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Draft Determinations

Finance annex response

Contents

1. Finance overview	5
2. Responses to questions FQ1-FQ6	7
FQ1. Do you agree with our approach to estimating efficient debt costs and calibrating the index?	7
FQ2. Do you agree with our proposal to use a combination of iBoxx GBP A and BBB 10+ non-financial indices rather than the iBoxx GBP Utilities 10+?	11
FQ3. Do you consider our proposed notional ILD assumption to be appropriate?	11
FQ4. Do you agree with our approach to setting the additional cost of borrowing allowances?	12
FQ5. Do you agree with our proposed treatment of inflation with respect to the allowed return of debt?	13
FQ6. Do you agree with the removal of the infrequent issuer allowance?	14
3. Responses to questions FQ7-FQ8 on allowed return on equity	14
FQ7. Do you agree with our methodology for calculating the RFR? and FQ8. Do you agree with our methodology for calculating the inflation wedge?	14
4. Response to question FQ9 on TMR	17
FQ9. Do you agree with our methodology change in calculating the ex ante TMR?	17
5. Response to questions FQ10-FQ11 on Beta	18
FQ10. Do you agree with our methodology for estimating beta? And FQ11. Do you agree with our proposed set of comparators which also incorporates selected European utility stocks?	18
6. Response to questions FQ12-FQ16 on Step-2	19
FQ12. Do you agree with the conclusions we have drawn from our chosen cross-checks?	19
FQ13. Do you agree with our treatment of risks to the ET and Gas sectors as non-systematic?	32
FQ14. Do you agree with our proposed dividend allowance policies for the notional gas and electricity companies?	32
FQ15. Do you agree with our proposal not to apply the flat WACC approach?	33
FQ16. Do you agree that our proposed package for gas and electricity companies is investable?	33
7. Response to question FQ17 on expected versus allowed returns	34
FQ17. Do you agree with our working assumption that there is risk symmetry within the aggregate balance of the whole price control?	34
8. Response to questions FQ18-FQ20 on debt financeability	37
FQ18. Do you agree with our approach to assessing financeability?	37
FQ19. Do you agree with our proposal to adjust bucket 2 capitalisation rates from natural rates to 85% for all ET licensees to support financeability? Are there alternative measures that stakeholders consider more appropriate?	38
FQ20. Do stakeholders have views or evidence on long-term financeability considerations, including the appropriateness of the proposed asset lives?	38
9. Response to question FQ21 on financial resilience	39

FQ21. Do you agree with our proposal to implement the Financial Resilience measures as laid out in our SSMD and the proposed methodologies set out above?	39
10. Response to questions FQ22-FQ30 (FQ24 and FQ26 not applicable).....	40
FQ22. Do you agree with the proposed position that by including robust protections within the Price Control Financial Handbook, a tax forecasting penalty is not required?	40
FQ23. Do you agree definitions for ANDt and TDNIt should be updated to reflect the principles outlined in paragraph 7.41?	40
FQ24. What are your views on our proposal to accelerate depreciation for new assets only in GD and is there any further evidence you would like us to consider before we reach a final decision?.....	40
FQ25. Do you agree with our proposal to maintain the existing depreciation policy for gas transmission assets?	41
FQ26. Do you agree with our proposal to maintain the existing depreciation policy for electricity transmission assets?	41
FQ27. Do you agree with our proposals for the RAM thresholds and adjustment rates?	41
FQ28. Do you agree with our proposal to include programmes such as ASTI within RAMs?	42
FQ29. Do you agree with our proposals for RAV Indexation?	42
FQ30. Is there any additional evidence we should consider to improve our setting of regulatory capitalisation rates?	42
11. Response to questions FQ31-FQ36	43
FQ31. Do you agree with the approach to maintain the RIIO-2 treatment for disposal of assets?	43
FQ32. Do you agree with the proposal for the ex ante base revenue definition we will use to calculate the re-opener materiality thresholds?	43
FQ33. Do you agree with the proposal for how we will set ODI caps and collars at final determinations that are fixed for the duration of RIIO-3?	43
FQ34. Do you agree with the proposal to move to using nominal WACC as the single uniform TVOM?	43
FQ35. Do you agree with the proposed base revenue forecasting penalty mechanism?	44
FQ36. Do you agree that the thresholds have been set appropriately?	47

Introduction

At National Gas, we operate and maintain the UK's gas transmission system, ensuring energy flows safely, reliably, and efficiently to millions of homes, businesses, and industries. We play a central role in the UK's energy security and are committed to enabling the transition to a net zero future.

As part of the RIIO-GT3 price control process, which begins in April 2026, we submitted our Business Plan to our regulator, Ofgem, in December 2024. This plan sets out how we will deliver long-term value for consumers, meet our regulatory obligations, and invest in a resilient, future-ready gas network.

On 1 July 2025, Ofgem published its Draft Determination, outlining its initial assessment and view on our proposals, and those of other regulated networks. Following an eight-week consultation period, we submitted our full response on 26 August 2025. This document forms part of the suite of materials that make up our full response.

We welcome the fact that Ofgem has clearly signalled this as a consultation in which it is open to making changes based on stakeholder views and the consideration of evidence. This is both positive and important, as we believe a significant number of the current proposals are unacceptable and require numerous remedies to be addressed in the Final Determination. Our response is evidence-based, includes new data where relevant, and proposes practical remedies that better serve the interests of consumers and the country.

We will continue to engage constructively with Ofgem in the weeks and months ahead to ensure our evidence is fully understood and that the necessary changes are secured.

 [Read our full Executive Summary here>](#)

Structure of our Draft Determination response

There are multiple parts to our response in which we provide the evidence to justify and support changes needed:

- Cover letter
- Executive summary
- Overview document response
- National Gas Transmission document response
- **Finance annex response**
- Impact assessment response
- Redaction log
- NetDAR Report (resubmission)
- Risk assessment (resubmission with update)
- National Gas Transmission Draft Determination response file list
- Appendices and supporting material

Please note: Cyber files are excluded from the above

Any tables, diagrams or images will be labelled numerically related specifically to and within the question response, rather than sequentially throughout the entire document.

1. Finance overview

1. When we and the other networks submitted our Business Plans in December 2024, we emphasised the importance of reaching the right balance of risk and reward for both investors and consumers. We welcomed Ofgem's wider focus on equity investor needs through its new principle of investability. Networks need to access efficient funding to deliver for customers; getting access to efficient funding depends on investors expecting a return at least as good as the opportunities available elsewhere and one that reflects the risks they take on. If this is not achieved because a changing risk profile is not reflected, equity or debt funds may not be forthcoming, ultimately leading to higher long-term costs borne by customers and the risk of broader network underinvestment exacerbating resilience risk.
2. The RIIO framework that Ofgem employs to reach that balance, reliant as it is on the Capital Asset Pricing Model (CAPM), has its limitations when networks face new or different risks in the future to those they have faced in the past unless inputs are re-assessed appropriately to reflect current market conditions. Given the need for a step change in investment to ensure a safe, resilient network that retains optionality for the transition to Net Zero, coupled with extensive Government consultation on the future of gas networks, RIIO-3 is characterised by that changing risk profile and as such, it is essential that the result of methods applied by Ofgem and other regulators to set the allowed return are rigorously tested by referencing up to date market evidence.
3. The proposals Ofgem published at RIIO-3 Draft Determination (DD) go some way to recognising the reality of the risks networks face and how markets price those risks and we welcome several positive developments in how Ofgem assesses this evidence. The widening of beta comparators to better reflect the gas sector, and the recognition that gas networks are paying more for new debt than electricity networks, are positive developments. However, the overall result falls short of what market data indicates is appropriate and as such, there is still an opportunity to ensure the RIIO-3 financial package is calibrated fairly.
4. This document is structured according to the questions Ofgem set as part of the DD Finance Annex on 1 July 2025. The key matters we expand on in our responses are:
 - Ofgem's proposed Cost of Equity (CoE), whilst a significant improvement on the position at Sector Specific Methodology Decision (SSMD), is below the level that a comprehensive set of cross-checks based on market evidence indicates is reasonable, which creates an investability risk for gas networks.
 - Evidence is presented on an expanded set of cross-check methodologies which present this consistent result.
 - We find inconsistencies in the way Ofgem assesses cross-check methodologies that could introduce bias and lead to unreasonable conclusions should they remain unaddressed.
 - The key input to the CAPM which is below the level indicated by market evidence is the Total Market Return (TMR), which remains below the long run historical average despite a period of high gilt and interest rates. Using historical data to estimate a forward-looking cost requires particular care where the returns investors need for taking market risk are different from the past. There is evidence that this return is higher than the past so the choice of TMR below the long run market average appears to be wrong.
 - There is also important evidence on how beta ranges are defined and how the risk-free rate should be assessed that merit further consideration and adjustment prior to Final Determinations (FDs).
 - The Cost of Debt (CoD) allowance proposed in the DD reflects what is clear from market evidence; that given the risks facing them, gas networks are required to pay a premium on new debt as compared to electricity networks. On recreating Ofgem's calibration of the CoD allowance we find that this risk is underpriced in Ofgem's analysis. The calibration adjustment proposed to ensure networks can recover efficiently incurred borrowing costs falls short of the level required and appears to disadvantage gas networks when compared to electricity networks.

- Allowances proposed for additional borrowing costs do not fully consider the market costs for maintaining such facilities.
 - We welcome the proposal to include a close out mechanism to assess and account for the costs of RPI reform in 2030 and will work with Ofgem to ensure this is clearly captured within the licence.
5. In the longer term we recognise that the gas sector faces uncertainties, as reflected in the number of Government policy consultations currently in progress and as demonstrated by our advisors when assessing beta specifically. Ofgem and networks will need to remain conscious of the evolving landscape and agile in their response given the risks facing gas networks that are yet to be resolved by the RIIO framework. Within our business plan we proposed that the regulatory asset life is not accelerated for NGT, given the enduring role of our network and the need to ensure the principle of inter-generational fairness is upheld. We therefore agree with Ofgem's proposals to retain the 45-year asset life for NGT and to revisit this assessment in RIIO-4.
 6. We also recognise that matching the regulatory asset life to the expected operational life is only one consideration within this decision; the need to consider the bill impact of recovering gas Regulatory Asset Values (RAV) from a reducing population of gas consumers is equally important. As domestic demand for gas declines, the gas transmission network will still play a vital role in supporting gas-fired electricity generation to back-up intermittent renewables and supplying gas to heavy industries that are hard to electrify. Because of this shift in usage, it is important to review the charging system soon to make sure costs are fairly shared among the right customers over the right time period.
 7. The financial package is financeable based on the criteria Ofgem employs to assess the notional company, albeit we note the recent tightening of thresholds by Moody's and a similar move expected by other agencies (notably Standard and Poor's and Fitch) means this needs to be reassessed at FD, as headroom will be significantly tighter than the DD results indicate. As such there are still improvements to be made to ensure it represents the risks investors face, as noted above.
 8. We do not regard the package of DD proposals as offering a balance of risk. We consider there to be greater downside risks than opportunities to perform well during RIIO-3, putting in jeopardy timely investment to meet resilience challenges because the allowed return is simply unachievable.
 9. This is for several reasons in addition to the shortfalls on CoE and CoD that the evidence laid out above demonstrates. The ODIs have been mis-calibrated meaning that under-performance is the most likely outcome. The ongoing efficiency target is proposed at a level which is markedly out of line with long term economy-wide productivity trends, meaning that hitting targets, even as a stretch, is fanciful. The totex cost assessment adds layer upon layer of additional efficiency challenge. And the proposals provide the lowest inflation protection to gas transmission of all the network companies. Given the business plan incentive has removed the scope for outperformance due to companies having information advantages, such layers of broadly defined efficiency challenges do not appear justified. These issues should be addressed at source by reconsidering totex allowances and the calibration of the incentive package before reassessing risk symmetry at FD.

10. The following responses summarise the evidence we submit to address shortfalls in the proposed CoE and CoD, with further detail presented in the accompanying expert reports. The table below summarises the resulting financial parameters that NGT proposes better reflect the evidence available to us, FEN members, our advisors and Ofgem:

Parameter	Ofgem DD	NGT	Notes/references
Cost of Equity (real)	6.04%	6.85%	FQ12
- Risk free rate	2.01%	2.34%	FQ7 and FQ8
- Total Market Return	6.90%	7.25%	FQ9
- Equity beta	0.83	0.92	FQ10 and FQ11
Cost of debt (real)	3.01%	3.38%	FQ1, FQ2 and FQ3
- New debt premium	+25 bps	+45 bps	
- Additional borrowing costs	25 bps	44 bps	FQ4
Notional Gearing	60%	60%	FQ12, FQ15 and FQ16
WACC (CPIH-real)	4.22%	4.77%	
WACC (semi-nominal)	5.09%	5.64%	
Asset lives/ depreciation method	45 years, sum of digits	45 years, sum of digits	FQ25
CPIH RIIO-GT3 average Long-run CPIH	2.00%	2.00%	FQ5 and FQ8

2. Responses to questions FQ1-FQ6

FQ1. Do you agree with our approach to estimating efficient debt costs and calibrating the index?

11. We find that whilst we broadly agree with the approach to estimating efficient debt costs and the need for a calibration adjustment, that the proposed calibration adjustment of 60 bps is not sufficient to accurately reflect the premium on new gas debt and should be increased to 92-98bps. To not adjust the calibration risks undermining gas networks' ability to access efficient funding to fund necessary investment.
12. FEN has commissioned NERA to assess Ofgem's calibration of the proposed Cost of Debt allowances on behalf of its members. NERA's scope covers the core allowance, including an assessment of the premium paid by gas networks when raising new debt, and additional borrowing costs. This work is presented across two separate reportsⁱ with the main conclusions summarised here.

Calibration of allowances

13. In respect of the core allowance, NERA has refreshed the analysis previously prepared for FEN members and responded to the updated methodology proposed in the DD Finance Annex. NERA has updated the inputs to the model it uses to calculate the expected cost of debt for the sector, with a clear focus on ensuring that the balance of embedded and new debt is assessed on a reasonable basis considering debt instruments in issue and expected RAV growth. NERA has also assessed the iBoxx trailing average Ofgem proposes to adopt, updating its assessment for the adoption of new indices and assessing the curve selected. This allowed NERA to establish whether the 14-year curve based on an average of iBoxx non-financial 10+ A/BBB indices with a +60bps calibration adjustment is sufficient to enable gas networks to recover efficient financing costs with sufficient certainty that reasonable downside risks can be accommodated.

14. As summarised in its first report, while Ofgem has not yet to date shared full details of its calculations, NERA has been able to broadly replicate Ofgem's calibration of the CoD allowance and the sector underperformance that results from the scenarios Ofgem included in the DD Finance Annex. We therefore concur with the need for a calibration adjustment so that allowances more closely align to average efficient borrowing costs for the gas sector.
15. However, NERA notes that a +/- 1% interest rate scenario does not sufficiently account for potential downside scenarios. Based on the experience of RIIO-2, a higher interest sensitivity of +/- 2% is considered more appropriate and has also been modelled by NERA. This results in 66 bps of under-performance against the 14-year trailing average (page 5 of NERA's "GDNs & NGT Cost of Debt at RIIO-3" report and Table 1 below):

Expected allowed return on debt minus forecast average expected debt costs in RIIO-GD/GT3

Out/underperformance	Ofgem's RIIO-3 DD ¹		NERA's modelling ² (GDNs & NGT)	
Sensitivities	14 Years TA	14 Years TA+60bps	14 Years TA	14 Years TA+60bps
Base Case	-0.54%	0.06%	-0.53%	0.07%
Higher totex	-0.55%	0.05%	-0.54%	0.06%
Lower totex	-0.53%	0.07%	-0.52%	0.08%
High Interest Scenario (Flat rate+1%)	-0.60%	0.00%	-0.59%	0.01%
Low Interest Scenario (Flat rate-1%)	-0.49%	0.11%	-0.47%	0.13%
High Interest Scenario (Flat rate+2%)	-	-	-0.66%	-0.06%
Low Interest Scenario (Flat rate-2%)	-	-	-0.41%	0.19%

Note: (1) RIIO-3 Draft Determination – Finance Annex, Table 10, and Table 13

(2) We have identified an error in Ofgem's WACC allowance model, which Ofgem agreed to correct for in its FD. Our results reflect corrected formulae.

Table 1

16. Results vary if modelled on a simple average or debt weighted average. We note Ofgem's decision in the DD Finance Annex to use the simple average, but both are presented in scenarios summarised here. Assuming companies incur 45bps of GNP and 44bps of ACB in line with NERA's findings (summarised in FQ5) and taking into account Ofgem's proposed +60bps calibration adjustment, the sector would underperform by 32bps on a debt weighted basis or 38bps on a simple average, requiring a higher calibration adjustment of 92-98bps for the gas sector under the high-interest rate scenario.
17. Table 13 within paragraph 2.116 of the DD Finance Annex illustrates the headroom the calibrated allowance offers each sector under a range of scenarios Ofgem has modelled. We note that ED comparators were added to ET to calibrate the allowance but considering networks that will be subject to the RIIO-3 GT/GD/ET price control, the ET sector has been granted significantly higher headroom. This does not appear to treat each sector in an equal manner and should be reconsidered at FD; to not do so places the gas sector at a higher risk of under-recovering efficient gas debt costs that the ET sector is less exposed to and is inconsistent with the evolving market conditions Ofgem itself recognises in debt markets when gas networks raise new debt. As such, NERA takes into account sufficient headroom when assessing calibration results.

Table 13: Difference between expected industry debt costs and expected allowed debt costs, RIIO-3 average, excluding derivatives

Sector	Index calibration	Baseline	Higher Totex	Lower Totex	Rates +1%	Rates - 1%
GD>	14 Years TA + 60bps	0.06%	0.05%	0.07%	0.00%	0.11%
ET	14 Year RAV Weighted + 45bps	0.39%	0.39%	0.39%	0.30%	0.48%
ET&ED	14 Year RAV Weighted + 45bps	0.14%	0.14%	0.14%	0.00%	0.27%
ET&ED	14 Years TA + 45bps	-0.54%	-0.55%	-0.53%	-0.86%	-0.21%

18. Comparing the results NERA reported (Section C in Table 2 below) with Ofgem's proposed 5.07% CoD allowance for the gas sector in RIIO-3, it suggests a higher CoD allowance of 5.39% on a debt weighted average and 5.45% in simple average for companies. Therefore, NGT proposes 5.45% nominal CoD allowance given Ofgem adopts simple average that equates to a CPIH-real allowance of 3.38% including 44bps of ACB.

