

RIIO-3 Draft Determinations

Summary of our response

August 2025



Navigating our response

Cadent's response to Ofgem's RIIO-3 Draft Determinations is structured as follows.

- 1. Executive Summary
- 2. Summary of our response
- 3. Question responses to the Draft **Determination documents**
 - a. Response to Overview Document
 - b. Response to Gas Distribution **Document**
 - c. Response to Cadent Document
 - d. Response to Finance Document
 - e. Response to other sector or company questions documents

4. Annexes

| Ofgem Question Reference | Annex Reference | Annex Title |
|--------------------------------|--------------------|--|
| | | No annexes referenced alongside questions in this document |

About this document

This document provides a summary of our response and sets out our key proposed changes to the Draft Determinations across all the key documents. The other documents then provide our detailed response to all the specific questions in each Draft Determination document.

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Introduction

It is important to get RIIO-3 right for current and future gas distribution customers

The Gas Distribution price controls are vital for the 11 million homes and businesses that rely on our services and the millions of customers who will continue to rely on those services for decades to come.

Whilst Ofgem has recognised in their Draft Determination the critical role that gas networks will continue to provide in RIIO-3, the RIIO-3 proposals will need to reflect the practical reality that there will be a long-term requirement to provide these services well beyond RIIO-3 and up to and most likely beyond 2050. The imperative to consider this has been seen in other countries such as Italy, the Netherlands and Canada where the importance of the gas networks' role in the transition to net zero has been recognised and supported (for example, through the expansion of biomethane resources and options for hybrid heating solutions).

In addition, the RIIO-3 control should support the industry to continue to innovate to find better ways to manage the network, reducing the reliance on intensive reactive emergency and repair processes to transform to a proactive and targeted asset intervention approach. This will meet Ofgem's stated aim of driving a safe and resilient network, making the greatest impact on reducing harmful leakage of gas and improving customer service.

Considerable work is required prior to Final Determinations to deliver a workable price control

The DD proposals are a considerable way off providing sufficient allowances for us to deliver our obligations to our customers (and deliver our obligations under the Pipeline safety regulations). If implemented, they would constitute a failure by Ofgem to carry out its functions in a way that furthers its principal objective, which the legislation explicitly recognises the need to secure that 'a licensee is able to finance its regulated activities'.

The DD proposals as set out, do not include funding for workload that is essential to meeting our obligations. In addition, whilst recognising the need to continue to focus on driving efficiency for the sector, the methodology for the efficiency assessment is flawed and leads to allowances which are unachievable and do not cover our efficient costs (even though in Ofgem's error-corrected DD analysis, our networks are setting the efficiency frontier).

As a result, the proposed DD allowances do not achieve Ofgem's stated objectives of enabling GDNs to maintain a safe and resilient network (which Ofgem describes as "paramount"), neither do they support the delivery of an environmentally sustainable network.

Further, we believe there are opportunities for the Final Determination to better satisfy Ofgem's net zero duties by making the most optimal impact on reducing harmful leakage from the gas networks in a no regrets way and also aligning with the HSE's expectations for safety risk management, the Environmental Agencies global methane reduction pledge and the government's climate change targets. In addition, the refinements we propose will also be

positive to the Government's growth agenda by encouraging domestic industrial growth and protecting jobs and skills in the sector.

Road map of changes required to Final Determination

We have provided a comprehensive response to all of the questions set out in the DDs and the annexes to the Draft Determination. There are a number of proposals in the Draft Determination which should be corrected to ensure the services our current and future customers and wider stakeholders have indicated they value are maintained and provided.

We summarise the key points and errors that have been made in the Draft Determination here for easier reference and to highlight the actions we recommend Ofgem take prior to Final Determinations. In each case, we have provided a reference to where the detailed evidence of our response is contained.

However, this summary should not be read as an exhaustive account of our response to the DD - the full consultation question answers should be used as the reference to the evidence we have provided and our suggestions of what we believe Ofgem should do for Final Determinations.

Please see our Navigating Our Response index to find references to all of our response documents.

We have structured the road map of changes required as follows

- 1. Material computational errors in the DD
 - A. Errors confirmed by Ofgem
 - B. Further errors to address for Final Determination
- 2. Critical workload to meet our statutory obligations and customer and stakeholder requirements
 - A. Critical workload disallowed
 - B. Critical workload allowed
 - C. Importance of the error correction process
- 3. Cost efficiency assessment
 - A. Regional Factors
 - B. Ongoing Efficiency
 - C. Legacy safety disconnections
 - D. National policy
 - E. Real price effects
 - F. Other material cost issues
- 4. Advanced leakage intervention programme
- 5. Business Plan Incentive Stage C Quality
- 6. Outputs and incentives
- 7. Financeability and risk/reward balance
 - A. Risk/reward balance
 - B. Equity considerations
 - C. Notional Dividend Yield
 - D. Debt considerations
 - E. Accelerated depreciation
 - F. Financeability assessment
 - G. Financial resilience

1. Material computational errors in the Draft **Determination**

Material computational errors have been made in the Draft Determination. These take the form of data input, spreadsheet errors and errors where Ofgem's stated methodology has not been applied as intended. The direct effect of these errors is that they materiality impact the presented results of several of the building blocks of the price control including the outcome of the cost efficiency assessment, totex allowances proposed and the business plan incentive. This in turn has a knock-on impact on stakeholders' ability to understand and interpret the Draft Determination as a whole. The correction of these errors is critical to a robust and fair outcome and to ensuring GDNs have sufficient allowed revenues to fund the activities on which their customers rely.

A. Errors confirmed by Ofgem in the 'issue-corrected model'

Ofgem has acknowledged a need to correct computational errors already during the consultation response period and on 13 August 2025 shared an 'Issue Corrected Model' with networks. This sought to correct the majority of the computational errors raised by networks to Ofgem up to 6 August 2025. Given this was shared over six weeks into the consultation window, there has not been sufficient time to comprehensively check Ofgem's updated model and update our consultation responses in light of it. However, from what review we have been able to undertake of the results, we note that there still remain errors to be remedied in Ofgem's work and corrections to be applied to errors Ofgem has attempted to fix but has incorrectly implemented.

It is critical that other computational errors raised that were not able to be confirmed, and corrections to attempted fixes in this communication are also remedied before Final Determination. We summarise the most material of these in section B below.

Computational errors that impact the relative efficiency assessment in the comparative regression benchmarking and the catch-up efficiency benchmark

Computational errors have made a material impact on the comparative regression assessment and networks relative efficiency score. The change in rankings and efficiency scores also affects the catch-up efficiency benchmark (set by reference in the DD proposals to a glidepath from the 75th percentile to the 85th percentile in year 3 of the price control). These errors have also erroneously reduced all networks allowances due to an incorrect application of Ofgem's Ongoing Efficiency Challenge.

Table 1 shows the revised relative efficiency scores and catch-up efficiency benchmark figures consistent with Ofgem's original Draft Determination model and Ofgem's 'issuecorrected model'. The table also contains the results of our 'Cadent Error-Corrected' model, noting that we have identified further incorrectly implemented corrections to errors in Ofgem's model run. Throughout the remainder of our response, we show all our results relative to the Cadent error corrected model.

