

An aerial photograph of a high-voltage electricity pylon standing in a lush green field. The pylon is a complex metal lattice structure, and several power lines extend from it across the landscape. The field is divided into sections by thin lines, possibly furrows or paths. The overall scene is bright and clear, with the green of the grass being a dominant color.

nationalgrid

Finance Annex Document Response

National Grid Electricity Transmission

August 2025

The regulatory and financial framework for RIIO-T3 must enable us to attract the capital required to deliver the consumer and societal benefits of the energy transition. Our plan includes a total investment of £35bn, an increase of 2.5 times from RIIO-T2, as part of the delivery of £80bn across electricity transmission. In order to deliver this investment, NGET will require £9bn to £10bn of notional fresh equity during the next price control. We remain fully committed to playing our part in this national endeavour to deliver the Clean Power 2030 (CP2030) mission and realising the overall consumer and society wide benefits of achieving net zero. However, the regulatory framework set out in the Draft Determinations is not yet investable.

We share the aim that the framework needs to ensure that companies can access “*sufficient and low cost investment capital*” to fund investment, and agree that Ofgem’s new net zero duty requires it to “*offer consistency, clear signals and direction so as to provide certainty and assurance to investors that projects are viable, investable and deliverable.*”¹ We agree with the overall objective that has been set out for RIIO-T3 “*to implement a regulatory framework for energy networks that will help GB accelerate its transition to a clean power system by 2030.*”² It is critical that RIIO-T3 has a workable framework of reopeners that is deliverable, investable and financeable to achieve these objectives.

We welcome the continued positive intent expressed by Ofgem on both financeability and investability, and we recognise the changes to the financial package since the Sector Specific Methodology Decision (SSMD) as a positive step. This includes:

- introduction of a Regulated Asset Value (RAV) weighted cost of debt;
- commitment to strong investment grade credit metrics equivalent to Baa1/BBB+;
- adjustment to capitalisation rates in light of financeability challenges; and
- introduction of European comparators for beta in the cost of equity

We welcome the explicit recognition that the network portion of the bill will need to increase, and that this increase is expected to pay for itself in terms of reduced constraint costs and protecting customers from wholesale price volatility. However, these changes do not go far enough, and the package is not yet investable as the Draft Determinations fail to create the conditions needed to secure the unprecedented increase in investment required. They also do not meet Ofgem’s objective to “*Create a competitive environment that protects consumers while attracting the scale of capital investment required, with fair but not excessive returns for investors.*”³

The Draft Determinations put at risk our collective Clean Power 2030 mission and the associated benefits for consumers and society, including reducing and stabilising bills, and improving energy security. This will inevitably have a detrimental impact on consumers, and it will also hinder the Government’s ability to meet its goal of driving economic growth.

Investors require earnings which keep pace with asset growth and nominal equity returns of 9 to 10% for high performing networks. Based on our analysis, the Draft Determinations deliver on the first of these but are far short of achieving the second because:

- The baseline equity return is too low and must be increased to at least 6% at 55% gearing in the Final Determinations;
 - The financial framework for electricity transmission needs to be competitive in the real-life global competition for significant equity; and
 - Cross checks clearly demonstrate the baseline equity return of 5.64% (55% gearing) is too low to compensate for the inherent risk faced by business, and given the returns available elsewhere, will not attract new equity;
- There is downside risk across the framework, including the position on totex and reopeners, that lowers expected returns further; and
- The incentive framework is incomplete and insufficient to bridge the gap to 9 to 10% nominal returns for efficient, high performing companies

There is strong rationale for Ofgem’s proposed cash solutions as the minimum required to support debt financeability, and these should be maintained.

The financial framework for electricity transmission needs to be competitive in the real-life global competition for significant equity

¹ Ofgem, RIIO-T3 Sector Specific Methodology Decision, Finance Annex, paragraph 1.6

² Ofgem RIIO-3 Draft Determination Overview Document, page 8

³ Ofgem RIIO-3 Draft Determination Overview Document, page 96, paragraph 9.2

There has been an enormous amount of change since the RIIO-2 price controls were finalised and the scale of investment in RIIO-T3 of nearly c.£80bn across the electricity transmission networks is unprecedented (this compares with c.£20bn in RIIO-T2). At the same time, there is fierce international competition for capital across global markets, the inherent risk profile of the electricity transmission sector has increased significantly due to the scale of the investment alongside the associated scale up of supply chain and labour, and networks need to raise new equity as well as new debt to fund their investment programmes.