Table 2

Out/underperformance	Debt Weighted Average		Simple Average	
	Sensitivities	GDNs & NGT	GDNs only	GDNs & NGT
A. Sector average underperformance under 14-year TA+60bps (using NERA estimate of GNP and ACB)²				
Base Case		-0.19%	-0.26%	-0.25%
High Interest Scenario (Flat rate+1%)		-0.25%	-0.35%	-0.31%
High Interest Scenario (Flat rate+2%)		-0.32%	-0.44%	-0.38%
B. Required CoD calibration adjustment to 14yr TA³				
Base Case		0.79%	0.86%	0.85%
High Interest Scenario (Flat rate+1%)		0.85%	0.95%	0.91%
High Interest Scenario (Flat rate+2%)		0.92%	1.04%	0.98%
C. Required nominal CoD allowance⁴				
Base Case		5.26%	5.33%	5.32%
High Interest Scenario (Flat rate+1%)		5.32%	5.42%	5.38%
High Interest Scenario (Flat rate+2%)		5.39%	5.51%	5.45%

1. Source: NERA (19 August 2025), Gas Network Premium (GNP) and Additional Cost of Borrowing (ACB) for GD/GT3, p.5.

2. The underperformance is calculated by comparing i) actual cost of debt, assuming 45bps of GNP for new debt, and 44bps of ACB, plus 6bps for infrequent issuers, and ii) for CoD allowance, of 14yr TA+60bps, which allows for 25bps of GNP and 25bps of ACB. This value is equivalent to the incremental calibration uplift required in addition to Ofgem's modelled 60bps uplift.

3. Calculated as 60bps of Ofgem's current uplift, plus the values from section A above.

4. Calculated as Ofgem's DD allowance of 5.07% (including 60bps of calibration uplift + ACB of 25bps), plus the values from section A above.

Gas Network Premium (GNP)

19. In respect of the gas new debt premium, Ofgem has proposed a +25bps uplift based on 14 issuances from five issuers from the gas sector over 2023-24, reflecting a combined gas network premium (GNP) and new issue premium (NIP). Whilst this is a positive development vs the position at SSMD, NERA was appointed to validate the proposed uplift to ensure gas networks can reliably recover efficient debt costs given current market factors.
20. To assess this, NERA set out to replicate Ofgem's DD analysis on GNP with the latest gas networks' debt books received from companies, considering the stated RIIO-3 methodology which calculates the yield at issue of recently issued licensee GBP fixed debt against the prevailing benchmark yield to maturity (YtM), i.e., average iBoxx GBP A and BBB non-financial 10Y+ index.
21. Replicating Ofgem's precise sample of 14 bonds from five issuers but including updated pricing date data for 3 WWU private placements (Ofgem used issue date data as a proxy), NERA estimates a GNP of 31bps (simple average) and 32bps (weighted average). According to the description Ofgem provided in its DD Finance Annex, as to what sort of data and methodology Ofgem used to determine benchmark adjustment for gas new debt issuance, NERA has also considered a scenario which excludes short tenor debts (less than or equal to 10Y), as these could potentially be deemed as unrepresentative debt instruments. This analysis, that is based on Ofgem's sample NERA used in its first scenario estimation, results in an estimated GNP of 32bps (simple average) and 35bps (weighted average). A comparison of the samples and scenarios NERA assessed compared to Ofgem's assessment is summarised in Table 3 below:

Table 3:

We estimate GNP of between 32 and 35 bps exc. short tenor debts from Ofgem's 14 debt issuances

	Ofgem DD	NERA's replication	
		Scenario 1	Scenario 2
Simple average	23bps	31bps	32bps
Weighted average (by issuance size)	18bps	32bps	35bps
Sample size	14 from 5 issuers	Ofgem's 14 bonds from 5 issuers, updating pricing date data for 3 WWU debts	Ofgem's sample, updating pricing date data for 3 WWU debts and excl. debt with tenor <=10 years. Resulting sample: 12 bonds from 4 issuers

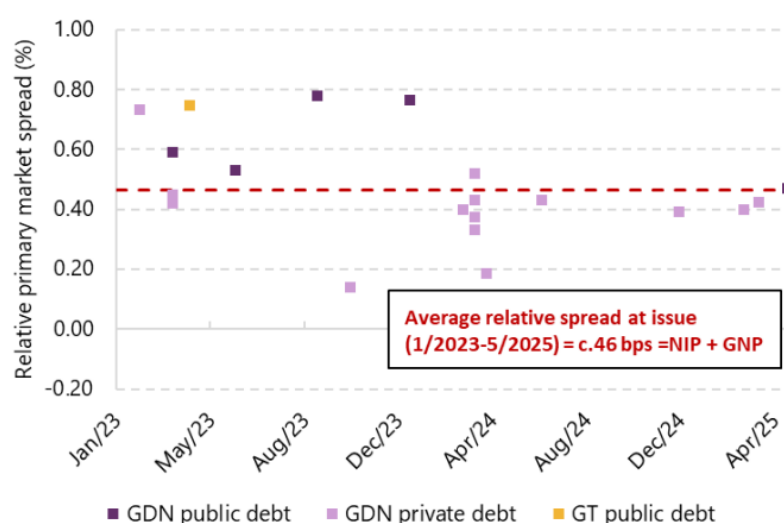
Source: NERA analysis.

ii

22. NERA has presented an alternative approach that draws on the method Ofgem adopted at RIIO-2 (following regulatory precedent therefore but also to be consistent with the approach adopted for assessing ACB); this was explored as Ofgem's proposed approach for RIIO-3 does not control for tenor differences between gas bonds and A/BBB iBoxx indices. NERA's alternative controls for this by calculating relative spreads in the primary markets, updating its approach in estimating GNP using Ofgem's DD benchmark of iBoxx non-fin A/BBB 10+, as opposed to Utilities 10+ index previously utilised.
23. NERA estimates an average relative spread at issue (New Issuance Premia (NIP)+GNP, based on pricing date) of 44-46bps in the primary market over the period of January 2023 to May 2025. The analysis output in Figure 1 below summarises the results, which are higher than the replication of Ofgem's approach principally due to controlling for tenor:

Figure 1:

We calculate gas network bond spread less A/BBB iBoxx spread of 44-46bps for the period Jan 2023 – May 2025



Source: NERA analysis.

iii

24. NERA's analysis is further supported by the comparison of bonds recently issued by gas and electricity networks. This demonstrated a GNP of 33bps relatively to electricity for the sample analysed.

25. In conclusion, NERA's analysis implies a combined GNP and NIP of 45bps, a higher level than Ofgem driven by controlling for tenor and using a wider sample of bonds. As such we consider that the proposed +25bps calibration adjustment to account for the premium on new debt is insufficient and should be adjusted at to +45bps.
26. We also note that the calibration of this allowance is highly sensitive to the ratio of embedded and new debt included in calculations. Given Totex plans may change between DD and FD, and therefore the requirement to raise new debt may increase, we expect Ofgem to recalibrate this allowance once final debt-raising plans are clear. To do otherwise risks not granting sufficient allowances to fund allowed investment.

FQ2. Do you agree with our proposal to use a combination of iBoxx GBP A and BBB 10+ non-financial indices rather than the iBoxx GBP Utilities 10+?

27. We have no objections to the adoption of new indices but note that the key matter is that the calibration adjustment against the resulting benchmark curve is set correctly, as discussed in our response to FQ1.
28. The DD Finance Annex states that the allowed return on debt for the gas sectors will be derived from a 14-year simple average of the average iBoxx GBP A and BBB non-financial 10+ index, plus a calibration adjustment of 60bps, plus 25bps for additional costs of borrowing.
29. In RIIO-GT2, the allowed cost of debt was constructed utilising data from an index of borrowing costs deemed to best align to the sector (Iboxx Utilities 10yr+), and an allowance for additional costs that are not fully reflected in that index output adjusted to a real allowance using the long-term CPIH assumptions set in RIIO-GT2.
30. The DD Finance Annex proposes to utilise broader corporate A and BBB indices on the basis that the average of these indices better represents the average credit rating of the RIIO sectors, that is Baa1/BBB+, but also as Ofgem considers the iBoxx Utilities 10+ index has been affected by certain events in the water sector which represents a smaller proportion of the overall iBoxx A and BBB non-financial 10+ composition.
31. Whilst we note that the use of the A index does not align particularly well with the average rating of the sector, the more important assessment of the calibration adjustment against the resulting curve, to which our response to proposals is summarised in FQ1.

FQ3. Do you consider our proposed notional ILD assumption to be appropriate?

32. We concur with Ofgem's proposal.
33. NGT's Finance Annex, that was submitted to Ofgem as part of the main business plan in December 2024, highlighted the reasons why NGT supported Ofgem's proposal of retaining a 30% index-linked debt (ILD) assumption in the notional structure for the gas sector by referring to an Economic Insight (EI) report^{iv}. This report listed several reasons why companies may benefit from issuing ILD, notably that issuing ILD can enable companies to stabilise their debt servicing in real-terms in some circumstances where ILD can be cheaper to issue than fixed-rate debt. Furthermore, regulated utilities may take the advantage of issuing ILD to reduce the risk of managing assets and liabilities under regulatory regimes, as revenues are adjusted with inflation and as such, benefits may be passed on to consumers via lower and/or more stable consumer bill charges.
34. According to the report, 60% of energy network companies and 100% of water companies have some level of ILD. Networks in the gas sector were aligned in their business plan submissions that the ILD assumption should continue to align to the observed average for the gas sector. As such, available theoretical and empirical evidence does not provide any robust reason to differ from the 30% ILD assumption applied at RIIO-GT2 and therefore we support Ofgem's proposal in the DD Finance Annex.

FQ4. Do you agree with our approach to setting the additional cost of borrowing allowances?

35. There is evidence that demonstrates that the proposed 25bps additional cost of borrowing allowance underfunds the relevant facilities or transactions and should be increased to 44bps. We welcome Ofgem's inclusion of a close out mechanism to address the uncertain but likely material costs of RPI reform in 2030.
36. Ofgem proposes gas networks receive a total allowance of 25bps to account for costs of borrowing not covered by the core allowance for RIIO-3 (paragraph 2.52 of the DD Finance Annex). This is the same level of allowance granted in RIIO-2. Ofgem states that each component of additional cost of borrowing allowance has been thoroughly reviewed by considering NERA's report^v that NGT and other gas networks submitted at the Sector Specific Methodology Consultation (SSMC). This report found that the allowance for such costs should be increased to 57 bps to reflect an increased market cost of facilities and a higher cost of carry for gas networks given the comparatively short tenors currently available.
37. FEN appointed NERA to assess Ofgem's positioning in DD and update its prior assessment. NERA's key conclusions are summarised below and are contained in its accompanying report^{vi}, which indicate that an allowance of 43-45bps (44bps) is more appropriate than maintaining an allowance of +25bps. Full consideration of this evidence is essential to ensuring that the allowances accurately account for borrowing costs faced by networks.
38. **Merged liquidity/cost of carry allowance:** Ofgem proposes to merge these two allowances, stating that it considers both to be driven by a common causal factor. The proposed allowance of 15bps is lower than proposed by NERA (19bps^{vii}), driven by Ofgem's analysis of network data on revolving credit facility (RCF) utilisation and cash balances over two years of RIIO-2. RCF utilisation fees or the associated margin of doing so are not included in Ofgem's proposed allowance, nor are upfront legal or other arrangements fee despite being included at RIIO-2. Cost of carry has reduced to 1.70% (previously 2% at RIIO-2), based on the spread between a 5-year average IBoxx indices and 3-month cash deposit rates. NERA finds that the use of historic data to assess cost of carry is not reliable, instead basing its estimate on forecast IBoxx rates. Additionally, while Ofgem recognises shorter tenor debt for gas networks, the adoption of an assumed 13-year tenor by Ofgem is overstated based on recent issuances; as such, NERA aligns its calculations to 10-year tenors. The consequence of both adjustments is a proposed allowance of 26 bps if Ofgem's proposed approach to hold forecast IBoxx rates flat is adopted (spread of 2.59%). We do note that if a market forecast of IBoxx is adopted to assess the spread to SONIA (NERA used Bank of England 10-year nominal gilt spot curve), the spread increases to 3.45% and the required allowance to 34.5bps; 26bps is therefore considered a conservative estimate. In respect of liquidity, NERA challenged the absence of an allowance for utilisation fees or associated margin on RCF on the grounds that, despite such facilities not regularly being drawn down by networks, it is inappropriate to assume that such costs will be zero, as it is to assume arrangement fees should not be taken into account. NERA also validated Ofgem's assessment of the size of RCFs, utilisation and fees incurred, concluding that a 5bps allowance is more appropriate. While we understand that Ofgem will calibrate such allowances on a sector basis, NGT is a comparative outlier in this dataset given the significantly higher RCF it needs to ensure licence obligations in respect of residual balancing etc. can be met and as such, incurs higher costs for RCF than this allowance.
39. **Transaction costs (t-cost):** Ofgem has recognised shorter tenors for gas companies and calibrated sectors separately (7 bps for gas, 5 bps for ET). However, Ofgem asserts that fees are lower for issuing shorter term debt, whereas networks presented evidence that fixed costs associated with debt issuance result in higher annual costs when amortised over shorter tenors. NERA's calculations and evidence on t-cost disprove Ofgem's statement as t-cost increases for short tenor bonds when the cost is correctly expressed on an annualised basis and as a % of debt issuance. NERA estimates a t-cost of 8 bps based on gas bonds issued since 2023. This outcome is consistent with observed short tenor of gas bonds. NERA's analysis also considers updated evidence on transaction costs for public bond issuances including underwriting fees, advisory fees, arrangement fees, legal fees, auditors' fees, listing fees, rating agency fees etc.

40. **CPI/H basis risk mitigation:** Ofgem proposes to reduce this allowance to 3 bps (previously 5 bps at RIIO-2). Ofgem based its assessment solely on RPI/CPI swap costs, with this assumption reflecting a lack of evidence of companies hedging the CPI-CPIH risk. NERA challenges Ofgem's assumptions by demonstrating that most gas networks do rely on issuing synthetic CPI-linkers (the costs of which were excluded by Ofgem). According to NERA's report, while it is possible for companies to issue RPI ILD and then issue RPI-CPI swap, it is demonstrated that there are practical limits to issuing RPI ILD e.g., RPI ILD markets tend to be less liquid, making it more challenging and costly for companies to issue these instruments. Hence why, companies typically view synthetic ILD as a more cost-efficient and flexible approach. Overall, NERA estimates in its report that the cost associated with issuing new CPI-linked debt to be 15-50bps that is based on:
- 15bps, consistent with Ofgem's assumptions that companies could issue RPI ILD and then issue RPI-CPI swap at cost of 15bps; and
 - 30-50bps, based on the cost of structuring a nominal-CPI inflation swap, a widely adopted and viable route for issuing CPI-linked debt.
41. NERA concludes that it is reasonable for companies to hedge against basis risk due to the large volatility of the CPI-CPIH wedge. Overall, NERA estimates a CPI/H basis risk mitigation allowance of 3-6 bps, based on:
- 30-50bps of cost for new issuances of CPI-ILD; and
 - 15bps of cost for managing RPI/CPI basis risk of embedded RPI ILD
42. We support this approach but note that the most recent market data or quotations received for actual transactions indicate higher costs (up to c. 21 bps for RPI/CPI swaps and up to 64 bps for new synthetic CPI issuances) and therefore there may be merit in a reassessment of the costs on which the allowance is based at FD. We would also note that investors attracted to regulated utilities value alignment between indices used for operating inflows vs those used for financing outflows. The absence of a mature market for hedging CPI-CPIH does not mean that there is no risk to companies or cost and to fully consider this risk would be a positive development in light of the investability principle.
43. **New Issue Premium:** as summarised in our response to FQ1, Ofgem estimated a 25bps premium on new gas debt. Ofgem considers that its analysis does not support additional an adjustment to account for a separate new issuance premium. Our summary of NERA's assessment of the proposed gas premium is included in our response to FQ1.
44. In RIIO-2, NGT was not eligible for the Infrequent Issuer Premium and was not expected to be in RIIO-3 based on the position at SSMC. Ofgem has proposed to remove this allowance at RIIO-3. NERA's assessment of the appropriateness of this conclusion is also included in the report accompanying this Annex.
45. We welcome Ofgem's recognition that the costs associated with the transition of the RPI measure of inflation with the CPIH methodology in 2030 could be material but also recognise that the costs and timescales of networks' response to the transition are uncertain at this stage given the immaturity of the market solutions to this matter at this stage. We therefore consider the inclusion of a specific close out mechanism to consider costs fairly and efficiently incurred by networks to address a sector-wide matter outside of their control to be appropriate. The alternatives to not address the matter or set an allowance based on limited evidence are not considered appropriate. How Ofgem documents the mechanism in the licence will be assessed through the separate licence consultation.

FQ5. Do you agree with our proposed treatment of inflation with respect to the allowed return of debt?

46. Given notional company assumptions in respect of index-linked det (ILD), we accept Ofgem's proposals in respect of inflation.

47. At the SSMD, to address the so-called 'leverage effect', Ofgem selected an option that grants a nominal allowance for fixed rate debt but removes CPIH indexation from the relevant portion of RAV measured under the notional structure (i.e., 70% of 60%, being 42%). As stated in the Finance Annex of the DD paragraphs 2.29 and 2.30, under this option, the portion of RAV that is aligned to the notional fixed rate assumption would be delinked from outturn inflation to avoid compensating investors twice, whereas the indexation of the RAV for ILD and equity would be unaffected. Given the evidence of ILD usage throughout the sector (see our response to FQ3), NGT supports Ofgem's conclusion on the treatment of ILD, which remains consistent with the SSMD position that assumes 30% of notional company debt is index-linked. At DD Ofgem concluded, in the DD Finance Annex paragraph 2.41, that a transition mechanism is not required. NGT presented evidence in response to Ofgem's Call for Input on inflation and throughout the RIIO-3 process that given its higher-than-average proportion of RPI-linked debt that it had not materially benefited from higher than forecast inflation. However, given Ofgem has retained the 30% ILD assumption in the notional company assumption, we accept Ofgem's proposed treatment of inflation considering the selected option and conclusion to disregard applying a transition mechanism.
48. Ofgem referred, in the DD Finance Annex paragraph 2.48, to its proposal in its SSMD to adopt Bank of England (BoE) CPI inflation target (2%) instead of the 5th year of the prevailing Office for Budget Responsibility (OBR) CPI forecast as the long run assumption that is usually aligned to 2%. We concur with this proposal and refer to our assessment of alternative forecasts of CPIH in our response to FQ7/8.

FQ6. Do you agree with the removal of the infrequent issuer allowance?

49. As summarised in our response to FQ5, NERA has assessed this conclusion in its report presented alongside our response.

3. Responses to questions FQ7-FQ8 on allowed return on equity

FQ7. Do you agree with our methodology for calculating the RFR? and FQ8. Do you agree with our methodology for calculating the inflation wedge?

