas has not provided sufficient condition data to demonstrate a need for asset replacement. Further clarification on these assets is welcome.	National Gas did not seek reinstatement of all volumes removed at Draft Determination, focusing its response on selected areas of reduction. National Gas has provided further narrative to support the investment for the refurbishment of generators.	Partially justified. Reduced volume. We have decided to increase volumes from our Draft Determinations position. We accept the revised and evidenced volumes proposed by National Gas.
NGT029 St Fergus Gas Terminal: Valves and Actuators	Partially justified with reduced volumes. National Gas did not provide sufficient condition data to evidence the need for the volumes in hand pumps, or technical reasoning to justify this spend, however, we welcome further clarification. National Gas proposes to replace certain valves based on the condition of other valves. There may be an engineering justification behind this position, but the case was not made in the EJP. Further clarification on these assets is welcome. We welcome further discussion on the pressure reduction skids which are not currently oversized, but National Gas believe risk becoming so during the price control period.	National Gas did not seek reinstatement of all volumes removed at Draft Determination, focusing its response on selected areas of reduction. National Gas agree with the principle of our approach, being condition-based assessment and the need for robust evidence to support investment. National Gas proposes to reinstate all five of our adjusted valve and handpump replacements providing additional evidence, citing	Partially justified. Reduced volume. We find there to be sufficient evidence to support the investment for one of the five volumes due to the condition of the valve and it is passing. While we acknowledge proactive and prudent asset management in this area, National Gas failed to provide substantive evidence which supports the position that all volumes being reinstated is the most economic option beyond articulating the point. We also note a lack of optioneering considering alternatives for this investment.

**Decision** – RIIIO-3 Final Determinations – National Gas Transmission

<b>EJP Title</b>	<b>Our Draft Determination Position</b>	<b>Response to Draft Determination</b>	<b>Our Final Determination Position</b>
		operational efficiency due to planned outages, excavation proximity and long lead times.	
NGT030 St Fergus: Pressure Vessels	Partially justified with reduced volumes. National Gas has proposed investment for work on pipeline inspection gauge traps, whereas the latest survey recommends continued monitoring. National Gas has not sufficiently justified the volumes for these interventions.	National Gas requested the reinstatement of all volumes removed at Draft Determination from investment ID C-048.	Partially justified. Reduced volume. We have decided to increase volumes from our Draft Determinations position. We find that the revised submission supports all requested volumes for investment ID C-048.
NGT031 St Fergus Gas Terminal: Sites	Partially justified with reduced volumes. National Gas has well evidenced some volumes. However, while we support the proactive approach, we do not agree with the approach regarding the proposed primary coating regime - we would encourage National Gas to explore other coating methods or materials and expand its qualifying database if necessary.	National Gas requested reinstatement of the full original EJP volumes removed at Draft Determination. National Gas acknowledged the challenges associated with the performance of primary coatings in saline environments across the NTS, and referenced their internal NG Standard. National Gas also recognised that alternative coatings exist but highlighted that these would require site-specific analysis and this has not been done, and therefore do not have the time to	Partially justified. Reduced volume. We do not find that this investment represents an efficient or economic use of consumer money. We do not find that new substantial additional evidence was provided to materially change the Draft Determination outcome. We agree that alternative coating systems exist, such as ISO 12944 C5-M. As this is a site-specific investment, we would expect corresponding site-specific analysis. We therefore encourage National Gas to conduct a peer review against industry to identify the most cost-effective solution considering the lifetime cost of any rolling programme.

<b>EJP Title</b>	<b>Our Draft Determination Position</b>	<b>Response to Draft Determination</b>	<b>Our Final Determination Position</b>
		complete this for this price control.	
NGT032 St Fergus Gas Terminal: Civils	Partially justified with reduced volumes. We carefully reviewed the evidence and found sufficient evidence for the construction of site storage building and drainage and sewage asset replacement. Beyond these volumes, National Gas has not suitably justified the proposed work.	National Gas did not seek reinstatement of all volumes removed at Draft Determination, focusing its response selected areas of reduction. National Gas maintains its position for several InvIDs providing additional evidence and in some cases adjusted volumes or unit costs. National Gas provided alternative solutions for subsidence, roads and sewage.	Partially justified. Reduced volume. We have decided to increase volumes from our Draft Determinations position We accept that for C-014 Roof Access Panel, there is consumer benefit in doing this work. We maintain our position that this was avoidable, and this to be a design forecast failure. We do not agree that National Gas could not have altered the design. We accept that for C-026, there is consumer benefit. We do not accept that the operational conditions have materially changed beyond what was expected, or this investment is due to an evolution to meet new unforeseen conditions. We accept the alternative options for subsidence, roads and sewage. National Gas failed to provide substantive evidence which supports its access platforms programme of work.