Providers of capital have a choice of where to invest. At the National Grid investor roundtable held with Ofgem in March 2025, equity investors were clear that they need to be able to see a credible pathway to a nominal return on equity of at least 9 to 10%. The base equity return is an important component of this, however in addition there needs to be sufficient visibility through the design of the incentive framework that high performing efficient networks can make up the difference between the base return and the 9 to 10% required by investors.

There is a host of supporting evidence for this including:

- returns available in US utilities of 9 to 10%, this is a particularly important comparison given the sheer size of the US energy investment requirement;
- recent announcements from UK listed water companies on targeted nominal returns (e.g. Severn Trent, Pennon targeting >9%); and
- inputs from the Global Infrastructure Investor Association (GIIA) into the recent Cunliffe review.

More recently, Centrica announced their Sizewell C investment, this also provides a strong viewpoint of the level of return and package that are required to attract capital into a significant multi-billion investment under a traditional regulated asset base (RAB) model (though this is less than half the investment needed in electricity transmission).

It is not credible that electricity transmission has a lower equity return than gas networks given the scale of equity to be raised. Ofgem state in the Draft Determinations that gas and electricity have the same level of risk and has given the gas and electricity networks the same beta. However, as electricity transmission has a lower gearing at 55% it has a resulting lower equity return. This makes the electricity networks look unattractive to investors and was specifically raised by Bernstein at the Ofgem RIIO-T3 investor call on 1 July who questioned why an investor would put their money into electricity transmission, when it could generate similar returns with much lower risk by investing in gas.

The context of global competition is particularly important. Investors have been encouraged by the positive intent from Ofgem regarding investability through the RIIO-T3 process and are carefully assessing the final framework for RIIO-T3 to ensure it follows up on that commitment. National Grid's May 2024 rights issue rightly referenced Ofgem's intentions regarding this as set out in the Sector Specific Methodology Consultation (SSMC). Attracting capital to deliver what is needed by 2030 is only the beginning of the process of delivering the energy transition in the UK, and the decisions made by Ofgem this year on investability will influence investor decisions on where to place equity in the future.

Cross checks clearly demonstrate the baseline equity return of 5.64% (55% gearing) is too low to compensate for the inherent risk faced by the business, and given the returns available elsewhere, will not attract new equity

Ofgem concluded in the SSMD that cost of equity cross checks would be the primary tool for assessing investability at RIIO-T3. However, Ofgem has failed to properly consider cross check evidence and this is one of the key reasons Ofgem has proposed a baseline return that is not sufficient:

- **Inconsistent and unbalanced standard of evidence:** Ofgem are not applying equal standards of evidence when selecting and rejecting cross checks. In the Finance Annex Ofgem state *"our broader concern with any debt-based cross-check is that we do not consider that it can definitively prove or 'back solve' to a required return on equity."*⁴ This fundamentally misunderstands the role cross checks play in determining the cost of equity and creates an insurmountable bar, as no cross checks meet this threshold. Ofgem is inconsistent in its approach to cross checks. For example, Ofgem has rejected the evidence on the total market return (TMR) glider stating concerns with the dividend growth model (DGM), but DGM is also used in the market-to-asset ratios (MARs) cross check.