50. We accept that 20-year index-linked gilts (ILGs) form an appropriate starting point to benchmark a risk-free rate. However, we do not agree with Ofgem's conclusions that only relying on ILGs as a proxy for the RFR is sufficient; further factors such as the convenience premium should be taken into account. As summarised below, taking these valid adjustments in account results in a risk-free rate of 2.34% vs the 2.01% proposed by Ofgem.
51. Ofgem proposes to adopt a 20-year term for ILGs measured over a one-month average to set the RFR allowance, updating this assessment annually in the October preceding the commencement of each year of the price control. Ofgem also proposes to account for the RPI-CPIH wedge necessary to calculate a CPIH-real RFR for use in calibrating cost of equity by using the official OBR RPI and CPI forecast methodology as described in Ofgem's SSMD, which excludes recognition of a CPI-CPIH wedge.
52. Ofgem continues to consider there to be a lack of compelling evidence to support most of the evidence presented on the use of additional proxies when estimating RFR within CAPM calculations. Ofgem referred to the Competition Market Authority's (CMA) decision in the RIIO-GT2 appeals that indicated ruling out the convenience premium in RFR estimation was "not wrong". However, as NGT indicated in its Finance Annex, the CMA did not explicitly consider the use of ILG as the sole proxy of the RFR to be the superior approach to a combination of ILG and AAA-rated non-government bonds. Indeed, the CMA concluded in the PR19 redeterminations that the convenience existed and therefore that relying solely on ILGs could be improved upon^{viii}.
53. FEN appointed Oxera to assess Ofgem's position on this matter and to update its own analysis of RFR. Oxera's key conclusions are summarised below and included in its report^{ix} accompanying this annex:

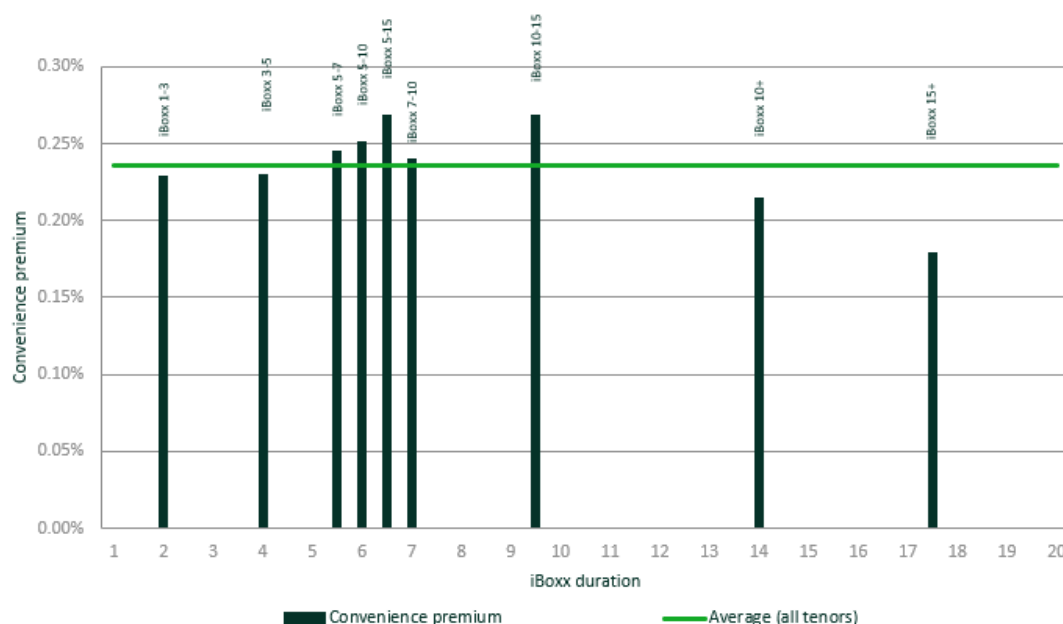
54. Oxera refers to the extensive evidence in its report that is supportive of the inclusion of the convenience premium, including recent regulatory precedents from the Competition and Markets Authority (CMA), the Civil Aviation Authority (CAA), and the Utility Regulator (UR) in Northern Ireland. The empirical data shown in the report provides evidence that a large and positive convenience premium can be observed across a variety of points of the gilts yield curve, including at the 20-year investment horizon. Oxera provides its analysis in Figure 2.1 below, recognising the level of the convenience premium can fluctuate over time, depending on the underlying market conditions. However, Oxera analysis demonstrates the convenience premium has been equally present during periods of calm and distressed financial markets, contradicting Ofgem's assessment that government bonds tend to be the only asset considered to be risk free in times of market distress.

Figure 2.1 Nominal spreads of AAA rated bond indices relative to benchmark government bonds, 2005–23



55. Oxera considers that its estimate of the convenience premium based on duration-matching provides robust justification for the inclusion of the convenience premium, albeit it is not based on exactly 20-year gilts. Therefore, Oxera estimates the convenience premium across the gilts yield curve using the full set of available AAA rated non-government bond indices to test its hypothesis. For each index available in Figure 2.2 below, Oxera calculates the average Macaulay duration over a five-year period and estimates the corresponding convenience premium with the duration-matching gilt benchmark identified for each index. According to the findings of Oxera, its estimates range between 0.18% and 0.27% with an average convenience premium of 0.24%, which is in line with the proposed value in the RIIO-3 SSMD Oxera Report prepared for the ENA^x.

Figure 2.2 Convenience premium across different AAA rated non-government bond indices (iBoxx £ AAA non-gilt)



56. In respect of the RPI-CPIH wedge and Ofgem's consideration of whether the OBR's October 2024 assessment of the CPI-CPIH wedge should be adjusted for, Oxera has:
- Assessed the historical evolution of the CPI-CPIH wedge, which demonstrates how volatile the wedge has been, making it hard to provide a stable and predictable wedge estimate on a forward-looking basis. Over the time horizons typically considered in regulatory decisions, the average CPI-CPIH wedge has been highly variable over time with no clear long-term trend.
 - Highlighted that the OBR quantified a long-term CPI-CPIH wedge for the first time in its October 2024 report and has not repeated or revisited this estimate since. As a result, OBR's estimate is a largely untested measure, and it lacks the track record and evidential basis needed to support regulatory application.
 - Observed that the underlying drivers of estimating the long-term CPIH are conceptually complex and challenging to reliably project. Hence, introduction of a CPI-CPIH wedge into the regulatory framework would bring complexity and risk.
57. Considering the evidence from Oxera report as pointed out above, NGT concludes that Ofgem should retain the approach proposed in SSMD, that is to utilise OBR forecasts of RPI and CPIH to define the wedge until convergence of the two indices in February 2030.
58. This analysis demonstrates that the evidence presented by Oxera should be accounted for when setting the RFR by placing weight on AAA-rated bonds as well as 20-year ILG's. This would result in a RFR of 2.2% vs the 2.01% proposed at DD.
59. Various members of FEN have also appointed KPMG to assess Ofgem's reliance on 20-year ILG's when setting the RFR. In its report^{xi}, KPMG presents an alternative methodology in estimating the RFR, taking into account the convenience yield and the difference between risk free saving and borrowing rates, building on explicit adjustments made by the CMA at PR19. In RPI terms this generates an estimate of RFR of 2.33%, a point estimate wedge of 42bps over the 20-year ILG yield over March 2025. Adjusting this to a CPIH-real RFR utilising the same 10bps RPI-CPIH wedge employed by Ofgem in its RFR estimate results in a RFR of 2.43%.
60. Both methodologies demonstrate that supplementing the use of 20-year ILG's in estimating the RFR is appropriate and based on modern academic research. As such, NGT has adopted the midpoint of these two methodologies in our response to the DD (2.34% vs 2.01% proposed at DD).

4. Response to question FQ9 on TMR

FQ9. Do you agree with our methodology change in calculating the ex ante TMR?

61. We agree with Ofgem's proposal to remove the correlation adjustment, but we continue to consider equal weighting on ex-ante measures to be inappropriate. We also conclude that Ofgem's proposed TMR is not reflective of market evidence and risks undermining the investability of the finance package for RIIO-3, with a point estimate of 7.25% being more appropriate.
62. The proposed approach to setting TMR is broadly consistent with SSMD, with a proposed range of 6.80%-6.90% (CPIH-real) proposed at DD.
63. With regards to adjusting historical returns for inflation, Ofgem stated in its DD Finance Annex paragraph 3.39 that it is now possible to deflate both ex-ante and ex-post nominal data using DMS data for the ex-ante calculation in nominal terms. In addition to this, Ofgem has proposed not to continue to make a serial correlation adjustment to the ex-ante TMR estimate in DD Finance Annex paragraph 3.40. NGT and other network companies proposed removal of the serial correlation adjustment in our Finance Annex. We, therefore, acknowledge this as a positive change.
64. Oxera was appointed by FEN to perform a detailed analysis of Ofgem's methodology, updating the evidence presented alongside network business plans. This included developing updated assessments of ex post and ex ante TMR estimates.
65. Ofgem proposes to continue placing equal weight on ex post and ex ante approaches to calibrating TMR. As with its previous reports, Oxera is consistent with its assessment that ex-ante methods offer limited insight and rely heavily on subjective assumptions about how future conditions will differ from historical trends. This critique also applies to the Dimson, Marsh and Staunton (DMS) decomposition method referenced by Ofgem, which is more accurately described as an ex-post approach, since it does not genuinely aim to forecast the TMR. While we acknowledge that the UKRN Guidance recommends TMR should be primarily based on historical ex-post and historical ex-ante evidence, it is noted that placing equal weight on ex-ante and ex-post methods was not explicitly recommended.
66. Considering the conclusion highlighted in the Oxera report, NGT's concerns remain over the subjective nature of ex-ante data and therefore NGT does not support giving this approach a 50% weight.
67. Oxera also refers to Ofgem's statement in paragraph 3.47 of its DD Finance Annex, confirming its assessment that the estimation of TMR does not reflect current market conditions. Oxera highlights the inconsistency of Ofgem's approach considering previous regulatory decisions (noting that when gilt yields were at a similar level to now, TMR was set at 7.5-8%) and UKRN Guidance specifying that regulators should not consider the TMR to be fixed; noting that it's crucial to acknowledge that a through-the-cycle approach could either overstate or understate returns required by investors in a specific price determination depending on the prevailing macroeconomic environment. The same guidance acknowledges that placing no or inadequate weight on shifts in market conditions could lead to an undervaluation of the TMR, undermining investability. This is consistent with the findings of Frontier's cross-checks of TMR, summarised in our response to FQ12.
68. NGT concludes, considering the above stated issues in Oxera's report, the historical evidence and current market conditions points towards a TMR range of 7.00-7.50% (CPIH-real) according to Oxera findings, with a midpoint of 7.25%. Frontier's evidence on TMR cross checks, particularly the TMR Glider, indicates a higher range (i.e. up to 7.8%) would be needed to capture cross check results.

5. Response to questions FQ10-FQ11 on Beta

FQ10. Do you agree with our methodology for estimating beta? And FQ11. Do you agree with our proposed set of comparators which also incorporates selected European utility stocks?

69. We welcome Ofgem's proposals to include additional comparators in its assessment. We still consider that considering additional market evidence, such as evidence from US markets, offers a valuable cross-check to the beta range and to ensure that the risks associated with the gas sector are considered. Taking into account this market evidence, we consider an asset beta range of 0.375-0.45 (midpoint 0.41) to be a more accurate reflection of sector risk.
70. Ofgem proposes in its DD Finance Annex to use daily betas, with emphasis placed on the 10-year betas, and a debt beta of 0.075. Ofgem has considered what NGT and other networks proposed in their main business plans, and therefore proposes, in its DD Finance Annex paragraph 3.55, to include three sets of comparators in the estimation of beta, including the additional comparators recommended by networks i.e., Pennon (PNN) and a group of European energy utilities for which Ofgem has 10-year betas.
71. NGT agrees with these proposals, as they align with conclusions in NGT's and the other networks' Finance Annex^{xii}. The inclusion of additional comparators than utilised at RIIO-2 is particularly important given the risk of the gas sector being underrepresented in the sample otherwise. This approach generates an asset beta range of 0.30-0.45, with Ofgem selecting 0.375 as a point estimate.
72. Investors in regulated networks are increasingly international in nature. When submitting business plans, the GDN members of FEN assessed further comparators in international markets, ultimately including analysis of US-based gas networks in their assessment of the risk of investing in gas networks captured by the beta input. Ofgem did not agree with the inclusion of such comparators, citing differences in the regulatory regimes.
73. At DD, FEN re-commissioned Oxera to update its analysis of beta comparators as follows:
 - An update to the asset beta estimate previously prepared and an assessment of any relevant developments since the previous analysis.
 - A reassessment of qualitative evidence on US beta comparators, including an assessment of the co-movement in asset beta data between the European and US comparators previously included in Oxera's report for the GDNs to assess their relevance in defining a beta range that accounts for the risks facing the gas sector. While we accept that there are some differences in the regulatory regimes (Ofgem cites the tendency for US regulation to focus on ex-post cost recovery vs GB regulation being on an ex-ante basis for example. We do note however the scope under RIIO arrangements for allowances to be clawed back based on delivery against PCDs or assessment of costs incurred) and perceptions of net zero risk in each jurisdiction (although which market perceives the risk to be higher is debatable), we consider this assessment a useful cross-check of Ofgem's beta range given the international focus of investors and the expansion of evidence on how markets perceive gas sector risks. As noted in our previous submissions, key factors in assessing the suitability of beta comparators centred on the exposure of such entities to regulated business and how the regimes in place manage risks between consumers and networks. No comparators outside of the UK are likely align completely (arguably the same could be said for water networks) but the evidence Oxera includes in its report indicates that US beta data should be valuable evidence in assessing whether the risks that gas networks face are adequately represented in the same applied, particularly given international focus on investors.
74. The results of Oxera's analysis are included in its report submitted with our response to the DD^{xiii}. Key findings are summarised below:
 - Remeasurement of the asset betas for the European comparators originally submitted shows a range of 0.29-0.44, with weighting applied to 10-year betas (as per Ofgem's conclusion in para. 3.61 of the DD

Finance Annex) narrowing this range to 0.36-0.44, which overlaps with the upper portion of Ofgem's range. We note and understand Ofgem's reasoning for excluding Italgas from the sample given the absence of a 10-year beta.

- A comparison to the asset beta allowances observed in the markets in which European beta comparators operate illustrates that the point estimate of 0.375 Ofgem has selected, whilst improved since SSMD, is below average for both GT and GD.
- Analysis of asset betas for US gas networks for 2-year, 5-year and 10-year estimation windows demonstrates that most betas follow a similar trend and pattern over time and evolve within the same range as each other. Despite differences in regulatory regimes this provides strong evidence that such comparators provide valuable evidence when sense checking a beta range that should not be dismissed, particularly given the limited comparators available for the gas sector. Indeed, the asset beta range resulting from Oxera's analysis (0.28-0.45 for all comparators combined across 2-year, 5-year and 10-year estimation windows) is broadly like the range generated from UK and European comparators Ofgem assesses.
- Oxera considers gas specific comparators across all comparator groups generate a 10-year beta range of 0.40-0.44, which is within the top half of the range Ofgem generates at DD. We and Oxera recognise that Ofgem will attribute weight to a wider set of non-gas/energy comparators. Taking this approach expands Oxera's recommended asset beta range to 0.375-0.45, with a midpoint estimate of 0.41. Selecting a point estimate below this does not appear to fully reflect risks facing the sector and as such, we consider this proposed range of 0.375-0.45 to be appropriate for RIIO-3.

6. Response to questions FQ12-FQ16 on Step-2

FQ12. Do you agree with the conclusions we have drawn from our chosen cross-checks?

Summary of National Gas Transmission's position

75. We disagree with the conclusions Ofgem has drawn from its chosen selection of cross-checks. In particular, we disagree with Ofgem's reasoning for disregarding the evidence shown by several cross-checks proposed by networks in business plans. We therefore consider that Ofgem has applied an inconsistent and potentially biased approach to assessing various cross-checks, resulting in an unrepresentative selection of cross-checks in the Draft Determinations ("DD") with the consequence that Ofgem's conclusion that the CAPM-generated estimate is high enough to pass Step 2 of its process is mistaken.
76. Throughout this response, we refer to the various reports and evidence below that have either previously been provided to Ofgem in the context of the RIIO-3 process or that are being provided to Ofgem alongside this response:
 - NGT's business plan provided to Ofgem on 12th December 2024 ("NGT Business Plan");
 - Frontier's "Updated Cost of Equity Cross-Check Evidence" report prepared for the Energy Networks Association ("ENA") and dated 22 November 2024 and provided to Ofgem on 12th December 2024 ("November 2024 ENA Frontier Report");
 - Oxera's "RIIO-3 Cost of Equity – CAPM Parameters" report prepared for the ENA and dated 8 November 2024 and provided to Ofgem on 12th December 2024 ("November 2024 ENA Oxera Report");
 - Kairos Economics' "Cost of Equity for RIIO-3: Gas vs Electricity and MRM Cross-check" report prepared for Future Energy Networks ("FEN") dated August 2025 and provided to Ofgem on 26th August 2025 ("August 2025 Kairos Report");
 - Frontier's "Updated Cost of Equity Cross-Check Evidence" report prepared for FEN dated 22 August 2025 and provided to Ofgem on 26th August 2025 ("August 2025 FEN Frontier Report");

- Oxera's updated "RIIO-GD>3 cost of equity and debt premium cross-check" report prepared for FEN and dated 22 August 2025, which was submitted to Ofgem on 26th August 2025 ("August 2025 FEN Oxera Report");
- Frontier's "Cross-Check Standards of Evidence" report prepared for ENA and FEN dated 22 August 2025 (the "August 2025 Standard of Evidence Report"), which was submitted to Ofgem on 26th August 2025; and
- KPMG's "Inference Analysis as a Cross Check of Allowed Returns at GD&T3" prepared for FEN and dated August 2025 and provided to Ofgem on 26th August 2025 ("August 2025 FEN KPMG Report").

77. Our response comprises the following sections:

1. Our understanding of Ofgem's general approach to cross-checks of the overall CoE
2. Ofgem has applied inconsistent standards of evidence to its assessment of cross-check options
 - a) Ofgem has focussed on MAR analysis while rejecting Dividend-Growth-Model ("DGM") analysis, thereby unreasonably dismissing the utility of a DGM-based cross-check on TMR
 - b) Ofgem has applied different standards of evidence to hybrid bond cross-check evidence, thereby unreasonably dismissing the utility of a hybrid bond cross-check
3. Further flaws in Ofgem's proposed selection and assessment of cross-checks give rise to an inaccurate assessment of investability of the resulting CoE:
 - a) Ofgem has not reasonably considered the outcome of its infrastructure fund implied IRR cross-check in its CAPM assessment
 - b) The breadth of outcomes of Ofgem's proposed MAR cross-check suggests Ofgem's proposed CAPM-based range may be underestimating the true CoE
 - c) Ofgem's proposed OFTO bid implied IRR cross-check does not provide a relevant point of reference
 - d) Ofgem unreasonably dismissed the utility of a long-term profitability benchmarking cross-check
 - e) Ofgem unreasonably dismissed the utility of an ARP-DRP cross-check
 - f) A Multi-Factor Model cross-check should be considered to ensure the CoE in the gas sector is accurate
4. Conclusions on the inaccuracy of Ofgem's CoE and suggested way forward

1. Our understanding of Ofgem's general approach to cross-checks of the overall CoE

78. The use of cross-checks in assessing the CAPM-derived CoE is essential when testing whether the overall package can be considered credible and investable. In the DD, Ofgem has proposed to continue to use the cross-checks proposed in its RIIO-3 SSMD decision, i.e. listed Market-to-Asset-Ratios ("MARs), Offshore Transmission Owner ("OFTO") bid implied returns, Investment Managers' TMR forecasts and Infrastructure Funds' implied CoE.
79. Ofgem argued, in its DD Finance Annex paragraph 3.91, that these cross-checks show the reliability of its proposed CoE estimate range (6.04% with March RFR for 60% gearing) as it is within the sensible range of its cross-check analysis. Ofgem also clarified that it does not intend to utilise additional cross-check methodologies analysed and proposed by networks in their business plan submissions, notably including a hybrid bond cross-check proposed by Frontier (November 2024 ENA Frontier Report) and the Asset Risk Premium-Debt Risk Premium (ARP-DRP) relationship proposed by Oxera (November 2024 ENA Oxera Report). Both methods utilise observable market data on the cost of debt to estimate the required equity return given the higher risk profile of equity investments and as such were, and continue to be, considered by networks valuable evidence in sense checking the CAPM-generated CoE.