Table 1 - Issue and error corrected RIIO-3 GDN relative efficiency scores

| Ofgem Draft | Ofgem Issue Corrected | Cadent Error-Corrected | |
|----------------------------|-----------------------|----------------------------------|--|
| Determination Model | Model | Draft Determination Model | |

| | Efficiency Score | Efficiency Score | Efficiency Score |
|-----------------|------------------|------------------|------------------|
| EoE | 0.97 | 0.96 | 0.96 |
| Lon | 1.02 | 1.06 | 1.04 |
| NW | 1.03 | 1.01 | 1.01 |
| WM | 0.94 | 0.94 | 0.94 |
| NGN | 0.91 | 0.96 | 0.96 |
| Sc | 1.01 | 0.99 | 0.96 |
| So | 1.04 | 1.04 | 1.03 |
| WWU | 1.15 | 1.12 | 1.15 |
| 75th percentile | 0.962 | 0.961 | 0.959 |
| 85th percentile | 0.946 | 0.961 | 0.957 |

Note: Efficiency scores calculated as the ratio of submitted costs to modelled cost over RIIO-GD3. Source: Cadent Analysis

The revised catch-up efficiency and other computational errors impact the totex allowances proposed in the Draft Determinations

Ofgem has confirmed their 'issue-corrected' model would result in the following change to DD proposed allowances with a material increase of c.£120m in Cadent's overall allowances. This compares to a c.£100m increase in Cadent's overall allowances under the Cadent 'Error-Corrected' model

Table 2 – Issue and error corrected RIIO-3 GDN allowances (£m, 2023/24 prices)

| | Ofgem Draft Determination Model | Ofgem Issue Corrected Model | Cadent Error-Corrected Draft Determination Model |
|-------------------|------------------------------------|--------------------------------|--|
| EoE | 2,092.24 | 2,143.82 | 2,129.93 |
| Lon | 1,676.57 | 1,670.27 | 1,676.67 |
| NW | 1,397.50 | 1,445.68 | 1,439.22 |
| WM | 1,116.18 | 1,140.37 | 1,135.13 |
| NGN | 1,568.14 | 1,545.85 | 1,542.63 |
| Sc | 1,051.21 | 1,107.91 | 1,091.82 |
| So | 2,378.77 | 2,460.32 | 2,438.78 |
| WWU | 1,501.70 | 1,571.25 | 1,564.09 |
| Cadent Total | 6,282.49 | 6,400.14 | 6,380.96 |
| Industry Total | 12,782.31 | 13,085.47 | 13,018.28 |

Note: Allowances reported are efficient modelled costs + bespoke outputs and technical assessments, including frontier shift. Source: Cadent Analysis

In turn, using the results from the corrected relative cost assessment will affect the proposed outcome of Stage B of the business plan incentive calculation

Stage B of Ofgem's Business Plan Incentive (BPI) methodology relies upon outcomes from the comparative benchmarking regression. Hence correction of the errors in the benchmarking assessment will mathematically affect the Stage B Business Plan Incentives outcomes presented in the DD.

In addition, the original Stage B BPI estimates presented in the DD were also incorrect as there were mistakenly based on RIIO-2 efficiency results not the RIIO-3 assessment or methodology.

Correcting both these errors (which Ofgem have accepted as errors), shows our West Midlands network now receiving the Stage B BPI reward for setting the frontier and adjustments to all of the other networks in relativity to the revised catch-up efficiency benchmark. This is the case under both the Cadent 'Error-Corrected' model and Ofgem's 'issue-corrected' model

Table 3 shows the impact of correcting these errors for Cadent as a whole (in other words, combining our four networks) on the Stage B reward/ penalty.

Table 3 – Corrections to the regression element of the Stage B Business Plan Incentive calculation

| | | Ofgem reported in DD (inc. BPI- specific errors) | Correction of BPI- specific errors only | Correction of BPI-specific errors, Ofgem 'Issue- Corrected' model | Correction of BPI-specific errors, Cadent 'Error-Corrected' model |
|------------------|--|--|--|--|---|
| | EoE | 1.03 | 0.97 | 0.96 | 0.96 |
| Ф | Lon | 1.07 | 1.02 | 1.06 | 1.04 |
| COL | NW | 0.98 | 1.03 | 1.01 | 1.01 |
| S S | WM | 0.90 | 0.94 | 0.94 | 0.94 |
| ienc | NGN | 0.84 | 0.91 | 0.96 | 0.96 |
| Efficiency Score | Sc | 0.99 | 1.01 | 0.99 | 0.96 |
| ш | So | 1.06 | 1.04 | 1.04 | 1.03 |
| | WWU | 1.01 | 1.15 | 1.12 | 1.15 |
| | Stage B Total BPI reward/penalty (%) | -0.042% | -0.009% | 0.056% | 0.060% |
| | Stage B Total BPI reward/penalty (£m) | -10.21 | -2.3 | 13.7 | 14.7 |

Source: Cadent Analysis

We have also sought to verify how the non-regressed cost assessment has been fed into the results of the Stage B BPI assessment. We were only provided with files to do so on the 19th August, but have also identified several errors in calculations. We will engage with Ofgem between Draft and Final Determinations to ensure these are also remedied.

Implications for Final Determinations and the BPI Stage B reward calculation

Both under Ofgem's 'issue-corrected' model and our Cadent 'Error-Corrected' model there is now a cluster of networks setting the industry catch-up efficiency benchmark.

Table 4 shows a graphical representation of the corrected efficiency scores under both model runs.

DD (Ofgem 'Issue Corrected') DD (Cadent 'Error corrected') wwu 1.15 1.15 Increasing efficiency 1.10 1.10 1.05 1.05 1.00 1.00 **Benchmark Benchmark** (85th pc.) (85th pc.) NGN 0.95 0.95 0.90 0.90

Table 4 – graphical representation of corrected relative efficiency scores

Source: Cadent Analysis

Whilst two of our networks West Midlands and East of England are now shown as the most efficient in the assessment, the revised results show that there is very little material difference between the relative efficiency of the top three networks – which set the efficiency benchmark under both the 75th and 85th percentile (and the glidepath between).

Given this, the current approach to the Stage B assessment of regressed costs is illogical, as networks that are receiving similar efficiency outcomes form the cost assessment receive very different BPI outcomes. Specifically:

- 1st place receives a 40bps reward.
- 2nd place receives a marginal reward (very marginal when compared to the 85th percentile).
- 3rd place receives a penalty.

This is particularly so, as the efficiency rankings and modelling will be very sensitive to small changes in input data and inherently the modelling has a margin of error within it meaning any differences may not represent actual differences in efficiency.

Hence, given the close clustering of results, we believe a fairer and more proportionate methodology would be to spread the Stage B business plan incentive reward equally amongst the first three networks who effectively contribute to the setting of the 75th and 85th percentile, used to establish the catch-up efficiency benchmark (i.e., in relation to the 85th percentile which is relevant for the final two years of GD", apportioning the c.40bps total reward pot as so: 1st - 13.3bps, 2nd 13.3bps, 3rd 13.3bps).

Other computational errors that have yet to be corrected

On top of these changes confirmed in Ofgem's 'issue-corrected model', and those we have accounted for in our cadent 'Error-Corrected' model, there are other computational errors that have yet to be confirmed that have a further material impact on the allowances for the sector as a whole.

To date, the most material computational errors we have identified and which need addressing for Final Determinations are:

- (i) how third-party contributions have been adjusted for in the overall allowances. The methodology set out looks to adjust the cost allowances generated from the comparative regression for contribution made by third parties to the costs (via the termed 'net-to-gross ratio'). However, the net-to-gross ratio adjustment applied in calculations is based on the overall business plan submission, and not the subset of the cost base it is actually applied to. This has been discussed with Ofgem and we are now sharing our work with Ofgem to ensure this error can be remedied promptly. Based on the Cadent 'Error-Corrected model' correction of this error would have an impact of c. +£95m allowances for Cadent.
- (ii) an inconsistent assessment of the costs of robotic intervention technology within the comparative benchmarking regression as costs have been added into the assessment, but the associated workload volumes not captured within Ofgem's repex synthetic cost driver, distorting the efficiency assessment. Impact c.+£20m allowances for Cadent.

As set out above, their remain discrepancies between Ofgem's 'issue-corrected model' and our Cadent 'error-corrected' model. It is important additional errors we have raised and corrections are implemented properly for Final Determinations.