## Appendix 2 – Network Asset Risk Metric (NARM)

Table 23: Baseline Network Risk Outputs (R£m) per asset category

Asset Category	Draft Determination (R£m)	Change from DD to FD	Final Determination (R£m)
Auxiliaries (A.2.12)-HVAC Equipment	0.0	-	0.01
Civils (GT.1.1)-Access	-	-	-
Civils (GT.1.1)-Buildings	-	-	-
Civils (GT.1.1)-Bunds	-	-	-
Civils (GT.1.1)-Chambers	-	-	-
Civils (GT.1.1)-Drainage	-	-	-
Civils (GT.1.1)-Ducting	-	0.00	0.00
Civils (GT.1.1)-Pathways	-	-	-
Civils (GT.1.1)-Pits	0.0	-	0.02
Civils (GT.1.1)-Plinths	0.0	-	0.00
Civils (GT.1.1)-Roads	-	-	-
Civils (GT.1.1)-Security Barriers	-	-	-
Civils (GT.1.1)-Security Cameras	-	-	-
Civils (GT.1.1)-Security Fences	-	-	-
Civils (GT.1.1)-Security Gates	-	-	-
Civils (GT.1.1)-Security Towers	-	-	-
Civils (GT.1.1)-Structural Integrity	-	-	-
Electrical (A.2.4)-Battery Charger	0.0	-	0.00
Electrical (A.2.4)-Cathodic Protection Equipment	0.0	-	0.04
Electrical (A.2.4)-Frequency Converters	-	0.22	0.22
Electrical (A.2.4)-Harmonic Filters	0.6	-	0.60
Electrical (A.2.4)-Power Transformers	-	-	-
Electrical (A.2.4)-Site Earthing & Lightning	-	-	-
Electrical (A.2.4)-Site Lighting	0.0	-0.00	-
Electrical (A.2.4)-Small Power	-	-	-
Electrical (A.2.4)-Switchgear	0.1	0.00	0.12
Electrical (A.2.4)-Uninterruptible Power Supply	-	-	-

<b>Asset Category</b>	<b>Draft Determination (R£m)</b>	<b>Change from DD to FD</b>	<b>Final Determination (R£m)</b>
Mechanical (A.2.3)- After Coolers	-	-	-
Mechanical (A.2.3)-Filters	0.0	-	0.01
Mechanical (A.2.3)-Heat Exchangers	0.0	0.01	0.03
Mechanical (A.2.3)-Heaters and Boilers	-	0.01	0.01
Mechanical (A.2.3)-Pipe Supports	-	0.08	0.08
Mechanical (A.2.3)-Pipeline	0.0	0.00	0.00
Mechanical (A.2.3)-Pipeline Protection	-	-	-
Mechanical (A.2.3)-Pipework	0.1	0.00	0.12
Mechanical (A.2.3)-Pipework Protection	0.0	-	0.00
Mechanical (A.2.3)-Pressure Vessels	4.9	0.02	4.94
Mechanical (A.2.3)-Storage Tanks	11.9	-	11.94
Mechanical (A.2.3)-Strainers	-	-	-
Rotating (A.2.2)-Compressors	6.6	-	6.61
Rotating (A.2.2)-Electric Motors	20.0	0.00	19.99
Rotating (A.2.2)-Gas Turbines	74.8	-18.28	56.54
Rotating (A.2.2)-Power Turbines	0.0	-	0.00
Rotating (A.2.2)-Pumps	0.0	-	0.00
Rotating (A.2.2)-Standby Generators	0.0	0.00	0.00
Safety and Control (A.2.5)- Actuators	0.7	-0.25	0.44
Safety and Control (A.2.5)- Control Logic Units	0.1	0.55	0.65
Safety and Control (A.2.5)- Control System	-	-	-
Safety and Control (A.2.5)-Fire and Gas Detectors	1.0	-	0.97
Safety and Control (A.2.5)-Fire Fighting Equipment	0.0	0.00	0.03
Safety and Control (A.2.5)-Inert Gas Equipment	0.1	0.00	0.06
Safety and Control (A.2.5)-Input Devices	0.5	0.17	0.70

**Decision – RIIO-3 Final Determinations – National Gas Transmission**

---

<b>Asset Category</b>	<b>Draft Determination (R£m)</b>	<b>Change from DD to FD</b>	<b>Final Determination (R£m)</b>
Safety and Control (A.2.5)-Metering	0.3	0.01	0.33
Safety and Control (A.2.5)-Regulators	2.2	-	2.24
Safety and Control (A.2.5)-Valves	19.8	1.39	21.23
Utilities (A.2.11)-Air Supply Equipment	0.0	-	0.00
Utilities (A.2.11)-Heating/Cooling Media	-	-	-
Utilities (A.2.11)-Nitrogen Supply Equipment	-	-	-
Pipelines-Pipeline	13,542.8	-	13,542.75
Total	13,686.8	-16.06	13,670.71