2. Ofgem has applied inconsistent standards of evidence to its assessment of cross-check options

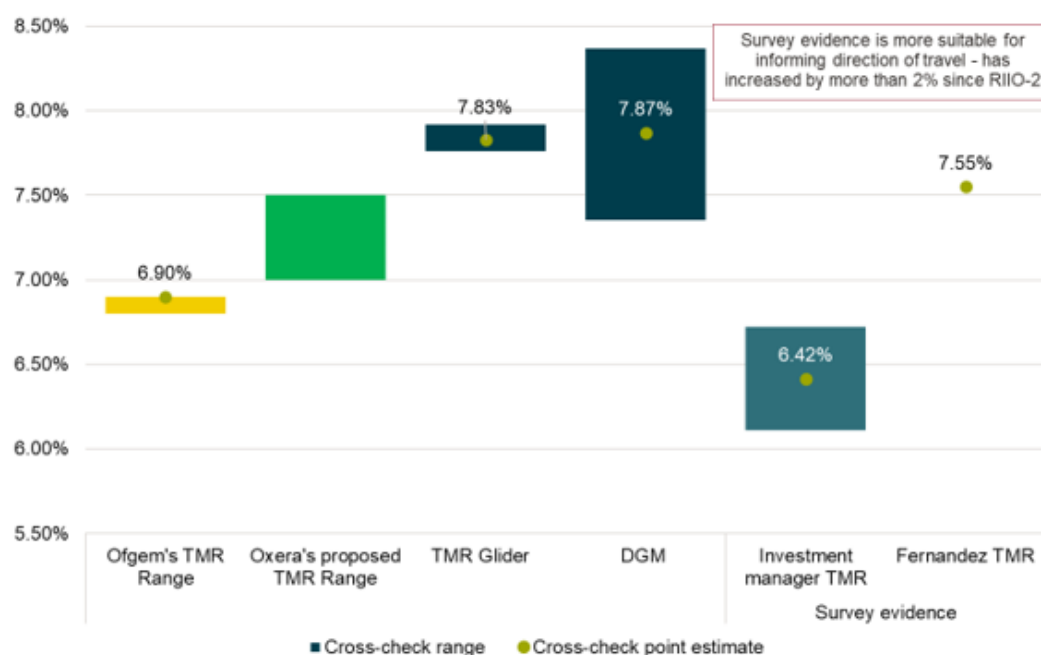
80. Frontier was appointed by both the ENA and FEN to review Ofgem's reasons for not relying on hybrid bond cross-checks of CoE, and DGM-based cross-checks of TMR that had been proposed by networks prior in the lead up to the DD. The August 2025 Standard of Evidence Report is submitted alongside our response^{xiv}.
81. Frontier's investigation suggests that Ofgem has not duly appraised the merits of different types of cross-checks in a consistent and objective manner, which introduced bias in its assessment of which cross-check methods to adopt or reject and ultimately lead to unreasonable conclusions (see e.g., page 3 of the August 2025 Standard of Evidence Report). Frontier underlined that if Ofgem did apply a consistent analysis and standard of evidence to the cross-checks recommended by networks and their consultants, the rejection of debt-based cross-checks such as hybrid bond cross-checks and DGM-based TMR cross-checks would be irrational and not justifiable (see e.g., page 4 of the August 2025 Standard of Evidence Report):
- As is further explained below at section 2a, DGM-based cross-checks on TMR have been rejected due to concerns over DGM-based methods generally. However, this is inconsistent with the fact that Ofgem continues to assign weight to its MAR cross-check when assessing the overall CoE, which relies on the same DGM logic (see e.g., pages 4 and 18 of the August 2025 Standard of Evidence Report).
 - Similarly, as summarised in further detail later in section 2b, the hybrid bond methodology is criticised by Ofgem due to what is perceived to be a low sample size and the need for further assumptions to derive a result. However, this is inconsistent with the fact that Ofgem accepts other cross-checks including OFTO bids, infrastructure fund IRRs that also rely on assumptions and market proxies, often without documenting the sensitivities applied to assess the strength of evidence provided by these cross-checks (which Frontier does do in its analysis, see e.g., pages 25 and 26 of the August 2025 Standard of Evidence Report).
82. It follows that, should Ofgem continue to place weight on the MAR cross-check, it is equally valid to consider DGM-based cross-checks of TMR as evidence. Furthermore, if a consistent assessment of cross-check methodologies that equally applies sensitivities regarding reliance on assumptions and market proxies is applied to the hybrid bond cross-check as it is to Ofgem's favoured methodologies, it too presents valid evidence. As such, FEN appointed Frontier to update its previous cross-check analysis from its November 2024 ENA Frontier Report, upon which Frontier produced the August 2025 FEN Frontier Report, which is submitted alongside our response^{xv}.

2a. Ofgem has focused on MAR analysis while rejecting DGM analysis, thereby unreasonably dismissing the utility of a DGM-based cross-check on TMR

83. Ofgem proposes not to use TMR cross-checks that were recommended by networks and their advisors. These cross checks were assessed and detailed in the November 2024 ENA Frontier Report that NGT referenced in the Finance Annex to its NGT Business Plan provided in December 2024.
84. Ofgem's rationale to rule out the "TMR Glider" as a cross-check rests on its concerns around the DGM that Frontier relied on when estimating a linear relationship between the TMR estimate and gilt yields. Ofgem argues in its DD Finance Annex at paragraph 3.103 that not all companies pay dividends, so the model does not fully represent the market. Furthermore, Ofgem asserts that company dividends might fluctuate or be cut completely which disproves the dividend growth model's assumption of perpetual dividend growth. As Frontier noted both in its updated assessment of cross-checks and its August 2025 Standard of Evidence Report applied to cross-checks methodologies, this seems at odds with Ofgem's own reliance on MARs which places a similar reliance on DGMs (see e.g., page 15 of the August 2025 Standard of Evidence Report). Frontier includes an assessment of Ofgem's rationale in its updated report, demonstrating that it is a widely used technique (see page 20 of the August 2025 Standard of Evidence Report). NGT and other networks therefore continue to see this as a valuable tool for assessing how TMR should react to market conditions.

85. At paragraph 3.106 of the DD Finance Annex, Ofgem proposes not to the use of Fernandez TMR investor survey that was recommended by networks and Frontier on the basis that Ofgem already utilises an investment manager implied CoE cross-check compiled from investment managers' firms. Ofgem also states in the DD Finance Annex paragraph 3.106 that they have no detail about who responded to Fernandez survey. However, due to the sensitivity of Ofgem's own TMR survey results to the sampling method, we recommend supplementing this cross-check with the Fernandez TMR survey. The Fernandez survey includes 82 UK responses in its last edition and draws from a broader range of inputs than the investment manager survey used by Ofgem (see page 25 of the August 2025 Standard of Evidence Report). Despite this, Ofgem's DD Finance Annex implies that 82 responses are too few, while it considers just nine responses sufficient for its own investment manager TMR cross-check, highlighting an inconsistent application standard between its own evidence and that proposed by networks and their advisors (see pages 25-26 of the August 2025 Standard of Evidence Report). The Fernandez survey is consistently reported across editions, making it easier to track trends over time. While survey responses may carry respondent bias, this can be mitigated if the sample size is large enough and the survey design minimises bias. Compared to the investment manager survey, the Fernandez survey appears to better meet these criteria (see page 26 of the August 2025 Standard of Evidence Report).
86. NGT and other networks continue to consider TMR cross-checks as valuable evidence, as presented in Frontier's report (August 2025 FEN Frontier Report) and summarised in Figure 4 below. The report emphasises TMR cross-checks are essential as they improve accuracy and reduce bias. It shows that relying solely on long-term historical averages can lead to systematic over or under estimation of TMR depending on prevailing market conditions. A truly fixed TMR would have had the effect of harming consumers in periods of low interest but in practice, Ofgem materially lowered TMR. In contrast, in today's high-interest rate environment, it risks understating returns, deterring investment. As also NGT stated in its Finance Annex to the NGT Business Plan, Frontier strongly advocates the view that the TMR Glider is not designed to be a predictive TMR model but is instead a helpful tool for regulators to reflect prevailing market conditions when setting the TMR for upcoming price controls. Taken together with the long-run historical average and DGM outputs, this approach provides a balanced set of evidence to be considered alongside Ofgem's survey data to ensure the CAPM-TMR is set at an appropriate level.

Figure 4 Ofgem DD TMR estimates against cross-checks (CPIH-real)



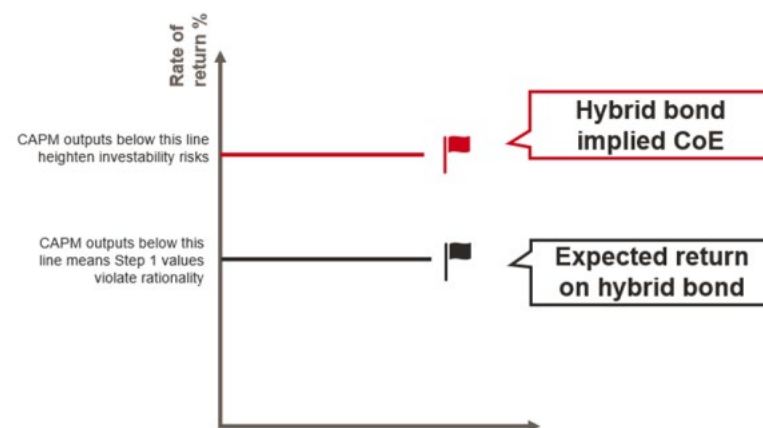
87. As summarised in our response to FQ9, Oxera has set out a range of 7.0%-7.5% in the August 2025 FEN Oxera Report. Frontier's analysis would suggest that this range is more suitable than Ofgem's proposed estimate of 6.9% but could still be moved to a higher range given the result of the TMR Glider in particular.

2b. Ofgem has applied different standards of evidence to hybrid bond cross-check evidence, thereby unreasonably dismissing the utility of a hybrid bond cross-check

88. A key focus of the August 2025 FEN Frontier Report is the hybrid bond cross-check, considered by networks to be a robust approach given it is based on observable market evidence and sound principles on the relationship between debt and equity investor expectations.
89. In Ofgem's DD Finance Annex at paragraph 3.99, Ofgem challenged Frontier's hybrid bond cross-check based on the sample size employed, the accuracy of assessing the equity-like nature of hybrid bonds and the complexity of consistently inferring specific returns from debt pricing due to the variances observed when assessing debt and equity risk premia over time. However, this is inconsistent with the fact that Ofgem does not appear to completely rule out the hybrid bond cross-check given it refers to the result of this cross-check in comparison to its proposed CoE of 6.04%, given that it notes that "Frontier inferred a real CoE of 6.6% from this cross-check which is above our proposed CoE but within our range" (para. 3.99 of the RIIO-3 DD Finance Annex).
90. This is further considered in the November 2024 Frontier Report and the August 2025 Standard of Evidence Report accompanying this Annex. The key conclusions are summarised below:
- Frontier's central analysis in the November 2024 ENA Frontier Report is based on a National Grid hybrid bond, considered to be the most directly relevant instrument. However, as demonstrated by Frontier in its previous report, this was balanced against checking the spread from this bond to that produced by a much wider population of hybrid bonds. It is also noted in the August 2025 Standard of Evidence Report that a similar sampling risk exists in Ofgem's preferred Equity IRR cross-check (see e.g., page 25 of the August 2025 Standard of Evidence Report). Dismissing the hybrid bond cross-check based on sampling risk is therefore irrational when considering that Ofgem did not equally dismiss the Equity IRR cross-check.
 - In respect of the observed variability of hybrid bond spreads, which Ofgem claims makes it difficult to reliably infer required equity returns (albeit acknowledging that they have stayed consistently positive), Frontier notes in its August 2025 FEN Frontier Report that the range quoted by Ofgem to demonstrate the variability is not representative of the sample assessed.
 - Ofgem considers the tenors of hybrid bonds that Frontier referred to in its analysis, which ranged from 5.8 years to 12.3 years (measured by reference to first call dates), make the hybrids less equity-like in nature. Frontier counters in the August 2025 FEN Frontier Report by noting that the equity-like features of these bonds are not limited to tenor, the primary bond utilised had a first call date after 12 years and that credit rating methodologies explicitly account for the equity and debt characteristics of such instruments. As such, we and Frontier do not consider the dismissal of the equity-like features of these instruments to be a valid conclusion.
91. Frontier has updated the proposed hybrid bond cross-check originally carried out in the November 2024 ENA Frontier Report in its August 2025 FEN Frontier Report to generate a gas sector specific output, utilising the IBoxx A/BBB indices and considering the premium on new gas debt recognised by Ofgem at the DD. The implied CoE from this approach is 6.79%.

92. In its August 2025 FEN Frontier Report, Frontier has applied a hybrid-bond rationality check to illustrate how hybrid bond evidence can be used to assess investability risk. The red line on Figure 5 below is the hybrid bond implied CoE; the midpoint of a CAPM being below this level raises a red flag and suggests investability risk is heightened. The black line is the return on a representative hybrid bond. The CoE should sit above this line given the comparative security of a hybrid vs equity, as such where the CoE does not sit above this line a rationality challenge is relevant.

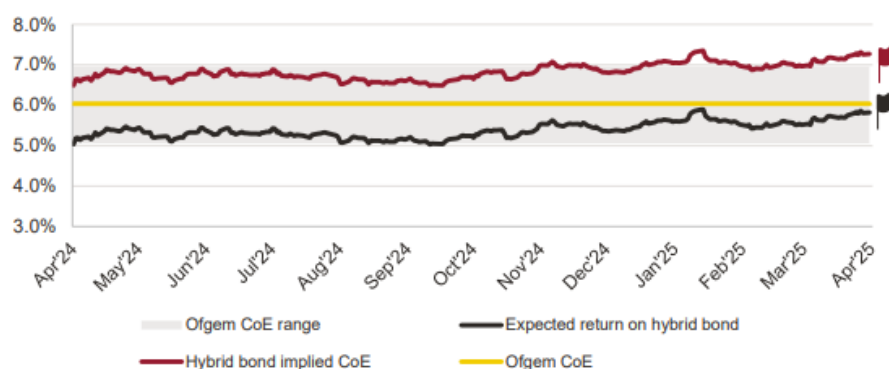
Figure 5 Hybrid bond rationality check illustration with red and black flags



Source: Frontier Economics

93. Frontier goes on to apply these thresholds to actual data in Figure 6 below. This shows that the CAPM point estimate at DD (the yellow line) is materially below the hybrid bond implied CoE and at the end of March 2025 is very close to falling below the expected return on the hybrid bond. Furthermore, almost the entire lower half of the Ofgem CAPM range lies below the hybrid bond return as at March 2025. There is therefore evidence of investability risk in the DD CAPM point estimate and that the lower half of Ofgem's range could be considered irrational when applied to this framework.

Figure 6 Representative hybrid bond return against Ofgem's CoE range



Source: Frontier Economics analysis

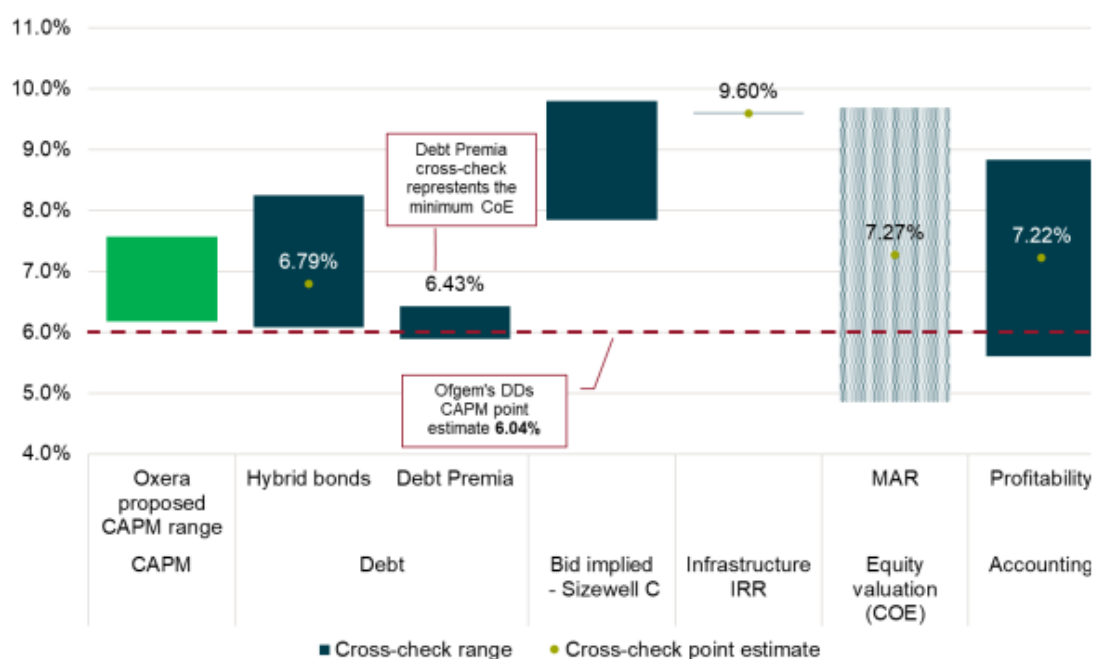
Note: The senior bond yield is calculated as the average yield of iBoxx £ Non-Financials A 10+ and iBoxx £ Non-Financials BBB 10, inclusive of Ofgem's proposed 25bps gas sector debt premium. Nominal values are converted in real terms using the Fisher equation, assuming a 2% inflation rate.
The representative return is calculated as the senior bond yield plus our estimated HB spread of 145bps. This spread represents the default-risk adjusted spread to the NG2073 hybrid bond at issuance.
The Hybrid bond implied CoE is calculated as the senior debt plus our estimated HB spread of 145bps multiplied by two. This is to account for the 50% equity-like feature of Hybrid bonds.