⁴ RIIO-3 Draft Determination - Finance Annex, Ofgem, paragraph 3.100

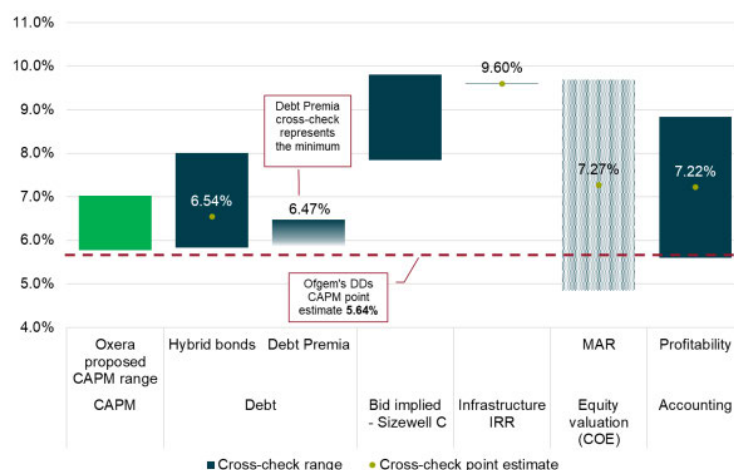
- **Ofgem cross checks:** Ofgem has relied on their preferred cross checks from RIIO-2; the three sector allowed return cross-checks have an average midpoint of 6.5%⁵, which is 90bps higher than the Draft Determinations allowed return for the electricity transmission sector.
- **Debt based cross checks:** Ofgem has discounted the strong evidence provided by new debt based cross checks, such as hybrid bonds, that consider the returns investors can achieve on lower risk debt capital. Gilt rates have risen by 300-400bps since RIIO-T2 and the premia for equity returns versus lower risk debt returns must remain attractive. These cross checks all suggest a lower bound of 6.5%.
- **US utilities returns:** In the Draft Determinations, Ofgem stated they “do not think US nominal returns in the region of 9% are significantly higher than the 7.7-8.2% cost of equity (nominal, assuming 2% inflation) we are proposing in RIIO-3.”⁶ We strongly disagree with this statement, a difference of 130bps relevant for electricity transmission networks is highly significant to investors decisions and will result in capital being deployed to the US rather than the UK.
- **Sizewell C competitive CoE⁷:** This cross check evidence is further bolstered by the recent allowed returns for Sizewell C under a traditional RAB model. Centrica has stated that the framework agreed includes an equity return of 10.8% (CPIH real, 65% gearing). While new nuclear build is acknowledged to be intrinsically risky, this risk is mitigated by the significant regulatory protections that allow for a strong return even in the downside scenario, estimated by Centrica at 10% nominal. These returns can be considered relatively low risk if 10% is the expectation if the project goes badly. Given the type of investors targeted in this competitive process, this is an important real-world, market tested benchmark for assessing RIIO-T3 returns.

The baseline equity return is too low and must be increased to at least 6% at 55% gearing in the FD

Our RIIO-T3 business plan submitted in December 2024 allowed for a baseline return of 5.83% (CPIH real, 55% gearing). A simple update for current market rates to the risk-free rate would imply a cost of equity of 6.00%.

Oxera has produced a report for the Energy Networks Association that suggests the available evidence lands a 6.38% (CPIH real, 55% gearing) midpoint for the cost of equity and can support a point estimate higher in their range.⁸

CoE estimates and cross-checks (CPIH-real)



There is compelling evidence from all the cross checks and market data that the baseline return proposed by Ofgem of 5.64% (CPIH real, 55% gearing) is too low. This point estimate sits either below, or at the bottom of the ranges produced by the wide range of cross-checks. In contrast, the top-end of the CAPM range set out in Draft Determinations has a greater degree of overlap with the cross-checks set out. Overall, this evidence suggests that significant investability risks remain in the Draft Determinations and if left unchanged, this level of allowed equity return would not achieve Ofgem's stated objective of ensuring that the RIIO-T3 price control package is investable for an equity investor.⁹

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.

Earlier in this summary, we noted that it is not credible that gas has a proposed higher return (6.04% CPIH real, 60% gearing) than electricity despite Ofgem asserting the same level of risk and beta. The removal of the flat WACC solution for RIIO-T2 has exposed a fundamental flaw that must be corrected by allowing for the same return as gas either by amending the cost of equity for electricity transmission or returning to a standard 60% level of gearing (whilst maintaining strong investment grade credit ratings equivalent to Baa1/BBB+).

The above evidence continues to support the credibility of our December business plan and the baseline return must

⁵ Average of: Market to asset ratio (MARs)-implied CoE of 4.2–6.2% (5.2% CPIH-real midpoint); OFTO-implied equity IRR of 5.7% (CPIH-real); Infrastructure fund implied equity IRR of 8.5% (CPIH-real)

⁶ RIIO-3 Draft Determination - Finance Annex, Ofgem, paragraph 3.111

⁷ <https://www.centrica.com/media/cfwb43au/centrica-2025-sizewell-c-presentation.pdf>

⁸ Oxera, August 2025, RIIO-3 CAPM Parameters

⁹ Frontier Economics, August 2025, Updated cost of equity cross-check evidence

be increased to at least the 6% at 55% gearing (at latest market risk free rate) as proposed in our business plan, with cross checks and other evidence suggesting that it should be higher.