B. Importance of the error correction process

The impact of these errors makes interpreting the impact of Ofgem's proposed cost assessment methodology difficult, which is potentially misleading to other stakeholders responding to the consultation. This has been exacerbated by key evidence documents not being made available by Ofgem in a timely manner (e.g., Real Price Effects underlying data, BPI calculations, Ongoing Efficiency analysis were not made available until over halfway through the consultation period and in the latter case at the very end). Furthermore, their remain pieces of evidence we have requested at the start of August which Ofgem are yet to provide (for example, calculations in the cost modelling suite to explain workload disallowances).

| [section title redacted] | |
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2. Critical workload to meet our statutory obligations and customer and stakeholder requirements

A. Critical Workload disallowed in the Draft Determination

In line with the Draft Determinations request for further information to justify some aspects of our investment proposals, we have provided further evidence to clarify and support critical workload not included in the Draft Determination proposals that is required to meet our statutory obligations and to ensure we maintain a safe and resilient network for current and future customers.

We have set out the key elements in Table 5 below and this shows the scale of change that is required for Final Determination to ensure we can meet our obligations. The combined total would see a change of c.£600m in allowances.

Table 5 Critical workload areas that should be included in Final Determinations

| Critical Workload Area | What needs to change | Impact | Question reference |
|---|---|--|--------------------|
| Critical replaceme | nt work | | |
| Proactive work on Multiple Occupancy Buildings | Include in base allowances We have proposed a risk-based approach to manage these critical assets and need to deliver this work to meet our safety case obligations. We have also provided more context around our approach to manage the risk associated with PE risers beyond the pure risk assessment approach given our experience of the Grenfell incident and societal expectations on flammable materials on buildings. | £107m for metallic risers, £4m for PE risers | GDQ5 |
| Repex stubs | Include in base allowances or volume driver We have provided the requested information breaking down costs and our methodology for managing stubs | £53m | GDQ8 |

| Critical Asset heal | th work | | |
|--|---|---|----------------|
| Asset health capex | Include in base allowances We have provided the global asset data underpinning critical work on pipeline integrity and above ground installation assets that are critical to ensure safety and resilience of the network. | £280m | CADQ14 |
| Major projects | Re-assessment of the West Winch proposal We have provided further clarification on the proposed West Winch feasibility work which we believe is cost beneficial to our customers. | £11m | CADQ8 |
| [section redacted] | | | |
| [redacted] | [redacted]- | [redacted] | [redacted] |
| [redacted] | [redacted] | [redacted] | [redacted] |
| Critical work to su | pport net zero transition planning | | |
| Net zero transitional planning resource and technology | Include revised estimates in base and/or NZARD allowances We have provided evidence of how the resources and technology plans we have put forward are not duplicative of the work the NESO are doing and how they will enable us as a Gas Distribution Network to play a similar role to the electricity DNOs in supporting regional planning and the transition to net zero | £18m in base allowances and £7m addition to NZARD allowances (was £25m in base in the business plan) | CADQ6 OVQ15 |
| Data & Digitalisation investment | Re-assess INV50 We have provided further information to help clarify the intent of INV50 and that it is not duplicating work by the NESO and will help support a number of stakeholder requirements | £12m | CADQ16 |

We hope that the information provided enables Ofgem to adjust these allowances for Final Determination and enable us to deliver on our statutory and licence obligations.

B. Critical Workload supported in the Draft Determination

There are several areas where we support the proposals in the Draft Determination on endorsing our strategies and funding of critical workload needed to deliver key outputs our customers and stakeholders need. The key elements are summarised in the table below (note there is one action on vulnerability support to deliver what we believe to be the intended funding proposed).

Table 6 Critical workload where we support the DD proposals

| Critical Workload Area | What needs to change | Question reference |
|---|--|---|
| Vulnerability support | We support the DD proposals on the use it or lose it funding but there is a need to remove vulnerability baseline allowances from the comparative regression to not constrain intended funding | GDQ11 |
| | We support the funding levels proposed for the Vulnerability and Carbon Monoxide Allowance use it or lose it mechanism. To get the most impact out of the services which have been moved into proposed business-as-usual base allowances, it is important these are ringfenced from the comparative regression analysis so as not to inadvertently disallow expenditure from the lack of a suitable cost driver. | |
| Advanced Leakage Detection and Digital Platform for Leakage Analytics | We support the DD proposals The support for continued development and deployment of these technologies is critical to enable the sector to transform to proactive leakage management optimising the benefits of asset intervention for safety, resilience and environmental management. We support Cadent receiving base allowances with other companies using reopener mechanisms as we share the learning from our more advanced deployment of these technologies | GDQ2 |
| Major projects | We support the DD proposals We support Ofgem's broad acceptance of our major project proposals on London Medium Pressure, Tinsley Viaduct, Grays medium pressure scheme, Flow Weighted Average Calorific Value and capacity upgrade projects | CAQ1, CADQ2, CADQ3, CADQ4 CADQ7 |
| Diversions and reinforcement work | We support the DD proposals to cover these costs predominantly through uncertainty mechanisms We have set out how the scope of the New connection and large load reopener could be widened to ensure the | GDQ24 GDQ26 |

| | capture of all reinforcement works that have been removed from the base allowances | |
|------------------------------|---|--------------------------------|
| Resilience strategies | We support the DD proposals We welcome the support for our strategies on cyber, climate, workforce and supply chain resilience | OVQ35, OVQ8, OVQ9, OVQ10 |
| Environmental Action Plan | Note updated common BCF targets We welcome the support for our Environmental Action Plan. We have worked with the GDNs to provide a common approach to Business carbon Footprint reporting | GDQ1 |

3. Cost assessment changes to deliver a robust outcome and financeable networks

There are some material changes that need to be made to the cost assessment approach proposed in the Draft Determination that if not addressed would provide insufficient allowances for us to be able to finance our activities. We set out the most material corrections that need to be made for Final Determination and where we set out the evidence in our response.

A. Accounting for regional and company-specific factors in the cost assessment

In our Business Plan, we presented robust analysis to justify the need for a totex model which incorporates a network density driver to capture regional and company-specific factors. Such an approach is clearly superior to using solely pre-modelling adjustments as a density driver allows the totex model to capture factors that cannot be quantified using a bottom-up approach. However, without any prejudice to that position, we also presented robust data and evidence to support our Regional and Company-Specific factor pre-modelling adjustment claims for our North London and Eastern networks, which together serve the London region. These claims consisted of:

- Replacement of Ofgem's existing and outdated urbanity productivity and reinstatement adjustments with a single 'Nature of Streets' factor consistent with the approach proposed by UK Power Networks (UKPN) which was based on gas network data and accepted by Ofgem at RIIO-ED2;
- A new 'Network-Specific Factors' claim which captures the multitude of impacts that disproportionately higher population and property density have across our operations and cost base for operating in the capital. This claim incorporates several elements with many analogous to UKPN's similar claim that was accepted at RIIO-ED2, and elements accepted in SGN's recent RIIO-GD2 streetworks reopener claim; and
- Improvements to Ofgem's Regional Labour Adjustment so that it: (i) reflects the most up-to-date regional earnings data, (ii) accurately reflects the geography impacted by the London labour market and (iii) accounts for the total disproportionate labour cost we face to operate in and around London by incorporating distortions due to the Employers National Insurance Contributions (NICs).

The Draft Determinations rejects or ignores our proposals completely, rolling-over Ofgem's RIIO-GD2 approach to Regional and Company-Specific factors. This is a clear and material error. As a consequence, the DDs materially underrepresent the external cost pressures outside of our control that we face for operating within London and the surrounding area and consequentially result in an inaccurate catch-up efficiency challenge being applied to our networks which serve London. Further, decisions made unduly discriminate against Cadent relative to UKPN (in some cases based solely on gas data), who had a significant proportion of the same adjustments accepted for RIIO-ED2, and SGN – who more recently

have had elements of our Network Specific Factors claim accepted as part of RIIO-GD2 reopener applications.