94. Ofgem's CAPM point estimate of 6.04% sits below the range produced by Frontier's updated hybrid bond cross-check analysis, which has a range of 6.1% to 8.3%, which indicates an investability risk and a misalignment with market-based evidence of expected returns. Furthermore, the CAPM point estimate is very close to falling below the return on a representative hybrid, raising concerns that the DD CoE is not sufficient to retain and attract equity.

3. Further flaws in Ofgem's proposed selection and assessment of cross-checks give rise to an inaccurate assessment of investability of the resulting CoE

95. In addition to the bias in Ofgem's approach to selecting relevant cross-checks, there are various additional flaws and deficiencies in Ofgem's proposed selection and assessment of cross-checks.
96. Frontier has previously provided a summary assessment of these cross-checks in its November 2024 Frontier Report. These have been updated in the August 2025 FEN Frontier Report (see Figure 1 below), which demonstrates that Ofgem's proposed CoE of 6.04% sits at the bottom end of a full set of cross-checks and therefore implies an investability risk.

Figure 1 CoE estimates and cross-checks (CPIH-real)

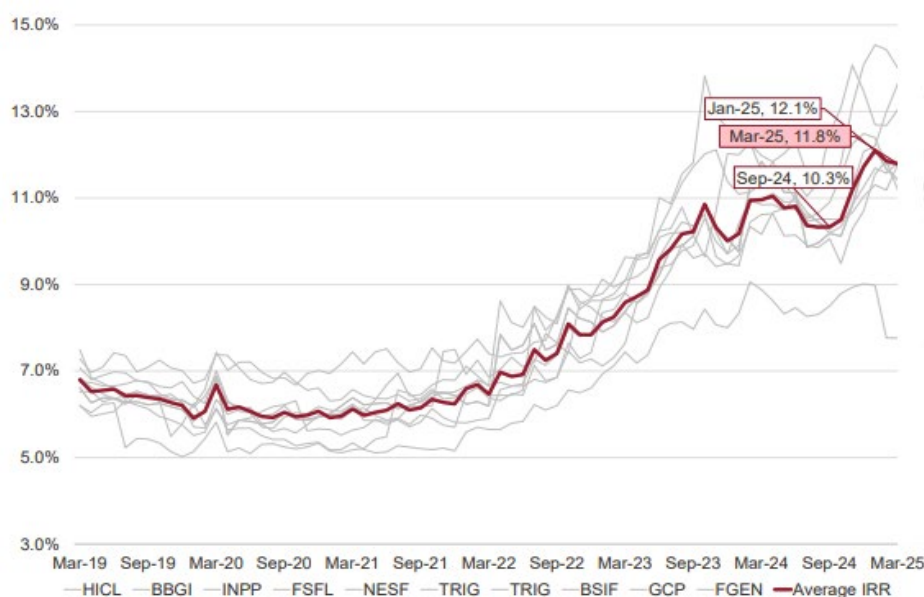


Source: Ofgem, Frontier Economics, Oxera

Note: We consider a 2% CPIH assumption and the Fisher equation to derive CPIH-real values for the cross-checks. For Debt Premia cross-check we present Oxera's minimum CoE to cross-check Ofgem's DDs CoE. We note that a higher minimum is needed to cross-check Oxera's proposed CAPM range.

3a. Ofgem has not reasonably considered the outcome of its infrastructure fund implied IRR cross-check in its CAPM assessment

97. Frontier has also presented an analysis to validate Ofgem's infrastructure fund implied equity internal rate of return (IRR) cross-check as proposed in the DD Finance Annex paragraph 3.97 in its August 2025 FEN Frontier Report. Frontier's findings indicate that the average implied equity IRR stands at 11.8% in nominal or 9.6% in CPIH-real terms, confirming that the upward trend in implied IRR discussed in previous reports has persisted into 2025 (see Figure 8 below). Ofgem itself quotes a result of 10.7% nominal (8.7% CPIH-real) average implied equity IRR (para. 3.3.2 of the Finance Annex), acknowledging this is an increase since RIIO-2. Given that even Ofgem's result is higher than the top end of its CAPM-generated range, it is not clear (or clarified in the DD Finance Annex) how Ofgem satisfied itself that this result is rational and justifies that the CAPM outcome is appropriate.

Figure 8 Nominal infrastructure fund implied equity IRR

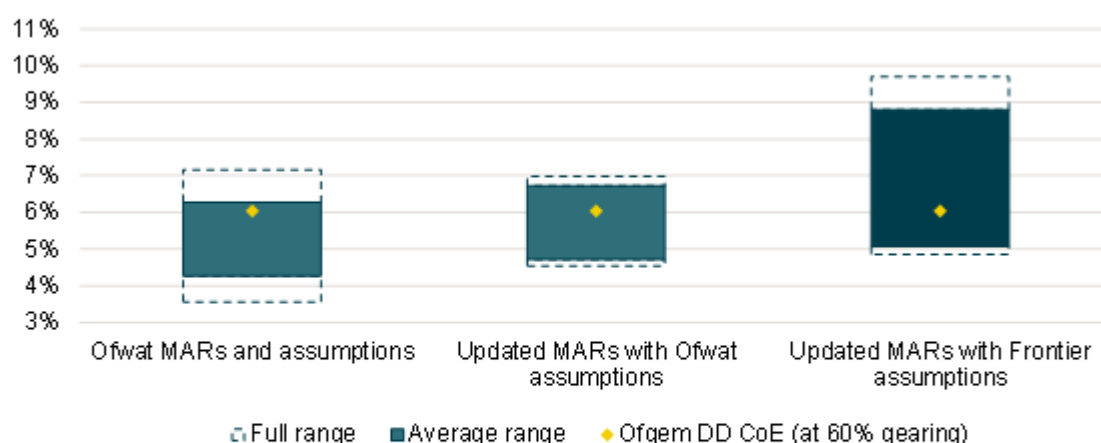
Source: Frontier Economics analysis on Bloomberg data and published reports

Note: Analysis as of June 2025 using the most recent discount rate in annual reports. The analysis excludes 3 funds considered by Ofgem in RIIO-2 (i.e. GRP, JLIF and JLP). For GRP, we have not been able to find the updated net asset value data throughout the period. JLIF and JLP were sold to investment firms in September 2018 and 2021 respectively. We have excluded Greencoat UK Wind (i.e., UKW) series due to a change in the company reporting that made the previous analysis irreconcilable

98. In addition, there are two key insights from Frontier's updated analysis in its August 2025 FEN Frontier Report on Ofgem's proposed infrastructure fund implied equity IRR cross-check. Firstly, the direction of travel; there is a significant shift of 5.4% when compared with RIIO-2. Ofgem's proposed CoE, on the other hand, has increased by only 1.5%, which raises concerns as to whether the CAPM-based allowance is aligned with prevailing market expectations and particularly whether the allowances Ofgem proposes in the DD adequately reflect recent changes in infrastructure capital markets.
99. Secondly, the infrastructure fund IRR lies 3.5-4% above the midpoint of Ofgem's CAPM range. Given that cross-checks are designed to sense check the result of the CAPM, the discrepancy between the infrastructure fund IRR and the midpoint of Ofgem's CAPM range raises questions as to whether and, if so, how this cross-check informed Ofgem's assessment. Although NGT agrees with Frontier's conclusion that while no one test should be considered in isolation, (i) the magnitude of the gap to Ofgem's point estimate of CoE, (ii) the upwards trend in data, and (iii) the lack of a clear and reasoned explanation of whether and how the result of the infrastructure fund IRR cross-check was considered, risks inconsistency and fallibility of the overall assessment.

3b. The breadth of outcomes of Ofgem's proposed MAR cross-check suggests Ofgem's proposed CAPM-based range may be underestimating the true CoE (see Figure 9)

100. NGT welcomes Ofgem's shift to its position at SSMD and placing more weight on traded MARs in the DD, acknowledging the difficulties with the associated lack of information around synergies to interpret a transaction premium. However, as NGT highlighted in the NGT Business Plan, there are important limitations with traded MARs as well. Ofgem's analysis is based on an outdated assessment which requires an update to ensure the assessment remains valid, based as it is on Ofwat analysis undertaken at the time of the PR24 DD. In addition to this, the inference model does not consider National Grid data, business plan incentive awards that influences water companies' CoE and utilises what appear to be very conservative assumptions for RAV growth and RoRE performance which should be updated to be more reflective of prevailing market conditions.

Figure 9 Cost of equity range implied by traded MARs

Source: Frontier analysis

Note: For each company, the MAR multiple used is based on the average of the MARs calculated using the net debt and book value of debt, as shown in Table 3 above. Detailed calculations underlying the construction of this inference range are provided in Annex C. The CoE range corresponds to the average of the company-level minimum, base and maximum values in the Ofwat approach. In our estimation of the implied CoE, we report the full range obtained under the minimum, base and maximum for all companies. We note that water companies are notionally geared at 55%.

101. By considering the listed limitations with MAR cross-check above, Frontier has updated its previous analysis from its November 2024 ENA Frontier Report in its August 2025 FEN Frontier Report and estimated an indicated CoE range of 4.65% to 9.19% (CPIH-real), which suggests a wider range compared to the narrower CoE range of 4.95% to 8.59% when Ofwat's averaging method is applied. There are still limitations in this cross-check that Frontier's suggested improvements do not fully address. However, while Ofgem's proposed CoE falls with modelled range, the breadth of outcomes and the positioning of Ofgem's CoE suggests the CAPM-based range may be underestimating true CoE.

3c. Ofgem's proposed OFTO bid implied IRRs cross-check does not provide a relevant point of reference

102. There are similar issues with Ofgem's methodology on OFTO bid implied equity IRRs as a cross-check. Ofgem's updated estimation of 5.7% CoE is based on OFTO bid implied IRR from 2022-2024. We do not consider this provides a relevant point of reference as a cross-check because there is no construction activities associated with OFTO bids and such entities do not operate under a RAV model. Therefore, we recommend Ofgem eliminates this cross-check from its wider list and instead considers Frontier's suggestion that the bid-implied IRR of the Sizewell C project is a more relevant cross-check given the size and timing of capital expenditure and the presence of a RAB model.

3d. Ofgem unreasonably dismisses the utility of a long-term profitability benchmarking cross-check

103. Ofgem did not place weight on this cross-check and noted that Frontier had not provided an updated estimate in the report submitted alongside network business plans. Now that information is available to perform such an update, Frontier has updated its previous analysis in its August 2025 FEN Frontier Report, which demonstrates an estimated range of 5.6% to 8.8%. As emphasised in the August 2025 FEN Frontier Report, we acknowledge the issues that limit the reliability of this cross-check but note that similar challenges exist in cross-checks that Ofgem does adopt (see para. 6.3.2 of the August 2025 Frontier Report). As such, we consider Ofgem's total dismissal of this method to be irrational and consider that it provides a useful reference point to ensure CoE falls within a reasonable point in the range of profitability metrics. Ofgem's point estimate falls in the lower end of

this range, implying that the CAPM-based CoE may be underestimating the true CoE and causing investability risks to remain.

3e. Ofgem unreasonably dismissed the utility of an ARP-DRP cross-check

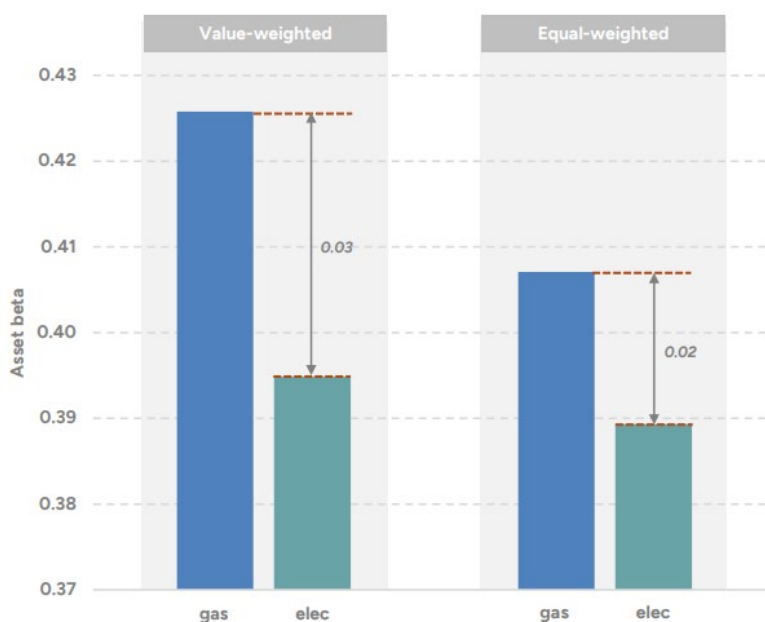
104. Ofgem proposes not to adopt the ARP-DRP relationship as a cross-check for its CAPM-based CoE. Ofgem emphasises the principle that the UK Regulators' Network (UKRN) 2023 Guidance referred to, which asserts that real equity returns do not respond one-for-one with the RFR; hence in Ofgem's view any debt-based cross-check is limited in its ability to definitively set a required return on equity. Ofgem supports its argument by referencing the CMA interpretation that the ARP-DRP cross-check method does not give better insight into the correct cost of capital and the inputs assumed in the methodology are not broadly accepted. As with the hybrid bond methodology and despite this analysis, Ofgem states in its DD Finance Annex that it ran an updated ARP-DRP analysis, which gave a minimum CoE like its proposed CoE, but did not provide any information with regards to its approach and data used to run the ARP-DRP analysis. This inconsistent approach makes it difficult to understand or comment on Ofgem's decision not to adopt the ARP-DRP cross-check.
105. The August 2025 FEN Oxera Report on the application of CAPM in the DD Finance Annex also includes an updated analysis of the ARP-DRP cross-check and a response to Ofgem's assessment of it. This report is submitted alongside our response and in summary sets out the following further points:
- In its critique, Ofgem relies on the assumption of the fixed TMR, whereas the main purpose of cross-checks is to test that assumption. Furthermore, Ofgem states that the ARP is likely to fall when interest rates rise, whereas Oxera's latest specification of the cross-check demonstrates that this is not necessarily always the case.
 - Regarding reference to the CMA's remarks on this cross-check from RIIO-2 appeals, Oxera notes that the ARP-DRP framework has gone through significant development since then.
 - In respect of Ofgem's conclusion that its "broader concern with any debt-based cross-check is that [it does] not consider that it can definitively prove or 'back solve' to a required return on equity", given that this test is not met for any of Ofgem's step 2 cross-checks on the CAPM-based CoE, this does not appear to justify this kind of cross-check being disregarded at DD.
 - Oxera's updated analysis that uses the cost of new debt based on the debt spreads of UK gas network bonds demonstrates that Ofgem's proposed CoE allowance of 6.04% falls short when compared to the key one- and five-year average implied minimum ARP. In contrast, the midpoint from Oxera's recommended CoE range consistently exceeds the implied minimum ARP across all historical average calculations.

3f. A Multi-Factor Model cross-check should also be considered to ensure the CoE in the gas sector is accurate

106. NGT and the other FEN members have also considered Multi-Factor Models (MFMs) as a cross-check of the overall CoE given recent improvements in the methodology, detailed considerations of the approach at PR24 CMA Panel hearings and Ofgem's limited engagement in alternative methodologies previously proposed, albeit as noted above we do not believe disregarding these methodologies to be appropriate. We also note the UKRN 2023 Guidance, in which it is stated that MFMs should be considered when suitable methodologies are identified such that evidence shows that such models meet evidential, transparency and stability thresholds that would justify placing weight on the output of MFMs.

107. In the August 2025 Kairos Report^{xvi}, Kairos Economics, on behalf of FEN, carried out an analysis on the CoE for RIIO-3, and advised in its report that CAPM has known structural flaws because it relies on a single factor, that is market beta, to explain expected returns and omits other relevant sources of systematic risk. It is also argued in the same report that CAPM performs poorly for low-beta stocks like utilities, often underestimating their required returns with the academic research evidence referenced to support this emphasis i.e., Fama & French, Frazzini & Pedersen.
108. Kairos has investigated the MFMs as such models incorporate multiple factors such as size, value, profitability and investment intensity that better capture investor expectations and risk pricing. The q-factor model is applied when deriving a UK CoE given its superior performance compared to alternatives such as the Fama-French Five Factor (FF5F) model. However, factor returns for the q-factor model are not readily available for the European comparators. Therefore, the MFM cross-check is only applied to Ofgem's UK comparators, which estimates a CoE that is on average 30bps higher than the CAPM CoE based on Ofgem's approach of a 10-year historical estimation period of data with no adjustments for exceptional events. Kairos concludes that the reason of the MFM-CoE for the UK comparator set is above the CAPM-CoE is due to the omitted variables in the CAPM, and particularly poor performance of the CAPM for low beta stocks i.e., utilities.
109. The same report considers whether there is evidence of a differential between the compensation required by investors for systematic risk in regulated gas versus electricity assets under the CAPM. To carry out the analysis, Kairos investigated beta estimates of European gas and electricity companies in Ofgem's comparator list, eliminating water companies to investigate sector-specific differences only. National Grid is also excluded as it may not be considered as sufficiently 'pure play' due to its significant investments in network businesses overseas. Kairos' report includes the figure below that demonstrates the range of asset beta estimates for the European comparators and gas and electricity portfolios. Kairos observes a difference in the estimates of the asset betas of gas and electricity portfolios of c.0.03 on a value-weighted basis and c.0.02 on an equal-weighted basis. This implies that there is a difference in systematic risk between gas and electricity networks under the CAPM, which Kairos concludes should not be contemplated as a product of differences in gearing or country-wide differences in regulatory regimes. Kairos calculates the difference using Ofgem's assessment of the parameters of the CAPM at DD Finance Annex Table 17 and reports differences of 0.02 and 0.03 in the asset beta amounts to a 24bps and 37bps impact on the CAPM-CoE respectively, as summarised on the figure below.

Figure: Differences between 10-year daily asset betas of European gas and electricity comparators



Source: LSEG Data and Analytics, Kairos analysis. Notes: 'Gas' represents the portfolio of listed European gas companies in the comparator set (Enagas and Snam) and 'Elec' represents the portfolio of listed European electricity companies in the comparator set (Red Electrica and Terna). Asset betas of the portfolios have been calculated on value-weighted and equal-weighted bases.

110. Kairos concludes that this finding should be captured in the CoE by adopting a higher beta estimate or by selecting a higher CoE point estimate than the midpoints currently proposed at DD for the gas sector. These findings also provide further support to Oxera's analysis of betas in its August 2025 FEN Oxera Report and that are summarised in our response to FQ10 and FQ11.