Our supporting evidence provided by our advisors explains why Ofgem's return is too low and sets out the appropriate remedies that should be explored including:

- **An increase in TMR** - The evidence suggests the prevailing TMR is now 7.8-8.0% and the TMR glider also supports a number at the top of our business plan range of 7 to 7.5%. Currently, Ofgem are only proposing to increase TMR by 40bps from the RIIO-T2 level to 6.9% which is in line with the long-run average, whereas gilt rates have risen by 300-400bps and are above the long-run average. Ofgem has already stated, in SSMD, that the through the cycle approach *"may cause issues if there is a disconnect with our 'through cycle' estimate and current market required rates of return."*¹⁰ The evidence demonstrates that Ofgem's TMR will cause issues and put at risk investability of the framework.
- **An increase in return to account for high capital intensity risk** - Ofgem *"do not propose to adjust the ET beta for the higher capital expenditure anticipated during RIIO-3"*¹¹ failing to acknowledge a clear link between scale of investment and risk. Delivery of net zero is going to increase capital intensity for electricity transmission and in RIIO-T1 Ofgem made a specific adjustment to cost of equity for this and should do so again. Investors consider the increased capex to be a driver of increased risk and, regardless of any technical discussion of how much of that risk is beta risk, expect a higher return.
- **Aiming up on the CoE** - The available evidence that Ofgem must consider suggests Ofgem should select a point estimate at the top of the Draft Determinations range to achieve a cost of equity supported by cross checks.

An increase in the baseline return to at least 6% at 55% gearing must be accompanied by changes to the overall framework to eliminate asymmetric downside risk, and to the incentive framework to allow for 9 to 10% nominal returns for efficient, high performing companies.

There is downside risk across the framework, including the position on totex and reopeners, that lowers expected returns further

Draft Determinations do not consider the practical challenges and risks associated with a two and a half times increase in delivery to achieve the biggest expansion of the electricity system in a generation, at a time when across the globe others are seeking to achieve the same which is creating a constrained supply chain. Ofgem's framework is not yet workable and Ofgem has systematically proposed disallowances which are not supported by evidence.

Ofgem's framework is not workable:

Under Ofgem's proposals (as with the current regime), delivering at the pace required for CP2030 and that our customers and consumers want, would require us to invest ahead of securing Ofgem approvals. This is because of the length of time it takes for Ofgem to undertake the assessment process. We are exposed to the risk of significant costs being disallowed – due to a lack of clear policy positions that are applied consistently, and Ofgem not appropriately considering the full range of relevant factors when reaching its conclusions.

Our concerns are not theoretical but are informed by recent experience of 'reopeners' in RIIO-T2:

- on average it takes 12 months for Ofgem to make decisions. We have already advanced [REDACTED] of spend at risk, without certainty the necessary allowances will be approved;
- we have examples of recent proposals where Ofgem has consulted on 30-60% disallowances on the basis of funding alternative technologies to those already being deployed (because optioneering decisions take place well in advance of securing regulatory approval)

This is a material issue. Without action, it would undermine both the investability of the regime and the pace at which transmission operators are willing to work:

- Based on one of the defacto policies emerging through reopener decisions (switchgear technology), we estimate a risk of [REDACTED] disallowance across the RIIO-T3 plan. This represents a [REDACTED] reduction in

¹⁰ Ofgem, RIIO-T3 Sector Specific Methodology Decision, Finance Annex, paragraph 3.265

¹¹ RIIO-3 Draft Determination - Finance Annex, Ofgem, paragraph 3.63

expected return. If not corrected, the framework would have a significant negative impact on investor sentiment and the ability to attract the necessary capital to the UK;

- The only way for TOs to manage this risk is to slow the pace of delivery and wait for final confirmation of allowances from Ofgem before progressing investments. This is clearly not in consumers' interests and would jeopardise the Government's objectives for economic growth and decarbonisation.