The errors made in the Draft Determinations consist of four component parts detailed in table 7 below.

Table 7 Errors in the density and regional factors assessment

| Error in Draft | What is the error? | Impact | Question |
|--|--|--------------------------------|-----------|
| Determination | | (£m) | reference |
| assessment | | | |
| 1.Rejection of use of a Density variable in the regression | Ofgem has failed to explain or justify the basis for its Draft Determination position that a density model is not reliable as a tool to set, or crossvalidate, the allowances it sets for networks at RIIO-GD3. The evidence indicates that such a model is a clearly superior alternative to premodelling adjustments alone and, without prejudice to that position, at a minimum, should be used as a cross-check on Ofgem's premodelling adjustments. To remedy this error in the Final Determinations, a density model (maintaining a regional wage adjustment) should be used by Ofgem to set and, without prejudice to that position, at a minimum, should be at a minimum used as a cross-check on Ofgem's pre-modelling adjustments | +£127m impact for Cadent | GDQ36 |
| 2.Nature of | The DD discriminates unduly against Cadent | +£14m | GDQ36 |
| Streets Factor | through a material error in rejecting our nature | impact for | |
| claim rejection | of Streets proposal as: | Cadent | |
| | it ignores recent, relevant regulatory precedent on a directly analogous claim at RIIO-ED2; | | |
| | it fails to address four errors in its existing approach to urbanity adjustments; and | | |
| | it ignores a more recent, reliable evidence base that directly estimates the additional efficient cost London networks incur when working with underground assets. | | |
| | To remedy this error in the Final | | |
| | Determinations, Ofgem should accept our | | |
| | 'Nature of Streets' claim. | | |

| 3. Network | The Draft Determination discriminates unduly | +£28m | GDQ36 |
|------------------|--|------------|-------|
| Specific Factors | against Cadent by, in error, rejecting our claim for | impact for | 02 00 |
| claim rejection | five reasons: | Cadent | |
| , | (i) The stated reasons for rejection of our claim are wrong for a variety of reasons; | | |
| | (ii) Rejection leaves the costs of operating in London under-funded; | | |
| | (iii) Ofgem's application of its materiality threshold is inconsistent with the approach taken in RIIO-ED2; | | |
| | (iv) Ofgem's application of its materiality threshold is applied inconsistently between RIIO-GD3 company-specific factor claims and RIIO-GD2 re-opener applications; and | | |
| | (v) Our claim meets Ofgem's remaining assessment criteria. | | |
| | To remedy this error in the Final Determinations, Ofgem should accept our Network-Specific Factors claim. | | |
| 4.Regional | The Draft Determination's justification for | +£10m | GDQ36 |
| labour | rejecting our proposal on amending the | impact for | |
| adjustment | geographic coverage of the RLA represent a | Cadent | |
| (RLA) evidence | material error, as the rationale provided is at | | |
| rejection | odds with the underlying data. Ofgem also offers no view on whether to accept or reject our proposal to amend the RLA to account for Employers National Insurance Contributions (NIC). | | |
| | To remedy this error in the Draft Determinations, Ofgem should accept both our proposals for improving its regional labour adjustment | | |

B. Ongoing Efficiency (OE)

Evidence presented by gas networks and electricity transmission networks in their business plans suggested an OE assumption significantly below 1% per annum would be sufficiently stretching but perceived to be achievable based on historic efficiency gains, for network companies in RIIO-GD3. In response, Ofgem's Draft Determination maintains the level of ongoing efficiency challenge set at RIIO-GD2 (post-CMA appeals) and RIIO-ED2, at 1% per annum.

The setting of the OE challenge in Ofgem's Draft Determination is wrong, and contains errors in both the evidence used to justify the OE assumption, and the logic and rationale used to interpret the available evidence, as a result of:

- 1. Ofgem relying on the outcome of regulatory precedent to support its prior **expectation of a 1% target assumption**, and not being led by the evidence based on application of the *method* set by regulatory precedent, which, as shown by Economic Insight's re-run of Ofgem's RIIO-GD2 approach (set out in our Business Plan), would result in a maximum OE target of 0.5%;
- 2. The underlying analysis used to inform Ofgem's range of potential OE assumptions from Grant Thornton's Report being materially flawed in approach and outcomes, particularly in relation to the selection of the time period and the omission of low productivity years as "outliers". Correcting for these errors results in a revised range of 0.1-0.9%, which contains our business plan proposal of 0.5% per annum, but not the Draft Determination position of 1% per annum.;
- 3. Ofgem's Draft Determination only recognising qualitative arguments to rationalise 'aiming up' on the ongoing efficiency challenge within a benchmark range, with no consideration to incentives and arguments to the counter;
- 4. Ofgem's Draft Determination failing to acknowledge the difference in OE potential between the gas and electricity transmission sectors; and
- 5. Ofgem failing to evidence why a 1% per annum OE target is achievable by GDNs, despite the wider productivity slowdown, and the evidence showing the converse.

Once these errors are corrected, it is clear that Ofgem's OE target of 1% for RIIO-GD3 is wrong, with the evidence suggesting a figure of 0.5% should be used, consistent with our Business Plan.

In addition to this error, Ofgem also errs in applying the ongoing efficiency challenge one year earlier than it should. Ofgem's application of OE target in the Draft Determination begins in the financial year of 2024/25, with the 1% target being compounded for each subsequent year. However, the financial year of 2024/25 has already elapsed.

For the Final Determination modelling, this year of data will not be updated to reflect outturn data for this year. Ofgem stated that the reason it will not update the 2024/25 data in its cost assessment model is that, from a high-level sense check, replacing forecast data with the outturn data has only a "negligible impact" on the benchmarking. Implicitly, Ofgem is therefore assuming that the forecast data submitted by GDNs in December 2024 (is a good-enough proxy for actual data. As there is no opportunity for the GDNs to achieve OE gains for historical, outturn expenditure, it would be irrational for Ofgem not to amend its starting year of application to 2025/26 in the Final Determination modelling (i.e. the OE target should compound from 2025/26, not 2024/25).

To remedy these errors in the Draft Determinations, Ofgem should reduce its Ongoing Efficiency challenge to 0.5% per annum and apply it from 2025/26 (not 2024/25). This would result in a +£190m impact for Cadent in allowances (+£160m through use of 0.5% per annum and +£30m from applying this assumption from 2025/26).

Further information can be found in our response to OvQ19.

C. Legacy gas safety disconnections

In our response to GDQ22, we have provided clarification and detailed evidence to show how the HSE have changed their expectation of what is required to safely disconnect customers from the network from agreed industry custom and practice that has been followed since the 1980s. Given their desire for us to retrospectively amend the service disconnections we have previously delivered, we also show how we have not been funded to carry out this work previously so there would be no double count in funding this in RIIO-3. This is a very material issue with a plausible range in excess of £100m depending on the number of connections in scope and what is required at site and hence is a critical component to ensure RIIO-3 enables funding to carry out these critical safety works.

Remedy for Final Determinations - Ensure the legacy safety disconnection workload is in scope of the safety disconnections revenue driver or the scope of the HSE policy reopener

D. Changes in Employers National Insurance contributions not reflected

The Final Determinations need to take account of increases in Employers National Insurance resulting from changes made in the Autumn 2024 Government Budget, which, as agreed with Ofgem, were not included in the GDNs business plans – on the intention of being reflected later in setting the price control. This is a material factor that has and will continue to impact our cost base, and we estimate this has an incremental impact of c. £90m on Cadent's costs as a whole for RIIO-3.

We have proposed a methodology for how this factor could be incorporated for Final **Determination**. This is set out in our answer to GDQ37. Were Ofgem not to provide funding for the additional costs driven from changes in Employers National Insurance at Final Determinations this would be a clear error in the settlement.