3g. A debt-based inference analysis cross-check should also be considered when validating the CAPM-based CoE

111. Despite Ofgem's assessment of the ARP-DRP and hybrid bond methodologies, networks remain of the view that the fundamental principle that for equity to remain investible, its expected return must be meaningfully higher than the expected return on debt. As such, as well as commissioning Frontier and Oxera to update their analysis and respond directly to Ofgem's assessment, as summarised earlier in this section, KPMG was also appointed by FEN to publish a report on inference analysis as complementary cross-check on the cost of equity (August 2025 FEN KPMG Report^{xvii}). We note that Oxera and KPMG have both presented debt-based cross-checks to the CMA in recent PR24 hearings as complementary evidence aiming to assess the same question rather than being conflicting methodologies.
112. KPMG's process and conclusions are included in the report submitted alongside this response but in summary, given this method does not assume a constant wedge between CoE and CoD and enables an inferred CoE implied by the changing risk premia (rather than a constant), NGT and other FEN members have adopted this valuable cross-check that addresses Ofgem's concerns about debt-based methodologies. KPMG also notes that inference analysis provides an independent framework in estimating CoE that is not subject to the same estimation issues as CAPM and uses sector debt yields that are directly observable and automatically forward-looking, enhancing the methodology's value as a cross-check of CoE.
113. Utilising the 31 March 2025 data cut off, the range generated by the inference analysis is 6.94% to 7.45%, with a midpoint of 7.20%. This estimate utilised a cost of new debt calculated in line with the method employed by NERA summarised in FQ1 and FQ4. The disconnect between equity and debt pricing implied by the inference analysis and the CAPM-derived CoE range of 5.06% to 6.96% Ofgem proposes at DD may be indicative of a material miscalibration of the allowed CoE. KPMG concludes that the analysis demonstrates that Ofgem's should consider selecting a point estimate at the upper end of its range to ensure sector equity remains attractive relative to debt.

4. Conclusions on the inadequacy of Ofgem's CoE and suggested way forward

114. As discussed above, NGT considers that Ofgem's approach to assessing and selecting cross-check options shows bias and has led to the unreasonable dismissal of DGM-based cross-checks on TMR and hybrid bond cross-checks. As set out in the conclusion to the August 2025 Standard of Evidence Report, if Ofgem applied a consistent quality standard to the available cross-check evidence, it should not dismiss debt-based cross-checks, including hybrid bond and ARP-DRP evidence, or DGM-based TMR cross-checks. Objectively, these cross-checks are superior to those that regulators have chosen to rely on (see page 28 of the August 2025 Standard of Evidence Report Report).
115. In addition, Ofgem's assessment of cross-checks has shown various flaws in methodology. A balanced and corrected set of cross-checks demonstrates that the CoE is too low and there is a risk to investability.

116. In line with our comments above and in order to correct Ofgem's approach, NGT considers that Ofgem should:

- Adopt and place meaningful weight the following cross-checks:
 - A DGM-based cross-check on TMR;
 - A hybrid bond cross-check;
 - An ARP-DRP cross-check; and
 - A MFM cross-check.
- Consider the evidence of direction of travel shown by the long-term profitability benchmarking cross-check
- Adjust its CAPM-based range on the basis of a correct calculation and consideration of its:
 - infrastructure fund implied IRR cross-check; and
 - MAR cross-check; and
 - Exclude its OFTO cross-check from its methodology but instead consider evidence from the recent Sizewell C agreements.

117. By relying on a fuller set of cross-checks as indicated above (and correcting flaws in Ofgem's current methodology), Ofgem can come to a more informed view of market sentiment with respect to the allowed return, allowing it to set the CoE at an appropriate level which mitigates investability risks and protects customers (see page 28 of the August 2025 Standard of Evidence Report Report).

118. The table below summarises results from the cross-check methods NGT considers to be relevant and which are summarised in this response. These findings infer further action is necessary to ensure that the CoE for RIIO-3 is considered investable and is fully reflective of the risks facing networks. The findings of the hybrid bond, ARP-DRP and inference cross-checks, considered the most reliable methods given they can be derived from observable market data, are consistent with the CoE point estimate we conclude is appropriate based on Oxera's work on the application of CAPM in its August 2025 FEN Oxera Report (i.e., 6.84%, rather than the 6.04% proposed by Ofgem). The TMR range proposed by Ofgem is likely to contribute Ofgem's DD CoE range being too low and hence this is further explored in its report and in our response to this question and FQ9.

Method	Implied CoE (CPIH-real, %) (midpoint where relevant)
Hybrid bond	6.79%
ARP-DRP	6.84% (* Oxera's assessment of ARP-DRP is tested against the midpoint derived from its CoE range)
Inference analysis	7.20%
Infrastructure IRR	9.60%
MAR – Equity Valuation	7.27%
Profitability Accounting	7.20%

FQ13. Do you agree with our treatment of risks to the ET and Gas sectors as non-systematic?

119. We understand the theoretical basis Ofgem applies when assessing risk but consider the key consideration is whether investors consider the return on offer to adequate to justify those risks or indeed attractive enough to attract them or retain them in the sector
120. Ofgem considers that only systematic risks that cannot be diversified away by investors should be compensated for in the allowed return. To compensate systematic risks, Ofgem proposes to expand the comparators used to assess beta and to mitigate stranding risk by accelerating depreciation for the GDNs.
121. Whether assuming perfect portfolio is appropriate or indeed practical in the energy sector is perhaps secondary to ensuring that investors are retained or attracted to the sector given the Government policy directions (for example, home heat, hydrogen blending, energy system close allocation and future of gas generally) and energy security requirements that need to be facilitated during RIIO-3 and beyond. We therefore draw attention to the analysis performed on cross-checks (FQ12) and the assessment of gas beta comparators (FQ7 and FQ8), evidence compiled to ensure that risks facing the sector are appropriately accounted for. Of note, both Oxera and Kairos find that there is evidence of an emerging premium between gas and electricity stocks, as has already been evidenced in debt markets.

FQ14. Do you agree with our proposed dividend allowance policies for the notional gas and electricity companies?

122. We do not consider the 3% dividend yield assumption applied to notional financeability assessments to be reflective of the sector.
123. Ofgem proposes to maintain the notional dividend yield assumed for financeability assessments at 3% for RIIO-3, as in RIIO-2. We noted in the NGT Finance Annex that we regard dividend yield as an input assumption which has a direct impact on the equity investors' required return, particularly for open-ended funds. We also compared NGT's dividend yield under its post-separation dividend policy to the industry average, which demonstrated that yields across the UK utility sector had averaged c.5.56% in the period analysed in NGT Finance Annex, demonstrating that National Gas' dividend policy is broadly consistent with market expectations of the peer group. The Finance Annex contained a summary of NGT's dividend policy, which at a high level is based around the allowed return and performance achieved but only once licence obligations, resilience requirements, funding agreements and capital requirements of the consolidated business has been considered.
124. The GDNs also commissioned Oxera to assess the notional dividend assumption and dividend yields across the gas and electricity sector, with the report^{xviii} published alongside GDN business plans. This not only demonstrated a similar trend in average yields (i.e., higher than the notional assumption) but also emphasised the key role that dividends play in an investor's assessment of the value and investability of a business. This assessment was updated in response to DD^{xix}, again demonstrating benchmarking evidence of higher yields in the sector but also emphasising that underlying dividend yields and the consequences of "special" dividends driven by the accelerated recovery of RAV need to be excluded from an assessment of "business as usual" regulated yield.
125. Given the decisions made in respect of accelerated depreciation for NGT and GDNs, the conditions when assessing dividend yields are not directly comparable. However, all the research referred to in our business plan Finance Annex and in Oxera's analysis demonstrates that 3% sits some way below the expectations of investors. Indeed, Oxera's analysis demonstrated a higher average yield for electricity networks as well as gas, despite the different expected investment profiles. Specifically, we note that Ofgem justifies a 3% dividend yield for the ET sector based on anticipated RAV growth during RIIO-3 that will increase dividend potential in future (paragraph 3.109 of DD Finance Annex). As such there is a clear need for Ofgem to re-assess the notional yield assumption (or at the very least perform adequate sensitivity analysis) to ensure that the assumption facilitates an adequate test of financeability that reflects real market conditions.

126. We also note that on submission of our business plan, we performed a separate financeability analysis of our RIIO-3 proposals based on actual funding agreements and NGT's dividend policies, which demonstrated it was financeable and met Ofgem's resilience criteria, as summarised in our Finance Annex. We have also performed scenario analysis utilising Ofgem's DD BPFM which illustrates the current plan remains financeable when allowed cost of equity is utilised as the notional dividend yield.

FQ15. Do you agree with our proposal not to apply the flat WACC approach?

127. NGT and the gas sector is assumed to be geared at 60% and as such is not directly impacted. However, we note findings that demonstrate weighted average cost of capital (WACC) changes little when gearing changes by relatively small amounts.
128. Ofgem proposes not to apply the flat WACC approach for RIIO-3 in its DD Finance Annex. The rationale is that there is lack of robust evidence to continue with the approach as not all sources of capital in the calculation are priced simultaneously. Furthermore, Ofgem's decision to set cost of debt allowances separately for the ET and gas sectors, which we agree with given the market evidence, creates a challenge to adopting the flat WACC approach. The other and main reason for not continuing with the approach is Ofgem's decision for RIIO-3 to separate debt allowances for ET and gas sectors.
129. NGT and the gas sector aligns to the notional gearing level Ofgem generally applies when assessing WACC (60%) and therefore this question is not directly relevant to NGT at DD. However, we do note, as has been recognised in previous price controls, that networks have referred to the finding often attributed to Modigliani and Miller that provided the appropriate changes are made to allowed cost of equity for changes in the assumed notional gearing, the calculated allowed WACC is found to change little with changes in gearing, except when gearing changes significantly.

FQ16. Do you agree that our proposed package for gas and electricity companies is investable?

130. We have presented evidence that cross-checks indicate investability risks in Ofgem's proposed financial package, potentially resulting in short- to medium-term underinvestment and the associated impact on network resilience. We have also raised concerns about the assessment applied to cross-checks presented. As such we consider further action is needed to properly assess cross-check methodologies and to take into account what they show about the point estimates for TMR, beta and CoE generally.
131. Ofgem introduced the concept of 'investability' in its SSMD to expand the financeability assessment carried out for debt investors in previous price controls to consider the needs of equity investors. This was driven by the need to assess the financeability consequences of the potential challenges the sectors may encounter during RIIO-3 and future price controls, notably delivering Great Britain's net zero targets.
132. Ofgem said in the SSMD that investability would be considered through an assessment of equity financeability, primarily measured via cross-checks to its CAPM-implied cost of equity at 60% notional gearing for the gas sector. Ofgem stated that this would be supplemented by the assessment of additional risk factors, equity issuance costs and picking a point estimate from the cost of equity range.
133. Ofgem's approach to the use of cross-checks and NGT's response are explained in our response to FQ12. In essence, NGT concludes that Ofgem's concerns raised particularly for debt-based and DGM based cross-checks on TMR are insufficient to rule them out from Ofgem's assessment of investability. It is recognised that no cross-check methodology is infallible but similar concerns to those Ofgem raise about proposed alternative methodologies are present and accepted in various other elements of Ofgem's own cross-check methods. Therefore, NGT strongly recommends Ofgem revisits employing the cross-checks proposed in our response to FQ12, appropriately considering the evidence and counter arguments provided by NGT, other networks and supporting consultants.

134. Alternative measures proposed by networks were generally rejected by Ofgem, including references to dividend yields. In our response to FQ14, we have set out our assessment of Ofgem's assumption that it is appropriate to retain a 3% dividend yield for electricity and gas sectors for RIIO-3. In our Finance Annex we summarised analysis that average dividend yields across the sectors are higher than this level at c.5.56%, as also explained in our response to FQ14. This was supplemented by a report prepared by Oxera^{xx} for the gas distribution networks, which among other findings demonstrated an average dividend yield of 5.24% in 2018 and 8.5% in 2024 for European gas networks. As we also summarise in our response to FQ12, NGT's dividend policy is aligned to the allowed return subject to an assessment that the business has sufficient funds to meet other requirements. This evidence is more reflective of investor requirements and as such, Ofgem should re-consider this assumption at RIIO-3, at least aligning the assumption (or a scenario test of it) to the allowed return granted.
135. Ofgem proposes to address additional or potential changes in risk relevant to RIIO-2 within the financial framework via the estimation of an appropriate beta and through policy choices, for example proposing to address stranding risks by accelerating depreciation for GDNs in RIIO-3. NGT responded to Ofgem's proposals on beta in our combined answer to FQ10 and FQ11 in which we summarised that NGT welcomes Ofgem's inclusion of additional beta comparators for RIIO-3, given the risk of the gas sector being underrepresented in the sample utilised at RIIO-2. However, NGT proposes Ofgem considers an additional update to the asset beta estimate considering relevant developments and a reassessment of evidence on US beta comparators to consider the risks that gas networks might face in RIIO-3.
136. Ofgem follows the UKRN Guidance to adhere to the midpoint of the cost of equity range for its point estimate, having said that this is best applicable when CAPM ranges are symmetrical and regulators should only deviate from the mid-point of the CAPM cost of equity range if there are strong reasons to do so, as advised in the UKRN recommendation 7. Ofgem stated, in its DD Finance Annex paragraph 3.124, that the evidence considered does not indicate that there are strong reasons to deviate from the mid-point of our CAPM cost of equity range. However, as we referred numerous times in our response to the DD, cross-check evidence provided in FQ12 demonstrates a higher range of cost of equity is appropriate to fairly reflect the risks networks facing. Further to evidence presented elsewhere, for the financial package to be considered financeable cross-checks need to be responded to carefully at FD.
137. Ofgem concluded in its DD Finance Annex that it is not appropriate to increase the equity issuance allowance in its current form (5% for gas and electricity sectors) given the lack of historical data specific to equity issuance costs at the companies subject to RIIO-3. This is not directly relevant to NGT and therefore we have not responded to that matter within this response.

7. Response to question FQ17 on expected versus allowed returns

FQ17. Do you agree with our working assumption that there is risk symmetry within the aggregate balance of the whole price control?

138. We do not consider that Ofgem's proposals in aggregate across the price control result in risk symmetry for NGT.
139. Any assessment of whether price control proposals result in risk symmetry should be an "in the round" assessment considering the broad range of factors that influence network performance. We support the principle that the finance package should result in a balanced risk/reward assessment and note the rationale and assumptions employed when Ofgem has assessed average RoRE ranges for NGT and other networks (paragraph 3.143 and Figure 32 of the Finance Annex). However, Ofgem's assessment does not take into account the likelihood of out- or underperformance in this analysis, applying is it does a symmetrical range by design of +/- 10% Totex performance and incentive results at the performance cap and collar only. Our assessment of DD indicates more downside risk than opportunity at this stage. As detailed in our responses to Ofgem's consultation questions and requests for further evidence, we would reasonably expect different outcomes at FD, notably in Totex allowances and incentives but also consider there to be sufficient evidence for a different FD

outcome for the financial package. We would therefore expect a reassessment of the risk symmetry of the FD at that point.

140. At this stage there are several indicators of downside risk inherent in the DD proposals:

141. **Cost of Equity:** an important stage of assessing whether the return reflects an appropriate response to the risks of investing in networks are the cross-check methodologies summarised in our response to FQ12; evidence suggests that the optimum balance has not yet been reached, albeit the position has improved since SSMD. However, the gas sector in particular faces significant uncertainty given the continuing Government consultation process on the future of gas, new technologies, asset transfer values etc. that have not yet been fully addressed by the regulatory framework. If the Cost of Equity is set too low, networks will start the price control with downside performance built in, requiring them to outperform on other elements of the framework to deliver an appropriate level of return to investors. Our analysis summarised below indicates there is limited opportunity to compensate for a return that is set too low.
142. **Cost of Debt:** as summarised in our responses to FQs 1-6, the recognition that the framework needs to respond to the premium observed on new gas debt is a positive development but we note evidence presented by NERA that an assessment of the proposed allowance against interest rate scenarios more consistent with networks' recent experience demonstrates that a higher calibration adjustment than proposed is required; otherwise gas networks will not be able to fully recover borrowing costs. We also note that the overall calibration of allowances results in significantly higher headroom for the ET sector across all scenarios than Ofgem considers necessary for the GD> sector (paragraph 2.116 and Table 13 of the Finance Annex). Whilst we acknowledge that the ET sector is calibrated alongside EDs for the purposes of benchmarking the allowance, there appears to be significant risk asymmetry between the networks that will be subject to the RIIO-T3/GD3 price control period.
143. **Real Price Effects:** as detailed in our response to OVQ18, the proposed RPE mechanism leaves GT with the lowest inflation protection of all networks (paragraph 6.53 and Figure 12 of the DD Overview Annex) (50.4% not covered by RPEs correcting for error of including plant and machinery coverage indicated in Figure 12, vs an average for ETOs of 10.3% and GDNs of 8%). This level of coverage does not seem reasonable when considering the objective of the RPE mechanism and broadly comparable business models with the TO's in particular. We present what we consider to be causal factor for this imbalance and how it should be corrected in our response to OVQ18. If not addressed, this proposal creates a greater risk of NGT not being able to recover efficiently incurred costs than other networks.
144. **Ongoing Efficiency:** as detailed in our response to OVQ19, the proposed efficiency threshold is materially higher than benchmarks indicate, assuming regulated networks can outperform other sectors. Economic Insight's analysis and the evidence presented in its report (see response to OVQ19) demonstrates that 1% per year is well above the plausible achievable range and is unsupported by the evidence available from benchmarks. In our view, the most likely outturn is 0.5% per year, in line with our business plan and our response at DD. Under this scenario, NGT is left with a £61m shortfall driven purely by ongoing efficiency being set at an unreasonable level (calculated based on DD Totex, which would obviously increase should Totex increase at FD). This shortfall increases to £86m if Ofgem's earlier starting point is not amended. Even based on Ofgem's own consultants' findings, Ofgem ongoing efficiency challenge is likely to lead to a shortfall:
 - Grant Thornton carried out analysis of historically observed productivity growth based on EU KLEMS data and found that the evidence points to ongoing efficiency between 0.1%-1.3%.
 - If outturn OE is 0.7% (the mid-point of Grant Thornton's range), this will lead to a shortfall of £25m.

- In fact, if we assume that the probability of achieving a given level of productivity is evenly distributed across the range of 0.1% - 1.3%, in expected terms a network operator will underperform Ofgem's OE target 75% of the time (since Ofgem's target sits at the upper quartile of the range).

145. **Totex:** The DD is a challenging assessment for NGT in a few areas that currently creates higher risk of underperformance than outperformance. In particular:

- Asset health investment creates risk and asymmetry between sectors. As detailed in our response to GTQ54, DD proposals result in a 200% increase in network risk as measured via the NARMS framework. In addition, as summarised in our Executive Summary to our response to DD, evidence suggests that NGT has been able to spend 2.4x as much as NGT across the RIIO-T1/T2 periods despite similar average MEAV. Given licence obligations to maintain a safe, reliable and resilient network, this creates significant downside risk for NGT, as indeed occurred in RIIO-1 when it was necessary to overspend allowances by c.£300m to maintain acceptable levels of asset health across the network and IT. Furthermore, our proposals for T3 asset health have been significantly cut at the DD, which will result in an increase in network risk across T3 vs T2 levels if not addressed
- As summarised in our response to GTQ42, Ofgem proposes to cap risk and contingency allowances at 10% for all projects regardless of project maturity and the subsequent risk assessment. NGT employed industry standards on how risk should be measured and valued in its proposals, often resulting in higher risk percentages. This proposal could have several consequences outside of the clear risk of underperformance vs the allowance granted, for example:
 - the requirement to contract with subcontractors in a such a way that shares remaining risk, most likely resulting in a higher cost and
 - certain projects may need to be managed via further UMs if an acceptable level of risk is not arrived at, increasing complexity of the deal and potentially delaying projects.
- As detailed in our response to GTQ44, significant unit costs adjustments have been made because of Ofgem's median approach to assessing historical unit costs, which disregards work mix and contingency costs.
- Several IT systems risk reaching unsupported status without our proposed, externally benchmarked allowance being granted (see responses to GTQ45 and GTQ51 in particular).
- We have several concerns regarding the trend analysis and regression techniques applied to indirect costs, notably how NGT data has been treated within it and adjustments Ofgem has made to enable a comparison to ETOs for certain cost categories. As summarised in our response to questions GTQ48 and GTQ49, these appear to put NGT at a disadvantage.

146. **Incentives:** based on engagement with Ofgem since DD and our analysis of proposals, we again expect movement from the position at DD but at this stage, we do not consider the proposed incentives to represent a fair balance of risk and reward or to be symmetrical. Target calibration proposals at this stage requires unprecedented performance in areas where NGT is not always in complete control or where obligations force different behaviours (i.e., emissions from compressors vs requirement to ensure appropriate pressures throughout network based on customer requirements) or where better performance is expected despite a higher risk profile (i.e., constraint management). Certain incentive calibration proposals may even disincentivise networks to go beyond core obligations given the complexity of delivery vs the potential upside granted (i.e., halving of CSAT target without detailed explanation and setting unrealistic minimum survey numbers). Our assessment of incentives is summarised in our responses to GTQ2-12 and GTQ22-27.

8. Response to questions FQ18-FQ20 on debt financeability

FQ18. Do you agree with our approach to assessing financeability?

147. We broadly understand Ofgem's approach but note that the dividend yield assumption is not consistent with conditions in the sector. Ofgem's approach should be updated to take into account changes to credit rating methodologies, which tightened investment grade thresholds and raised higher business risks associated with the energy transition for gas companies. This should include a full assessment of remaining headroom given at revised Moody's thresholds, headroom is removed under some scenarios.
148. Ofgem confirms its position on financeability parameters and explains its rationale in detail in Chapter 5 of the DD Finance Annex. The position broadly aligns with that taken in RIIO-2 as it focuses on a target credit rating of Baa1/BBB+, utilisation of the Moody's rating scorecard and the retention of adjustments to capitalisation rates as a tool to address financeability challenges, while assuming notional gearing levels for each sector. The results of financial projections using Ofgem's BPFM are then assessed against these measures and stress tested.
149. We broadly agree with this approach and our own financial policies and approach to assessing financeability broadly align to Ofgem's policy. We have noted in the past (including in our responses to SSMD and in our Finance Annex) that whilst we agree adjusting capitalisation rates (or indeed asset lives) does have the effect of improving cashflows in the short term, material adjustments of this type of risk undermining key regulatory principles. Firstly, inter-generational fairness; a material move away from the natural capitalisation rate risks recovering too much or too little from the current generation of consumers. Secondly, long term financeability of networks may be undermined by a material acceleration of allowances to compensate for inadequacies in the wider financial package. We comment on the capitalisation rates applied to NGT in RIIO-3 in our response to FQ30.
150. As summarised in FQ14, we also note that retention of the 3% notional dividend yield assumption as not fully reflective of the financing policies employed and investor expectations of the sector. This is particularly the case considering decisions made in respect of accelerated asset lives for the GDNs.
151. NGT's business plan was shown to be financeable using Ofgem's tests, both adopting Ofgem's SSMD proposals for the financial package and NGT's alternative financial package. This was detailed in our Finance Annex. Based on our analysis of the BPFM that Ofgem issued at DD, we agree that NGT's DD Totex plan and Ofgem's Financial framework meets Ofgem's financeability criteria for the RIIO-3 period, noting expected changes to credit rating thresholds summarised below. Whilst we present alternative evidence for the setting of inputs to the financial package, these are therefore based on observations of market evidence and the expected application of such evidence by Ofgem, recognising the many options investors have to deploy their capital.
152. NGT's financeability approach does focus on the notional company to estimate financial parameters such as cost of equity, cost of debt, gearing and financial metrics in line with the Ofgem practice explained in the DD. NGT also targets a strong credit rating consistently across the financial package. Ofgem does consider in the DD that the baseline credit quality of an efficient gas licensee adopting the notional capital structure is, in the round, generally stronger than BBB+/Baa1, which was the target rating that NGT aims to retain for various reasons outlined in our Finance Annex.
153. However, it is important to underline the reaction of credit rating agencies to Ofgem's proposals for RIIO-3. As mentioned in NGT Finance Annex, Moody's has performed an assessment of its rating criteria as certain ratios (or the thresholds) utilised in that assessment may no longer be fit for purpose. For example, the acceleration of the recovery of allowances from future periods due to the implementation of semi-nominal WACC and the shortening of regulatory asset lives is likely to cause the AICR (Adjusted Interest Coverage Ratio) to be deemed no longer fit for purpose. As we noted in our Finance Annex, Moody's was always likely to 'look through' this change and amend the thresholds for this ratio or replace it altogether. Fitch also referred in its response to Ofgem's SSMD^{xxi} that under the 'accelerated depreciation profile', cash post-maintenance interest coverage

ratio (PMICR), under its current definition, would become less relevant and stated it could therefore introduce new credit metrics to better reflect some project finance-like features, or adjust the PMICR calculation, or place greater reliance on net debt/RAV and networks' financial policies.

154. Moody's released its assessment on 29 July 2025^{xxii}, stating that "we currently estimate that the generic expectation at the start of RIIO-3 for a Baa1-rated gas network company in Great Britain would be an AICR of at least 1.6x, compared with 1.4x currently, and net debt/RAV no higher than 72%, compared with 75%". This change was prompted by Moody's assessment of higher business risks for gas networks than electricity, driven by "uncertainty associated with the detailed pathway and timeline to net zero as well as potential risks of future policy decisions". Whilst not published at the time of our response, we expect Standard & Poor's to perform a similar review and potentially restate investment grade thresholds.
155. Given these changes, we expect Ofgem to re-assess financeability assessments considering new thresholds at FD and a full consideration of whether headroom is considered adequate. According to the tests built into the BPFM, our business plan would meet revised Moody's AICR thresholds at the required investment grade, however headroom is much reduced in all scenarios; under a "Low RoRE" scenario there is no headroom at all (average headroom using x1.4 AICR target was 0.53, with the lowest result ("Low RoRE") being 0.20. At x1.6 average headroom across scenarios reduces to 0.33 with the lowest result (again "Low RoRE") being nil). This result demonstrates the need to reassess financeability taking into account revised thresholds.

FQ19. Do you agree with our proposal to adjust bucket 2 capitalisation rates from natural rates to 85% for all ET licensees to support financeability? Are there alternative measures that stakeholders consider more appropriate?

156. NGT has not submitted a response to this question.

FQ20. Do stakeholders have views or evidence on long-term financeability considerations, including the appropriateness of the proposed asset lives?

157. The long term financeability modelling provided in the DD Finance Annex is relatively limited given what Ofgem terms "necessary simplification", but we recognise the importance of testing financing assumptions on a longer-term basis than simply referencing the next price control period.
158. Ofgem explained its long-term modelling of the main financial ratios employed in shorter term modelling (FFO/Net Debt, PMICR and AICR) in paragraphs 5.69-5.75 of its DD Finance Annex. The approach relies on extrapolating RIIO-3 price control policies, current macroeconomic environment and capitalisation rates in RIIO-4 and RIIO-5. Totex is also assumed to be equal to RIIO-3 levels; NGT assumes this refers to DD as this is not explicitly stated.
159. According to the figure 119 that Ofgem provides in paragraph 5.72 of its DD Finance Annex, which focuses on NGT, AICR remains relatively flat, hovering just below 2.00 throughout the RIIO-3, RIIO-4, and RIIO-5 periods, above Moody's current investment grade threshold. As noted in our response to FQ18, this threshold has already been superseded, and the assessment should therefore be reassessed. The same Figure 119 plots NGT's nominal PMICR (Fitch), accounts for maintenance costs before interest payments, offering a more conservative view. On average the projected PMICR exceeds Fitch's nominal PMICR threshold but is erratic and falls marginally below the threshold (2.00) in 2031, before stabilising for RIIO-4 onwards. This may imply a mismatch between maintenance and/or capital expenditure and revenue recovery in projections, which should be reassessed once final Totex plans are understood or implies a financeability issue in 2031 in isolation that has not been addressed by the DD proposals.
160. Ofgem also provides the summary of its FFO/Net Debt projections covering the years 2027 to 2041, utilising both Moody's and S&P methodologies. Both remain compliant with thresholds throughout the period assessed.

161. In respect of asset lives, as summarised in our response to FQ25, we support Ofgem's conclusions on asset lives for RIIO-3, but we recommend this is reassessed for RIIO-4 given the Government policy consultations ongoing and decisions due during RIIO-3. As such, the long-term modelling Ofgem has performed would have benefited from scenario analysis to illustrate the impact of different decisions in RIIO-4 or later (as it would from more scenario analysis generally, particularly inflation scenarios given changes to RAV indexation and allowances proposed for RIIO-3).
162. NGT also appreciates Ofgem's consultation on asset valuation methodology which NGT responded to on 1 July 2025. NGT also shared an example of an internal illustrated analysis with Ofgem recently that demonstrates how transmission assets could be repurposed for hydrogen and carbon capture and storage (CCS). However, both RIIO-3 DD and the consultation on asset transfer values left various issues unresolved, such as the life applied when valuing assets for transfers and the treatment of decommissioning/disconnection costs. Such issues are repeatedly raised by credit rating agencies and have, in Moody's case, resulted in the tightening of both AICR and gearing ratios.
163. These are long term financeability considerations that have not to be addressed in proposals or modelling.

9. Response to question FQ21 on financial resilience

FQ21. Do you agree with our proposal to implement the Financial Resilience measures as laid out in our SSMD and the proposed methodologies set out above?

164. We broadly agree with Ofgem's proposals and consider the right balance of enhanced resilience visibility and assurance, without imposing undue restrictions on networks, has been reached. NGT is already compliant with proposals as drafted.
165. Ofgem proposes in its DD Finance Annex to proceed with implementing the financial resilience measures as laid out in its SSMD, being the requirement to hold two investment grade credit ratings (previously "reasonable endeavours" to maintain one), a dividend lock up imposed at 75% regulatory gearing or a credit rating of BBB- with negative outlook and an extended period to be considered when issuing Availability of Resources certificates each year.
166. NGT is committed to maintaining strong financial resilience, recognises the need to continuously review financial resilience measures and indeed has engaged in constructive discussions with Ofgem's Financial Resilience team in recent months to demonstrate this. Introducing measures that are too restrictive risks interfering with the core principle of network choice of financing strategies. As we underlined in the NGT Finance Annex, we consider that these measures reach the appropriate balance of allowing networks to set their own financing strategies, given such measures stop short of imposing restrictions on networks' financing strategies, whilst giving Ofgem more information and foresight of potential issues. NGT already holds two investment grade credit ratings, with issuer ratings (outlook) of Baa1 (stable) and BBB+ (stable) for Moody's and Fitch respectively, indicating substantial headroom to the lower threshold of investment grade. These ratings are dated 11 March 2025 and 2 April 2025 respectively. Actual debt covenants are already well aligned to dividend lock up proposals.
167. Further to the above measures, Ofgem introduced additional requirements for the FY24 Regulatory Financial Performance Reporting (RFPR) pack submitted in September 2024, with which NGT complied. FY25 reporting requirements remain consistent but we have kept Board assurance processes and documentation under review throughout, with the aim of enhancing our submission if and where necessary for the FY25 RFPR, which will be submitted in September 2025.

10. Response to questions FQ22-FQ30 (FQ24 and FQ26 not applicable)

FQ22. Do you agree with the proposed position that by including robust protections within the Price Control Financial Handbook, a tax forecasting penalty is not required?

168. We agree that a tax forecasting penalty is not required as part of the RIIO-3 regulatory framework.
169. The potential for a tax forecasting penalty was also recently raised by Ofgem through the PCFM Working Groups and Licence Drafting Working Groups and we similarly responded that such a mechanism was unnecessary.
170. Ofgem has noted (in para 7.81 and 7.82 of the RIIO-3 Draft Determinations – Finance Annex) that the Price Control Financial Handbook (PCFH) has been updated to reflect Ofgem's view that a Tax Review may be undertaken where a material unexplained variance would have arisen had the PCFM variable values been updated in line with the behaviour of a notional efficient company.
171. The PCFH is being consulted on through the RIIO-3 Licence consultation process and as such any update is only proposed rather than adopted at this stage. Our concerns with the licence and PCFH drafting, including Ofgem's proposed protections are raised through the licence consultation process running in parallel to the determinations process.

FQ23. Do you agree definitions for ANDt and TDNI should be updated to reflect the principles outlined in paragraph 7.41?

172. In respect of Ofgem's proposal to include interest accretion net of paydown within the definition of net debt (an approach which NGT initially shared its supporting view, per SSMD Finance Annex paragraph 7.25), we would like to further explore with Ofgem whether shrinkage volatility could artificially inflate ANDt in the tax clawback gearing test, particularly in periods of high shrinkage costs where revenue recovery lags. As emphasised in our Finance Annex, there were periods during RIIO-GT2 when actual shrinkage costs significantly exceeded the regulatory allowances, and the shortfall was temporarily financed through NGT's own facilities. Given gearing is measured at year end for tax clawback purposes, these short-term, non-controllable timing effects artificially inflate ANDt and risk a threshold breach which is not related to financing behaviour. We therefore see merit in revisiting the calculation of tax clawback for RIIO-3 licence drafting and associated reporting tools (e.g., PCFM, RFPR), to exclude such timing effects and better align with how gearing is calculated in NGT's debt covenants.
173. Further to this, we have no other challenges to the proposed updates, however, offer the following two clarifications. In respect of the decision to exclude CIR disallowances from TDNI:
- Paragraph 7.61 states that a standalone UK company can use the Group Ratio Rule to ensure that no interest is disallowed in its tax return. We would point out that there are certain circumstances where a disallowance can still arise if net group interest expense is revised downwards in the group ratio calculation, for example due to the requirement to apply a notional disregard election to derivative FV movements.
 - Paragraph 7.71 states that no licensee has reported any unrecognised deferred tax assets on disallowed interest, which affirms that CIR disallowances are viewed temporary in nature by licensees. We would point out that NGT plc has an unrecognised DTA of £5m arising on £20m of disallowed interest under CIR which predominantly arose in FY22 and based on current forecasts this will not be reactivated over the RIIO-3 period, thus NGT plc does effectively view this as a permanent disallowance.

FQ24. What are your views on our proposal to accelerate depreciation for new assets only in GD and is there any further evidence you would like us to consider before we reach a final decision?

174. NGT has not submitted a response to this question. Please note the response to FQ25.

FQ25. Do you agree with our proposal to maintain the existing depreciation policy for gas transmission assets?

175. We support the proposal to maintain the existing depreciation policy, specifically the 45-year sum-of-digits approach, for gas transmission assets. This method remains appropriate given the current stage of the energy transition and the evolving role of the gas transmission network.
176. Maintaining the existing policy provides stability and predictability, which are essential for investor confidence and long-term planning, and retains consistency with the core regulatory principle of inter-generational fairness. This is because it aligns with the best available evidence at this stage, including analysis by organisations such as the National Infrastructure Commission and NESO, which demonstrates an enduring role for the gas transmission network. This analysis, as summarised in our Finance Annex, showed the likelihood of the network being required to support intermittent power generation and the repurposing opportunities identified for gas transmission assets, particularly in supporting the transition to net zero through potential future use in hydrogen or CCS networks. These requirements or opportunities extend the economic utility of existing assets and value to customers, reinforcing the rationale for a longer depreciation profile.
177. We continue to support Ofgem's principle that any stranding risk associated with gas network assets needs to be addressed via the RIIO framework. We also recognise that the future of the energy system and particularly the gas networks continue to be subject to Government consultation and there are, therefore, several open policy decisions that Ofgem and NGT will need to respond to at the relevant time. As such, we support Ofgem's proposal to retain the existing regulatory asset life for RIIO-3 but to reassess it at RIIO-4.
178. We do recognise that aligning the regulatory asset life with the period over which consumers will derive value is one element of this decision, the other key input being an assessment of the consumer bill impact on a reducing population of consumers. As Ofgem itself points out at the DD, the comparative impact of NGT's charges is very small but we recognise that the point needs careful consideration. A refreshed assessment of the key regulatory principle that the right set of consumers should pay for an asset over the right period is relevant to this assessment as the user base for the gas transmission network evolves (for example, its increasing role in supporting peak, intermittent power generation as a backup to renewable generation). We therefore recommend that Ofgem considers the charging mechanism during RIIO-3 to ensure that network charges are recovered from the correct population of consumers, which may mean spreading gas transmission network charges over a wider population of gas and electricity consumers. This helps mitigate concerns over recovering charges from a falling population of consumers but also reflects an updated assessment of a core principle (and not a change to that principle). Any changes should ensure that Great Britain remains an attractive location for gas, ensuring supplies are available to meet demand at a cost that is fair. This would include both treatment in determination of Allowed Revenues and the methodology for its recovery, through NTS Transportation charges and impacts to consumer bills.

FQ26. Do you agree with our proposal to maintain the existing depreciation policy for electricity transmission assets?

179. NGT has not submitted a response to this question.

FQ27. Do you agree with our proposals for the RAM thresholds and adjustment rates?

180. We agree with the proposals.
181. The RAM threshold for RIIO-3 that have been proposed are consistent with the current RIIO-2 RAM thresholds, both in terms of measure of the thresholds and being based on an assessment of operational performance only (i.e., excluding financing and tax performance). This continues to align with the established principle that financing strategy is a network's choice. Given the operation of these RAM thresholds throughout RIIO-2 we do not see a robust case for change in this area and NGT agrees that the thresholds are set at that current level to protect the consumers and networks from the risks of delivering a price control.

FQ28. Do you agree with our proposal to include programmes such as ASTI within RAMs?

182. NGT has not submitted a response to this question.

FQ29. Do you agree with our proposals for RAV Indexation?

183. Ofgem's proposals are the logical result of its approach to setting cost of debt allowances.

184. Ofgem's position on this matter is consistent with SSMD, being to adopt a nominal allowance for fixed-rate debt in line with the notional capital structure and delinking the respective portion of the RAV corresponding to the notionally assumed level of fixed-rate debt. The indexation of the portions of the RAV assumed to relate to ILD and equity are unaffected. As noted elsewhere, granting a nominal allowance for fixed rate debt increases cash allowances in RIIO-3 at the expense of RAV indexation in the long-term, as referenced in our response to FQ20. This policy decision was made to address Ofgem's concerns regarding inflation and our commentary is included in our response to FQ5. However, we agree that the proposed RAV indexation approach is the logical result of that policy decision.