E. The proposed Real Price Effects indices do not match Gas Distribution cost drivers

The DD proposes a radical change to the materials real price effect indices to be applied to Gas Distribution moving from the existing three indices in RIIO-2 to 10 indices for RIIO-3.

We are unclear on what rationale and evidence has been used to underpin the conclusion that these indices would be more reflective of movements in costs relating to Gas Distribution than those used in RIIO-2.

In particular, we do not understand why indices such as timber have been included with equal weight to other material indices such as polyethylene given our expenditure on polyethylene is many times multiples of our expenditure on timber.

We also believe Ofgem should change how it has applied the materiality threshold to plant and materials indices. We believe the evidence suggests that indices for these items should be included and these costs are material for Cadent and very close to Ofgem's 10% threshold. We also note that including these indices is feasible as the indices defined for electricity transmission could be used.

We have provided further information and illustration of what would be more reflective splits of the use of materials. This can be found in our answer to OVQ18.

This is an important area for further analysis and to ensure that any final proposals are likely to reflect the cost drivers in the sector well and do not introduce unnecessary volatility or deviation from actual costs to those forecast from the indices. We recommend that a dedicated Gas Distribution sector workgroup is set up to analyse and discuss this further to help inform a more robust Final Determination.

F. Other material cost assessment issues

In addition to errors identified with regional and company-specific factors and ongoing efficiency (on top of the computational errors discussed above), we have identified three other material errors that we believe need to be corrected in the Draft Determination cost assessment. These are covered in Table 8 below:

- **Inconsistencies in the application of exclusions to the regression** We have proposed changes in the specific activities and projects Ofgem has excluded from its totex regression assessment to ensure consistency with the intent of the methodology proposed. Further information provided in GDQ36.
- **Application of catch-up efficiency to non-regressed costs** There is no rationale for applying catch-up efficiency determined by the comparative cost assessment to non-regressed costs which by their definition are non-comparable. This should be removed for Final Determinations. In isolation this would have a +£40m impact for Cadent alone. Further information provided in GDQ42.
- Assessment of non-regressed costs for streetworks The use of a ten-year average (five historic, five forecast) and the policy decision to not fund streetworks charges and penalties will systematically mean our networks are underfunded for streetworks costs. We have proposed a methodology for setting base allowances that remedies these problems, including funding charges and penalties as part of the streetworks assessment. Further information provided in GDQ41.

Taken together with our remedies in respect of regional and company-specific factors and ongoing efficiency (on top of correction of computational errors), the net impact when all these remedies are applied together is a +£580m increase to Cadent allowances. relative to the Draft Determination, when using the clearly superior approach of a density model. Furthermore, without any prejudice to that position, the impact on Cadent allowances is +£520m when using our proposed regional and company-specific factors as pre-modelling adjustments. The changes from applying these remedies would also increase our BPI reward.

4. Advanced Leakage Intervention Plan

The Advanced Leakage Management Approach we set out in our plan (as summarised in the case study except from our plan, below) has been developed from taking cutting-edge technology and internationally tested operational practice and bringing this approach to the UK. We believe this proactive approach to asset management will transform the way we manage the network enabling greater targeting of work and optimisation across multiple customer outcomes and create a blueprint to drive safe and resilient, low emission and more cost-effective gas networks. It will remove a reliance on a less optimal reactive approach, where works are less targeted and will help avoid issues such as those seen in the water sector (such as environmental problems, delayed interventions and more expensive catch-up works). We believe this is fully aligned with

- A) the HSE's expectations for how the sector should manage assets both within and outside of the Iron Mains Risk Reduction Programme to manage the risks of a deteriorating metallic pipe network
- B) the Government's climate change goals and the Environmental Agency's methane action plan, part of the UK's global pledge on methane reduction, by driving greater leakage reduction across all of our work by using observed data to proactively target the leakiest assets rather than relying on average data.
- C) Ofgem's desire for driving a resilient network at the lowest cost to consumers and its net zero duties.

Case study 4: Advanced leakage management approach

Advanced Leakage Detection (ALD)

During RIIO-2 we have trialled the use of Picarro's Advanced Leakage Detection technology in several of our networks, starting with North London.

We have engaged externally with the Italian gas network, Italgas, who have successfully deployed the technology across their network, enabling a significant reduction in leakage emissions.

Our trials have demonstrated that roughly 50% of the emissions from our networks originate from c.5% of our pipeline. We have used the outputs of the trials to inform the cost-benefit repex work in RIIO-2, supporting outperformance against leakage targets set at the start of the period. The trials have also been used to inform the Advanced Leakage Intervention Programme for RIIO-3.



Advanced Leakage Intervention Programme

The ALD and DPLA ultimately feed ever more accurate and impactful leakage intervention, which in turn will feed the outcomes back to drive learning and impact into future planning through the DPLA.

Using the outputs of the ALD and DPLA trials to date, we have worked with Boston Consulting Group and Partners to design an Advanced Leakage Intervention Programme to use in addition to our IMRRP in RIIO-3. Having analysed the range of options, we have proposed the delivery of 750km of cost benefit mains replacement, predominately Tier 1 steel, which equates to c.10% of our overall mains replacement. Utilising traditional and innovative techniques to reduce emissions, we will reduce leakage by a further 10% with a full pay back within 16 years.

Digital Platform for Leakage Analytics (DPLA)

The DPLA works alongside the ALD project delivering real-time, granular insights into leakage across our entire asset base by leveraging the data from sensors such as Picarro.

It overlays sophisticated machine learning and hydraulic modelling techniques, allowing us to strategically repair leaks and conduct priority mains replacement programmes, expediting emissions reductions and improving network safety.

During RIIO-2 we embarked on a pioneering Strategic Innovation Fund (SIF) project in collaboration with Guidehouse Europe, other GDNs and National Gas. Our proposals will see the DPLA be fully operational by 2027, and working alongside the ALD will allow us to replace the Shrinkage Leakage Model (SLM), moving from modelled to measured leakage interventions against all asset classes

In delivering the optimal roll-out of technologies we have considered the relative cost benefits of investing in a broader application of ALD technology versus a more sophisticated machine learning and Al built on the DPLA

We welcome the support in the DD proposals to fund the rollout of advanced leakage detection and digital analytical technology but rejects our Advanced Leakage Intervention

programme (ALIP) and instead proposes a package of interventions on non-Iron Mains Risk Reduction Programme assets based on a continuation of RIIO-2 levels. This proposes a much smaller intervention programme of c. 250km against our business plan proposal of c.750km for assets outside of the IMRRP.

In our response (see GDQ5, CADQ5 and the revised Engineering Justification paper EJP09) we respond to the points made in the DD surrounding Ofgem's assessment.

Our updated information provides

- 1. The reduction in our proposed ALIP programme as a consequence of the updated Tier 2A risk threshold which will mean we have an additional 100km of mandated Tier 2A work under the IMRRP. Given the additional Tier 2A work, we have reassessed what we can deliver under the ALIP programme as deliverability was carefully considered and was a driving factor behind the programme proposed in our December 2024 business plan.
- 2. Clearer articulation of the options we have considered and clarity on the options which have a positive benefit within the DD's proposed 11-year payback period (2037)
- 3. Clarity on the additional leakage reduction benefits that each option delivers
- 4. Clarity on the impact each option would have on managing underlying safety and asset resilience risk from asset deterioration
- 5. Updated consumer willingness to pay insight on incremental costs to reduce leakage

Table 8 shows the additional benefits that would be delivered by each of the options in our plan compared to the DD's proposed option of a 250km programme of work

Table 8 Benefits of Advanced Leakage Intervention Programmes

| Option | NPV, 2037 | NPV, 2050 | RIIO-3 Repex | Avg RIIO3 | Start to end o | of RIIO-3 perfo | mance trend | |
|---------------------------------|-------------------|--------------|-----------------|--------------------------|------------------------------------|-----------------|-------------|-------------------------|
| name | (£m) ¹ | (£m) | (£m) | Bill impact £/HH/y | Contribution to leakage reductions | Gas escapes | GIBs | Supply interruptions |
| Option 1: 640km in RIIO-3 | 100.5 | 425.4 | 305.2 | 0.68 | +10% | -4% | -5% | -9% |
| Option 2: 230km in RIIO-3 | 95.4 | 304.7 | 118.9 | 0.33 | +6.8% | +3% | +4% | -1% |
| Option 3: 390km in RIIO-3 | 92.4 | 355.0 | 209.6 | 0.51 | +8.3% | 0% | -1% | -5% |
| Option 4: 480km in RIIO-3 | 99.9 | 392.7 | 249.8 | 0.63 | +9.2% | -2% | -3% | -7% |

NPV is relative to the baseline option (of continue to reactively repair) and carry out no proactive replacement.

Table 8 shows that all of the options presented deliver a positive return to customers within the DD 11-year payback constraint including option 1 which is the option that delivers the greatest benefits by 2037 and is consistent with the option we presented in our Business Plan (after adjusting volume down for the increased Tier 2A work).

The DD proposed option (which was our option 2) would deliver a 6.8% increase in leakage reduction but would not keep pace with asset deterioration and hence see a 3% increase in gas escapes and a 5% increase in gas in building events. The other options (1, 3 and 4) all provide incremental benefits to the DD proposed option in terms of positive additional leakage reduction but are also able to keep pace with expected asset deterioration and therefore ensure there is no increase in gas escapes, gas in buildings events and help reduce the expected number of unplanned interruptions.

Whilst we believe our proposed option 1 would be the best way to deliver the maximum benefits to our customers on safety, resilience and the impact on the environment, we recognise Ofgem may choose to place an affordability constraint on the size of the programme. To help with this assessment, we have further tested customers' willingness to pay for incremental costs for reducing methane leakage and our results suggest they 56% of those surveyed are willing to pay up to £2 per annum for this. Extrapolating this outcome would suggest that all of the options would be supported by the majority of our customers. By acting now, we are proactively managing affordability and service for future consumers, ensuring that the burden of necessary investment is not proportionally placed on a smaller customers base in the years to come.

We suggest Ofgem reviews its Draft Determination position and considers the Advanced Leakage Intervention Plan options further for Final Determinations.

5. Business Plan Quality Assessment

We welcome Ofgem's acknowledgement in its Draft Determinations in the first part of stage C of the Business Plan Incentive assessment that our business plan was both clear and coherent. However, Ofgem's stated justifications for marking down the quality of our business plan commitments in the second part of stage C of the BPI assessment are inconsistent, and not reflective of the evidence we have provided and ultimately not conducive to driving GDN behaviours in the interests of consumers.

The outcome of the proposed 'penalties' embedded within the assessment of the three outcomes is that the DD's overall assessment of the quality of the commitments in Cadent's plan is 'acceptable' leading to a close to zero reward against the 0.13% of RORE available.

We believe Ofgem should remove the embedded penalties and correct the part 2 Stage C BPI assessment across all three of the outputs categories for Final Determination. We believe this would make a material overall difference to the rating of the quality of our commitments well beyond just 'acceptable'. This position would be more reflective of the stretching commitments we have proposed for the RIIO-3 price control period (against the baseline of the industry leadership and innovation we are already demonstrating in the RIIO-2 period) in all these areas.

Our detailed response can be found CADQ11 but we have summarised the key areas of the assessment we believe should be reassessed for the Final Determination in table 9 below:

Table 9 - Errors in the business plan quality assessment

| Outcomes in Stage C assessment | Error in assessment and what needs to change | Impact |
|---|--|---|
| Secure and resilient supplies Assessment – poor -1.3bps | Despite demonstrating clear consumer value and providing detailed supporting information for our innovative Advanced Leakage Intervention Programme, the DDs propose to score our "new company proposals" on "secure and resilient supplies" as "poor" by reference to the ALIP This penalty should be removed as all the options proposed are justified under Ofgem's RIIO-3 business plan guidelines cost benefit methodology as shown in section 4 of this summary and GDQ5 and CADQ5 We believe our proactive approach to asset management as demonstrated by our Advanced Management Approach illustrated in section 4 should be rewarded more than reliance on reactive and traditional approaches which appears to be assessed as 'outstanding' in other plans. | Removing the penalty should move score to at least zero and we believe a fair comparative assessment would show a reward on this category for proactivity and innovation. |

Infrastructure fit for a low-cost transition to net zero

Assessment acceptable 0 bps

Despite the proposal for measures including our ALIP to facilitate very ambitious reductions in leakage, Ofgem's stated reason for scoring our business plan commitments with respect to "infrastructure fit for a low-cost transition to net zero" as "acceptable" (rather than "outstanding") is that our shrinkage targets are "not... particularly stretching"

Our leakage reduction is the most ambitious of any of the plans when estimates are expressed in observed measurement rather than through the shrinkage and leakage model (which was the basis for the business plan data tables). The Advanced Leakage Management approach is applied to all our replacement work both assets within the Iron Mains Risk Reduction Programme and those outside and we estimate a potential to drive actual leakage reduction of up to twice the volumes set out in the business plan data tables based on the shrinkage and leakage model as we are the only company using the observed data to target the leakiest pipes first (please see the table in response to GDQ1).

Removing this penalty should move our assessment into the outstanding category which we think is reflective of how we are leading transformation of the industry on leakage management and zero emissions vehicles

High Quality Service

Assessment outstanding

+1.95 bps

The overall assessment in this category should be higher as there are unjustified penalties which are dampening the assessment score.

The unjustified penalties are:

The DDs cite self-funded initiatives such as further research into services beyond the meter and investigating enhancements to customer services as reasons to score the sub-category "new company proposals"" as "poor" which is illogical

The DDs also point to our proposal to extend the geographical scope of the Collaborative Streetworks ODI-F as a further reason for scoring our "new company proposals" as "poor", despite Ofgem having proposed to adopt the initiative

Removing these penalties we believe should move our score to the top of the 'outstanding' assessment (+2.95bps)

6. Outputs, incentives and uncertainty mechanisms

The DD proposes an outputs and incentives framework that is broadly similar to that which we are operating under in RIIO-2.

There are, however, some important changes that are proposed which we believe need amendment to provide the best outcomes for customers, avoid discrimination to our London network and where refinement is needed to ensure the intent of the proposals is delivered in reality.

We set out our key responses in table 10 below:

Table 10 - Key areas that we have evidenced a need to change on outputs, incentives and uncertainty mechanisms

| DD proposal area 7 Day and 28-day repair response incentive | Rationale for change to DD position We have set out a number of flaws with the incentive rationale, design and operation. We believe there are better ways to achieve the intended benefits to customers and that this incentive is overpowered and unnecessary and, as proposed, also discriminates unfairly against our London network. | Action needed for Final Determination Remove or materially reduce the strength of the incentive to <=0.04% of RORE | Question reference GDQ3 |
|--|--|--|-------------------------|
| Network Aset Risk Metrics | Considerable work is required to create a clear and transparent understanding of the proposed funding, adjustment and penalty rules and how the proposed improvements to the NARM methodology will operate in practice. It is essential this is done before FD and that rules are determined before the control | Clarify the funding, adjustment and penalty rules and what the proposed improvement to the framework means in practice for the gas distribution sector We propose a series of workshops between Ofgem and network businesses through which illustrative case studies and examples are worked through. | OVQ5 and OVQ6 |