185. Ofgem also flagged, in its DD Finance Annex paragraph 10.4, that its proposed approach to RAV indexation requires minor modification for the final year of RIIO-2 and the first year of RIIO-3, in order to ensure that the closing balance of RIIO-2 reflects the full year's inflation for 2025/26, but this issue has not yet been addressed in the DD and will be implemented at FDs. We agree with the objective of this proposed change.

FQ30. Is there any additional evidence we should consider to improve our setting of regulatory capitalisation rates?

186. Ofgem's proposal to set capitalisation rates at 100% for Uncertainty Mechanisms does not reflect the established regulatory principles of aligning to the natural capitalisation rate and should be amended.

187. In our Finance Annex we stated that the regulatory capitalisation rate should remain aligned to the natural capitalisation rate inherent in the agreed business plan, which Ofgem appears to have adopted in the DD for baseline Totex. We would expect this approach to be continued at Final Determination once evidence presented elsewhere in our response to Ofgem's Totex proposals at DD has been considered.

188. We do not agree with Ofgem's assessment of capitalisation rates for Uncertainty Mechanisms at 100% is consistent with this principle. If the same principle has been applied, this implies that Uncertainty Mechanisms result in no incremental non-capex costs, which experience of RIIO-2 UMs and other positions assessed in our response indicate is not the case.

189. In RIIO-2 this was recognised and dealt with via the opex escalator for relevant projects. As summarised in our response to GTQ49, it is proposed that the opex escalator is removed primarily to simplify the UM regime. If this proposal is adapted, our recommendation is that this is addressed by RIIO-3 UM submissions being costed appropriately (i.e., fully costed including capex, opex, direct and indirect cost categories) and maintaining the opex escalator for in scope projects granted during RIIO-2.

190. The implication of both positions is that the natural capitalisation rate for UMs is unlikely to be 100% on average. Assessing on a case by case basis would add complexity to the UM process and therefore we recommend one rate for UMs across the RIIO-3 period, as in RIIO-2.

191. Based on the high-level cost ranges provided for UMs with our RIIO-3 Business Plan, natural capitalisation rate would be c.90%, which should form the capitalisation rate for RIIO-3 following the principles described above.

11. Response to questions FQ31-FQ36

FQ31. Do you agree with the approach to maintain the RIIO-2 treatment for disposal of assets?

192. We broadly agree with the proposals in respect of isolated, less material asset disposals but do not consider them appropriate to transfers of assets into new businesses.
193. We broadly agree with the proposal to maintain the RIIO-2 approach to asset disposals, which treats disposals as a negative Totex adjustment. We would like to highlight that this approach has not appeared to function effectively in RIIO-2 due to the issues with the interaction between the RRP and the PCFM, which will hence require some type of close-out process.
194. We do not agree that this approach is suitable for specific asset transfers, such as transferring to a hydrogen network. Under the current framework (Standard Special Condition A27), disposals result in an in-year Totex reduction, triggering fast-money effects and impacting the Totex Incentive Mechanism. This would create a mismatch between the asset's transfer value and the amount ultimately recovered, raising concerns around revenue recovery and investor value.
195. We recommend that Ofgem consider enhancements to the disposal treatment to address these issues, particularly in the context of asset repurposing. As outlined in our recent consultation response^{xxiii}, a clear and robust regulatory framework is needed to support asset transfers, including:
- Defined mechanisms for asset transfer that go beyond the current disposal framework;
 - Transparent treatment of allowed revenues, capital recovery, and taxation; and
 - Mechanisms to ensure that repurposing costs, especially those incurred pre-transfer, are recoverable, even if the receiving network is not yet fully established.
196. We also urge Ofgem to consider the implications of repurposing on disposal treatment. For example, where assets are repurposed rather than decommissioned, the regulatory framework should ensure that natural gas consumers are not left bearing residual risks or unrecovered costs. A bespoke adjustment mechanism may be required to allocate costs fairly between the transferring and receiving networks, particularly during early-stage market development. Further details are available in our consultation response referenced above and are also raised in our response to the separate RIIO-3 licence consultation.

FQ32. Do you agree with the proposal for the ex ante base revenue definition we will use to calculate the re-opener materiality thresholds?

197. NGT's response to OVQ13 includes an assessment of the base revenue definition Ofgem proposes to apply when assessing re-opener materiality.

FQ33. Do you agree with the proposal for how we will set ODI caps and collars at final determinations that are fixed for the duration of RIIO-3?

198. Our responses to questions GTQ2 to GTQ27 detail our assessment of Ofgem's Output Delivery Incentive (ODI) proposals, including in respect of how incentive scheme caps, collars and targets should be set.
199. Whilst it is not clear to NGT how Ofgem has set caps and collars with reference to RoRE (para. 11.68 of the DD Finance Annex) given the limited detail shared on how this has been performed, we have not raised any issues regarding fixing cap and collars for the duration of RIIO-3.

FQ34. Do you agree with the proposal to move to using nominal WACC as the single uniform TVOM?

200. We concur with this proposal.

201. As summarised in the DD Finance Annex, two different rates are applied to revenue true ups, to which a rate of interest is applied. In RIIO-2, the interest rates applied to the adjustments across the sectors are nominal WACC for historical revisions to PCFM model inputs including incentive revenue earned by past performance and SONIA + 115bp for charging errors. Ofgem proposes to maintain its SSMD decision of using nominal WACC as the single uniform TVOM for RIIO-3. The rationale of the change from RIIO-2 practice is to simplify the process with the move to licensees self-publishing their allowed revenue, which according to Ofgem eliminates a potential gaming risk when there are multiple rates for different sources of error.

FQ35. Do you agree with the proposed base revenue forecasting penalty mechanism?

202. Whilst we recognise the rationale for introducing such a penalty, we disagree with the inclusion of factors beyond NGT's control in the assessment.

General comments

203. Ofgem proposes to introduce a mechanism to apply a penalty in relation to differences between base revenue forecasts and actuals (being the sum of fast money, pass-through costs, RAV depreciation and return) (paragraph 11.96 of the Draft Determination Finance Annex ("DDFA")). NGT recognises the need for Ofgem to have a means of incentivising licensees to submit the best possible forecasts of costs which are forecastable and controllable by licensees and in that respect does not oppose in principle the introduction of a base revenue forecasting penalty ("BRFP"). We agree that base revenue is an appropriate starting point for the application of a revenue forecasting penalty and that a waiver process should be introduced alongside the penalty regime allowing Ofgem to waive some or all the penalty by direction.

204. However, we consider that further adjustments should be made to remove the routinely non-controllable elements of base revenue from the assessment of the penalty mechanism and set out our reasons below. While NGT welcomes Ofgem's proposal to carve out the effects of inflation on base revenue as it "is outside of licensee's control" (para 11.110 of the DDFA), NGT has serious concerns with Ofgem's proposal for the BRFP to apply to other costs outside of the reasonable control of the licensee, i.e., pass through costs and Uncertainty Mechanism allowances.

205. We have previously raised these concerns in PCFM and Licence Drafting Working Groups and via Ofgem's issues logs associated with these groups. We refer to these previous discussions and direct Ofgem to our responses through the parallel licence consultation process. In addition, we set out below a summary of our concerns as to the aspects of these proposals (including points where there is a lack of clarity as to Ofgem's proposals). We consider that when these concerns are taken into account, Ofgem should reconsider its proposals, and we have set out a proposed way forward for the final determination.

206. Generally, for the reasons set out below, we consider it is not reasonable or proportionate to include non-controllable costs within the BRFP. In particular, we consider including non-controllable costs in the BRFP to be inconsistent with the duties on Ofgem to:

- carry out its functions in the manner which it considers is best calculated to promote efficiency and economy on the part of persons authorised by licences to carry on any activity; and
- have regard to the principles under which regulatory activities should be transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed.

Ofgem's inclusion of non-controllable factors in the proposed BRFP mechanism appears to be inconsistent with the stated rationale for introducing a BRFP

207. Ofgem's apparent reason for the introduction of the BRFP is that "this would penalise poor forecasting" (para 11.96 of the DDFA). In addition, at para 11.97 DDFA its rationale for this approach is that "we think it is therefore reasonable and proportionate to incentivise accurate forecasting as misforecasting would result in accurate bills, which could result in consumer detriment."

208. Given Ofgem's apparent rationale for its approach to the BRPF, NGT disagrees with Ofgem's decision to include non-controllable costs in the BRPF. This is because licensees cannot be incentivised to provide better forecasting on non-controllable costs because these are, by their nature, unknown and out of their control.
209. Ofgem appears to recognise this but tries to mitigate the effect of this approach to non-controllable costs via the waiver mechanism. At para 11.96 of the DDFA, it states, "we propose to have a mechanism whereby Ofgem may waive some or all of the penalty by direction if the [forecasting] error is caused by factors outside of the reasonable control of the licensee" (see also para 11.98 DDFA). This appears to be an acknowledgment that licensees should not be penalised for non-controllable costs, but rather than removing such costs from the BRPF in the first place, this approach places undue and significant reliance on the operation of the waiver request mechanism (which we address in further detail below).
210. This approach also appears to be inconsistent with Ofgem's approach to carve out the effect of inflation on base revenue on the basis that this is outside of the licensee's control "and we do not want to set a penalty that will result in routine waiver requests" (para 11.110 of the DDFA).

Specific non-controllable costs which should be removed from the BRPF mechanism

211. NGT opposes the inclusion of the following particular costs within the BRPF mechanism:

- Pass-through costs:
 - We note that at para 11.112 of the DDFA, Ofgem states that "the headroom that the proposed thresholds indicate should provide licensees with comfort that the penalty would not be triggered routinely. While these costs may be non-controllable, we are satisfied that they should still be forecastable in the short term".
 - NGT agrees that these costs are non-controllable and note that Ofgem has defined GT-specific pass-through costs (within the RIIO-3 Draft Determinations – Gas Transmission Annex at page 79, in the description of the "Purpose" of GT specific pass-through costs) as "...costs that are substantially outside of its [NGT's] control...". However, we disagree with Ofgem's rationale for including pass-through costs within the penalty assessment on the basis that these should be forecastable although non-controllable. We consider that the non-controllable nature of these costs poses a significant challenge to forecasting. Contrary to Ofgem's assumption that this would not result in the penalty being triggered routinely, NGT considers that the inclusion of pass-through costs in the BRPF is therefore more likely to result in triggering the penalty, the waiver process being utilised frequently, and therefore causing persistent and significant administrative burden on Ofgem and licensees.
- Uncertainty Mechanism Allowances:
 - Whilst re-opener submissions are prepared by the licensee, the re-opener allowances are decided upon and directed by Ofgem. Licensees are expected to include their best estimate of the information available at the time of forecasting to derive the Allowed Revenue which informs charge setting. The GT2 PCFM Guidance sets out that where a licensee has not received a direction or minded-to position from Ofgem, "the licensee may use the same values included in its application or the actual costs incurred in the Regulatory Year, whichever is lower" as its forecast position.
 - Therefore, where Ofgem's allowance direction differs from the re-opener submission values this could result in a position where a licensee's adherence to the PCFM Guidance could result in triggering the revenue penalty. We consider that this is an unreasonable position and that re-opener allowances should also be excluded from the base revenue penalty assessment. This would be consistent with the treatment of inflation and pass-through costs as being outside of a licensee's control.

Ofgem's reliance on the waiver mechanism is inefficient and it is not clear whether Ofgem have taken into account all relevant considerations in relation to the regulatory burden such mechanism would place on licensees

212. NGT's position is that it is not efficient or in the interests of consumers for the default approach to be for the penalty to apply to costs that Ofgem has already recognised should be subsequently waived. This is reinforced by the fact that it is unclear to NGT whether Ofgem has taken into account all relevant considerations on the increased regulatory burden on licensees (or on Ofgem itself) that this waiver process would undoubtedly introduce:

- For example, at para 11.102 of the DDFA, Ofgem states, "Our analysis did not indicate that penalties would be routine or that there would have been a significant administrative burden resulting from numerous waiver requests as suggested by some companies". However, Ofgem has only offered a high-level description of its analysis being, "We examined historical AIP data from the RIIO-2 period and applied a 6% penalty threshold for differences between forecast and outturn base revenues in each period". However, this does not provide NGT with sufficient information to interrogate this analysis or Ofgem's conclusions from it that penalties would not be routine or that there would not be a significant administrative burden resulting from waiver requests.
- In addition, Ofgem has not provided sufficient information in relation to the proposed waiver process, including the relevant criteria or the required evidence that a licensee would be expected to produce. Ofgem has also failed to provide clarity on the waiver process timelines and how long the waiver process may take to produce an outcome (especially given multiple licensees could be going through the process at a similar time). Such information clearly has an impact on the burden that such a waiver mechanism would place on licensees.
- The waiver application must be concluded prior to publication of the Price Control Financial Model to correctly capture the charges for the forthcoming year. Due to the lack of detail on the process, it remains unclear how Ofgem intends to ensure the outcome of the waiver process will be concluded in a timely manner and thereby ensure that the process itself does not undermine Ofgem's policy goal of accurate charges.

We propose an improved approach to the BRFP mechanism

213. We consider that non-controllable and non-forecastable costs should be excluded from the BRFP. We therefore agree that inflation is a non-controllable and non-forecastable cost and so should be excluded. We consider that this principle should be applied consistently to all costs within base revenue which are similarly non-forecastable and/or non-controllable including pass-through costs and Uncertainty Mechanism Allowances.

214. While we acknowledge and support Ofgem's inclusion of a waiver process to remove elements of the penalty determined as outside the licensee's control after the fact, the high degree of remaining discretionary freedom this allows Ofgem creates unnecessary regulatory risk (and is inconsistent with the way Ofgem is required to carry out its statutory duties – see point 1. In addition to the effect of inflation, we therefore propose the removal of all non-controllable and non-forecastable factors from the BRFP, i.e. pass-through costs and Uncertainty Mechanism allowances.

Ofgem has provided Insufficient information regarding application and administration of the penalty for NGT to be able to meaningfully respond

215. In addition to the above points on the waiver mechanism, NGT considers that there is a lack of clarity in Ofgem's other proposals around the BRFP, particularly regarding the application and administration of the penalty. In particular:

- Ofgem has not clarified within the DDFA when the forecasting penalty would commence. Given that base revenue to be included within the first regulatory year of RIIO-GT3, 1 April 2026 – 31 March 2027, will be forecast and included within charges prior to the publication of Final Determinations, we consider that the forecasting penalty should be applied at the earliest to Year 2 (1 April 2027 – 31 March 2028) published revenue. It is of clear importance for licensees to understand when the penalty will apply from.
- Whilst we agree with Ofgem's proposal to remove the impact of inflation from the penalty assessment, the mechanism through which this will be achieved is also unclear.

216. Subject to further information on the above, NGT therefore reserves the right to comment further on these aspects of the proposal.

217. We also direct Ofgem to our responses through the parallel licence consultation process.

FQ36. Do you agree that the thresholds have been set appropriately?

218. We understand how Ofgem has derived proposed thresholds. However, given our position on the inclusion of non-controllable elements of revenue discussed in our response to FQ35 and potentially material movements in Totex by FD that these thresholds need to be reviewed at FD.

219. Ofgem has set the thresholds for the penalty forecast based on an assumed headroom of around 20% movement in fast money plus pass through costs.

220. Whilst we disagree with the inclusion of pass-through costs in the penalty assessment and calculation of the threshold (see response to FQ35), we do not have any substantial disagreement with setting the threshold at 6% for NGT TO and 12% for NGT SO. However, we propose that these levels are discussed further with Ofgem prior to the publication of Final Determinations as the aspects of the regulatory framework which materially impact base revenue (e.g., totex allowances, capitalisation rates) are finalised.

ⁱ GDNs & NGT Cost of Debt at RIIO-3 dated 22 August 2025_NERA and Gas Network Premium (GNP) and Additional Cost of Borrowing (ACB) for GD/GT3 dated 19 August 2025_NERA

ⁱⁱ Gas Network Premium (GNP) and Additional Cost of Borrowing (ACB) for GD/GT3 dated 19 August 2025_NERA

ⁱⁱⁱ Gas Network Premium (GNP) and Additional Cost of Borrowing (ACB) for GD/GT3 dated 19 August 2025_NERA

^{iv} Index-linked Debt for the Notional Company dated 25 October 2024_Economic Insight

^v Full Report prepared for the ENA on Additional Cost of Borrowing for RIIO-3 Price Control dated 22 February 2024_NERA

^{vi} Gas Network Premium (GNP) and Additional Cost of Borrowing (ACB) for GD/GT3 dated 19 August 2025_NERA

^{vii} Full Report prepared for the ENA on Additional Cost of Borrowing for RIIO-3 Price Control dated 22 February 2024_NERA

^{viii} NGT_A09_Finance Annex_RIIO_GT3, Chapter 4.1.1, page 22-23

^{ix} RIIO-GD>3 cost of equity and debt premium cross-check prepared for FEN dated 22 August 2025_Oxera

^x Oxera Report prepared for the ENA - RIIO-3 cost of equity-CAPM parameters dated 8 November 2024

^{xi} Estimating the risk-free rate for RIIO-3 prepared for FEN dated August 2025_KPMG

^{xii} NGT_A09_Finance Annex_RIIO_GT3, Chapter 4.1.3, page 25-26

^{xiii} RIIO-GD>3 cost of equity and debt premium cross-check prepared for FEN dated 22 August 2025_Oxera

^{xiv} Cross-Check Standards of Evidence prepared for the ENA and FEN dated 22 August 2025_Frontier

^{xv} Updated Cost of Equity Cross-Check Evidence prepared for FEN dated 22 August 2025_Frontier

- ^{xvi} Cost of Equity for RIIO-3: Gas vs Electricity and MFM Cross-Check dated August 2025_Kairos Economics
- ^{xvii} Inference analysis as a cross-check on allowed returns at GD&T3 prepared for FEN dated August 2025_KPMG
- ^{xviii} Gas distribution networks' dividends in RIIO-GD3 prepared for GB gas distribution networks dated 3 December 2024_Oxera
- ^{xix} Dividends in RIIO-GD/GT3 prepared for FEN dated 20 August 2025_Oxera
- ^{xx} Gas distribution networks' dividends in RIIO-GD3 prepared for GB gas distribution networks dated 3 December 2024_Oxera
- ^{xxi} Fitch Ratings Report - What Investors Want to Know: RIIO-3 Sector Specific Methodology Decision dated 14 November 2024, page 3, paragraph 5
- ^{xxii} Moody's Gas Networks - Great Britain_Broader policy uncertainty on energy transition increases business risk_page 6, paragraph 4
- ^{xxiii} National Gas Transmission Consultation Response - National Gas Asset Repurposing Valuation Methodology", dated 1 July 2025