| DD proposal area | Rationale for change to DD position | Action needed for Final Determination | Question reference |
|---|--|--|--------------------|
| Unplanned interruption incentive Collaborative streetworks incentive | The impact of complex non-MOBs needs to be reflected in the Minimum Performance Level (MPL) as it materially impacts average duration times and hence unfairly discriminates against London. The rationale for reducing our West Midlands and Eastern network MOBs MPLs is not consistent with the evidence and stated intent and not in customers interests. We support the proposal to enable the Collaborative Streetworks Incentive to be rolled out to all parts of the country. The minimum threshold would create a barrier to the expansion of Collaborative Streetworks, and the associated benefits, to new areas. We support the incentive rates, incentive cap value and the use of a period-wide incentive cap set out across the Draft Determinations and SSMD but the licence drafting needs to | Revert to network-specific MPLs for non-MOBS as used in RIIO-2. West Midlands and Eastern MOBs MPLs should be set as per our plan. We would propose that the minimum threshold of projects for each network before incentive income is earned is based on the number of incentive qualifying projects delivered during the RIIO-2 period by that network We have set out the necessary changes to the drafting of Special Condition 4.5 to match the intent of the policy proposed. | GDQ18 & GDQ19 |
| Biomethane use it or lose it mechanism | ensure it aligns with the policy proposed. The funding mechanism would be more effective if it had greater alignment with the GDN's connection charging methodology – for example linking to how the methodology determines what costs the connectee pays and what is socialised rather than specifying a £1m cap per project | We have proposed refinements that would link the mechanism to the GDNs connection charging methodology to facilitate clarity and flexibility as volumes change | GDQ20 |

| DD proposal area | Rationale for change to DD position | Action needed for Final Determination | Question reference |
|--|--|--|--|
| Scope of uncertainty mechanisms | We broadly support the range of uncertainty mechanisms proposed, including introducing the new mechanisms on resilience and biomethane. We have proposed some specific features that will be critical to ensure the scope and operation of these mechanisms drive the most value for customers and deliver the intent of fairly making adjustments over the control by ensuring items not covered in baseline funding are in the scope of the reopeners. | We have proposed amendments to the following mechanisms (not covered elsewhere in this table): • Specified streetworks reopener • HSE Policy reopener • Large load connection reopener • London subways and tunnels bespoke reopener • Safety Disconnections volume driver • Heat Policy reopener | GDQ27, GDQ22, GDQ26, CADQ12 GDQ25 GDQ21 |
| Revenue Forecasting penalty incentive | The proposed incentive is not justified or proportionate given that the volatile factors in revenue forecasting are all outside of our control. Introducing the incentive will add risks to networks for no gain for customers | Remove the incentive | FQ35 |
| DSI Licence condition | There is no benefit in introducing the licence condition as this time as the framework is still evolving | Remove now and reconsider when the DSI framework has been established | OVQ37 |
| Joint Office Costs | The DD proposal to reject the networks' request to move the Joint Office to a passthrough item takes no account of the uncertainty related to the Code Reform project and establishment of the Code Manager. This drives material uncertainty into the costs which is beyond networks control | Move the Joint Office costs to a pass-through item in a similar way to how other cross-industry costs for Xoserve costs are treated | GDQ29 |

| DD proposal area | Rationale for change to DD position | Action needed for Final Determination | Question reference |
|---------------------------------------|---|--|--------------------|
| Gas Strategic Planning reopener | This reopener proposed in the GT price control should be extended to the Gas Distribution control. This approach would enable the use of a GDNs' Local Transmission System (LTS) to resolve constraints on the NTS should this be identified by the NESO as the optimal approach. | Replicate the reopener in the RIIO-GD3 control | GTQ28 |

Summary

We believe the changes we have proposed to the outputs, incentives and uncertainty mechanisms will deliver better outcomes for customers by ensuring we focus on the most important areas through a better risk-reward balance that shares benefits and risks more appropriately and is positive for financeability.

7. Financeability and risk and reward balance

The DD stresses the need for an investable gas sector and hence it is critical that the cost of capital is set to reflect the risks and realities of investing in the gas sector and the overall price control framework and enables investors to support the day-to-day business operations, provide the investment to underpin a safe and resilient network and to support the transition to net zero. The overall risk and reward of the price control therefore neds to be carefully calibrated and the financeability assessment consistent with this reflecting the latest tests that rating agencies apply for networks to maintain a solid investment grade rating. Proper calibration of the elements will ensure that the networks will be able to finance their activities to deliver for customers.

Our response to the Finance Annex sets out several areas where we think Ofgem needs to revisit the Draft Determination proposals to ensure a fair and robust price control for the gas distribution sector and Cadent. In particular, the proposed control materially discriminates against our London network and the proposals present an unfinanceable framework for that network on a standalone basis such that it would be unable to deliver for current and future customers.

Our key elements are summarised in the subsections below

A. The risk/reward balance of the control does not present a 'fair bet' - and the presented RORE range in the DD is flawed

We do not agree with the statement that there is risk symmetry within the aggregate balance of the whole price control. This is because the evidence upon which it is based is incomplete and contains errors.

We have commissioned analysis from Economic Insight to assess the RORE range and this has concluded that Ofgem has made three errors in assessing risk symmetry, each of which has been assessed in their report. These are:

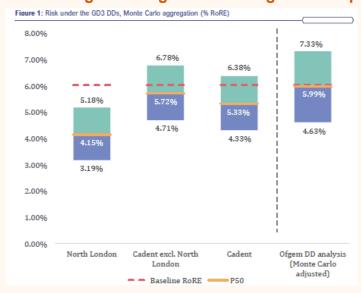
- 1. Not covering the full list of risk areas embedded within the RIIO-3 framework in their assessment of overall control price control risk (e.g., Ofgem omits GSOP payments, and Streetworks fines and penalties which are investor funded activities, but for which the efficient level is above zero). As a result, Ofem understate the downside risk associated with the control.
- 2. Not considering a realistic performance distribution in calibrating its risk assessment. Ofgem makes unqualified decisions to inform its risk analysis (e.g., specifying totex risk based on a crude +/- 10% totex out or underperformance and unrealistic ODI performance which is not supported by any historical or analytical evidence. Economic Insight's analysis, which uses actual performance delivered in RIIO-2, shows that the range of upside and downside associated with ODIs is materially smaller than the DD states, but the risk associated with totex is much larger

- and that both the most likely level of performance is materially lower than the allowed return on equity, and with a further downward skew to what they present.
- 3. The DD's risk analysis makes the simplified assumption that all upward and downward risks are perfectly correlated – overstating the upward and downward potential in the control. Economic Insight have undertaken Monte Carlo analysis which shows: (a) that Ofgem's risk analysis with Monte Carlo applied results in a much lower upside possible and (b) when combined with the two points above maintains a significant downward skew.

Having remedied these errors Economic Insight's results show (in Figure 1 from that report replicated below) replicated in Table 11 below that:

- There is an asymmetric downward skew to potential equity returns for Cadent **networks**, meaning that the price control does not represent a 'fair bet' to equity holders. The analysis suggests an expected return of 0.7% lower than the proposed base cost of equity (5.33% v 6.04%).
- The largest factor that contributes to that is the unbalanced distribution of risk associated with meeting the totex allowances (which shows a negative expectation of 0.42% of RORE, the largest component of which is driven by the DD proposal of 1% per annum ongoing efficiency (this contributes 80%, 0.34% of the 0.42% mean negative totex performance overall).
- The imbalance is particularly pronounced in the case of our North London **network** (which shows an expected 1.8% deficit to the proposed base cost of equity 4.15% v 6.04%) and reflects the wider penalisation for operating this network within the RIIO-3 framework at draft determinations – with key decisions on cost allowances (most notably regional and company-specific factors) discriminating against Cadent and output targets not recognising what is achievable within London.

Table 11 - Estimated RORE ranges having remedied Ofgem's computational DD errors



Source: Economic Insight, Annex – FA9 (see our response to FQ17 for further details)

At Draft Determination in setting the proposed allowed cost of equity, Ofgem selected a midpoint estimate of 6.04% on the basis that the control was a fair bet to equity investors. Given what El's analysis shows, this is not true and there is a significant material downward skew in the aggregate price control. For Final Determination, Ofgem should accept our proposed remedies to errors made in respect of cost assessment address this skew and justify continuing to utilise a midpoint estimate for the cost of equity. Otherwise, the remaining negative skew would necessitate Ofgem in needing to 'aim up' on the cost of equity.

However, we detail in Table 12 below, even if these errors in the cost assessment were remedied such that utilising a midpoint estimate for the cost of equity becomes legitimate, the midpoint for the cost of equity that should be chosen has moved materially upwards since submission of our business plan.

Sections B to G – Financeability Considerations

Table 12 below highlights key evidence and our a summary of our response to the Finance Annex.

Table 12 - Key messages and proposals from the finance annex response

| What needs to change for FD | Question reference |
|---|--------------------|
| B. There are errors in how the cost of equity has been calibrated | |
| | |
| Updating our Business Plan position for the latest market data results in an | FQ7 |
| increased Cost of Equity range of 6.2% to 7.4%, with a revised mid-point | FQ8 |
| of 6.8%, up from 6.3% as of December 2024. | FQ9 |
| Our evidenced point estimate lies within the range that Ofgem has said can | FQ10 |
| be justified by the available evidence it had assembled for its DD. As such, | FQ11 |
| one possible alternative way of interpreting our estimate of the cost of equity | FQ12 |
| is that there is a need to 'aim up' within Ofgem's range. If the imbalance in | FQ13 |
| risk highlighted above is not adjusted, this would provide further rationale for 'aiming up' in the range Ofgem has provided. | FQ16 |
| We set out our key points for each parameter below: | |
| Risk free rate (RFR) - We disagree with the DD to approach to solely rely on index linked guilt (ILG) yields when estimating the RFR and instead a basket of yields should be used. If Ofgem continue to rely solely on ILG gilts, it must adjust for the convenience premium and difference between lending and borrowing rates. | |
| Total Market Return (TMR) – TMR should reflect the higher for longer interest rate environment in which this price control is being set and therefore the long run average is 6.97% plus an upward adjustment for current market conditions would be the minimum robust estimate based on the evidence. | |
| Beta - The bottom end of Ofgem's asset beta range is below the lower end of the asset beta range set in RIIO-2, implying a decrease in risk which is | |

fundamentally inconsistent with statements made about risk and uncertainty for the gas sector.

We believe there is a systematic difference in the risk profile of gas and electricity networks that should be reflected in the relative asset beta comparators selected by Ofgem. Credit rating agencies have also updated their views on the sector, highlighting an increased risk profile and tightened credit metrics for equivalent ratings.

Cross Checks - We believe there are fundamental inconsistencies in the standards applied to choosing relevant cross checks that results in a downward bias in the implied cost of equity.

If this bias is removed, the evidence strongly indicates that a higher CoE is required to mitigate investability risks. Ofgem's cost of equity point estimate fails almost all of the cross checks – there is a risk that DD proposals undermine the investability of the sector. It is clearly better to rely on a wide set of information, rather than placing weight on a small number of crosschecks. By considering a wider range of evidence, Ofgem would be better equipped to set the cost of equity at an appropriate level which mitigates investability risks and protects customers accordingly.

C. The Notional dividend policy is inadequate

We present additional evidence supporting a higher underlying dividend yield, closer if not equal to the cost of equity - this is more reflective of a price control package that provides no capital growth. This dividend yield should be distinctly separate from the return of capital afforded through Ofgem's proposed accelerated depreciation. Ofgem's proposal to only allow the notional company to return capital when it reaches 55% gearing does not result in an efficient use of capital, effectively trapping equity.

D. The proposed cost of debt methodology could be refined to better align with forward looking risks in the Gas Distribution sector

We support the DD proposal to base the cost of debt allowance on a notional company basis with respect to estimating sector-wide costs. We also continue to support the full indexation approach to setting the allowed cost of debt and the calibration that ensures sector debt costs are funded. As noted in our business plan submission, the forward-looking assumptions that are made as part of the calibration are crucial to ensure the allowed cost of debt supports the funding costs and recognises the forward-looking risks in light of the energy transition into RIIO-GD3.

In this light, we have provided evidence in our response as to why a 10-year trailing average of the iBoxx Utilities 10+ index provides a better match to sector debt costs, and results in a lower calibration adjustment which mitigates the risk of divergence through the RIIO-3 period. This might allow

FQ14

FQ1 FQ2

FQ3

FQ4

the uplift factor which Ofgem has proposed in the DD to be refined and provide less risk in the cost of debt allowances being sufficient.

We provide further evidence that some of the forward-looking assumptions made to set the allowed cost of debt do not adequately capture the forwardlooking risks into RIIO-3, most notably the Gas Network Premium and interest rate scenarios. Further, our assessment of the additional cost of borrowing allowance demonstrates that this is insufficient. Omitting these risks underestimates the costs and hence fails to provide allowances which ensures we are financeable.

E. We continue to believe there is no reason to further accelerate depreciation at this stage

Whilst we recognise that the DD proposes the most cautious of the options put forward in the Sector Specific Methodology Decision (Option 4), we still see no evidence of why this decision needs to be taken for RIIO-3.

FQ24

Given the uncertainty over future pathways for decarbonisation, with the government yet to conclude on their position on heat policy (including the extent to which gas network assets will be repurposed) and the significant time that the UK will continue to be reliant on the gas networks, Ofgem do not need to make any change to the RAV depreciation policy at this time. There is compelling evidence that there is still significant uncertainty over the speed at which has usage may change and that there is an expectation the gas networks will continue to play an essential role well beyond 2050. We therefore do not think that setting out a policy which signals an end date for depreciation of 2050 will support driving the most efficient financing costs for the ongoing investment required and will force a material impact on current customer bills (+£10 per annum) which can be avoided.

Further, by introducing this policy, Ofgem have fundamentally changed the regulatory model which investors relied upon – accelerated depreciation creates different risks; investors face the prospect of no capital growth and returns falling over time (despite retaining the risk of operating a network which will not reduce in size in proportion to the RAV, or reduction in customer numbers).

Notwithstanding the above, if Ofgem retain their DD proposal they must ensure:

- A robust long-term financeability assessment (including affordability) is carried out to ensure there are no unintended consequences.
- Consideration is given to the fact this policy fundamentally changes the investment proposition in which investors have invested
- Equity is not trapped through an inadequate notional dividend policy
- A more detailed holistic review of the gas network is carried out with the Government prior to the next price control covering asset repurposing, disconnections and decommissioning to inform asset life policy.

| F. The financeability tests approach will need to reflect the best available information on latest rating agency behaviour for the FD | | | | |
|--|--------------|--|--|--|
| We disagree with Ofgem's approach to assessing financeability for three key reasons: Narrow Focus on Rating Agency Metrics – the DD assessment only reflects one credit rating agency metrics, which appears inconsistent with new financial resilience measures proposed to have at least 2 investment credit ratings Outdated Reflection of Sector Risk – Two credit rating agencies have updated their views on the gas distribution sector, highlighting the sector no longer sits at the lower end of the utility risk spectrum. As a result, both Moody's and S&P plan to tighten credit metrics for equivalent ratings. Insufficient Long-Term Financeability Analysis - We also expect a more thorough analysis of the long-term financeability in light of the proposed introduction of the accelerated depreciation policy including impacts on long term affordability. Ofgem should revisit its methodology in the FD to ensure that financeability assessments are both realistic and aligned with the evolving regulatory and financial landscape. | FQ18 FQ20 | | | |
| G. Existing financial resilience protections have worked well | | | | |
| We continue to believe the existing financial resilience protections have worked well in the past for the energy sector and ensure an efficient level of financial resilience, so we do not feel any strengthening is required. There is a high hurdle for introducing new regulation in order to avoid introducing distortions, additional costs or creating other unintended consequences. | FQ21 | | | |