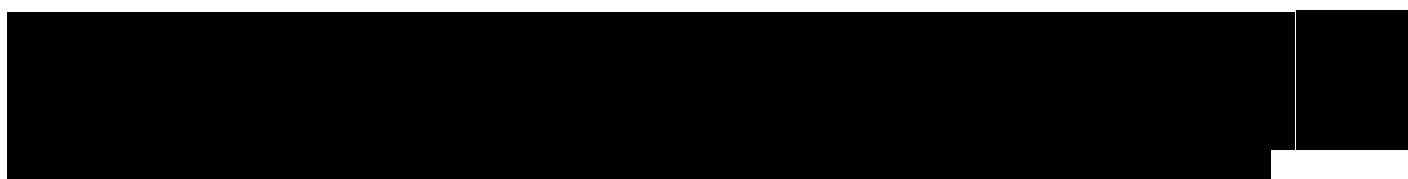
Ofgem has systematically proposed disallowances which are not supported by evidence:

Totex allowances have asymmetric downside risk due to systematic disallowances. Example proposals include:

- ongoing efficiency, where Ofgem has proposed a 1% challenge although the evidence shows this level has not been achieved across the economy since 2008 (further detail in OVQ19);
- risk and contingency allowances to be reduced from 7.5% in RIIO-T2 to 5% in RIIO-T3. Ofgem has provided no evidence for this decision, which compounds an unjustified figure from RIIO-T2. We have shared real world evidence which shows allowances of at least [REDACTED] are justified (further detail in ETQ50); and
- a series of unjustified disallowances through a combination of the engineering assessment and the cost assessment processes, which in totality amounts to a 27% shortfall in coverage for our efficient costs. This is discussed more in section three of the main executive summary.

Our modelling¹² of the Draft Determinations package, covering cost and output delivery incentives (ODIs, including the risk of being found in breach of licence in the event of materially late delivery of ASTI/CSNP) reveals that:

- rather than offering an opportunity to outperform and boost baseline returns, the current package creates a range of outcomes that are skewed to the downside;
- underperformance is more likely than outperformance; and
- the scope to achieve the kind of upside that would be needed to deliver outturn returns within the range of 9%-10% nominal is very unlikely indeed, even if we were able to very materially beat our own expectations.



Further details are provided below on the incentive framework, however, these issues demonstrate that the regulatory framework is not a fair bet, and investors may expect that even the baseline returns are not achievable. We have set out in the overall executive summary accompanying the full Draft Determinations response the key changes required to ensure the package is workable, deliverable and therefore investable.

The incentive framework is incomplete and insufficient to bridge the gap to 9 to 10% nominal returns for efficient, high performing companies

The power and design of incentives is critical to both the investability of RIIO-T3 and in driving performance, innovation and customer value. Investors require a credible path for TOs with strong performance to earn 9 to 10% returns.

We welcome Ofgem's intent for a more powerful incentive framework than in RIIO-T2. Ofgem have, in setting out an illustrative RoRE range in the Draft Determinations, suggested that there is over 200 bps of outperformance from cost and performance incentives. However, the incentive framework is weaker than Ofgem suggest, contains design flaws, is incomplete and lacks clear targets or understanding of how Ofgem will set them. This makes it difficult for investors to assign any value to the incentive framework and is likely to drive a negative perception of value. This has resulted in Ofgem not achieving their aim to set out a powerful incentive framework. More specifically:

- The scope for totex outperformance is limited by costs being set relatively late for a material share of totex and by tight market conditions.

¹² Frontier Economics, August 2025, Equity returns for RIIO-T3

- Connections is a critical incentive for driving customer value and meeting Government's ambitions for Clean Power 2030 and economic growth. It is impossible, given the limited level of development, to assess if targets will be 'fair bet'. This incentive could have more downside risk than upside opportunity if targets do not reflect realistic 'deliverability' of connections alongside protections against delays outside TO's control.
- The Innovative Delivery Incentive is intended to drive innovation roll-out, but the panel-based assessment is too subjective. The value of this incentive should be directly linked to TOs retaining a share of the consumer value from innovations. The design of the mechanism does not appear to be able to deliver the size of contribution to returns as Ofgem suggests (i.e. 50-100bps).
- The eligibility criteria for defining what actions are incentivised under the SO:TO incentive are unclear. This ambiguity diminishes the power of this incentive which has, to date, provided material consumer benefit.
- Assuming an appropriate calibration of delivery dates, the new delivery incentive for projects under the CSNP-F regime is a positive step but the majority of projects that it will apply to will not be delivered until after 2030 resulting in this incentive having limited impact over RIIO-T3.

Putting this together, we cannot see a credible path for high-performing networks who generate additional value for consumers to close the gap to achieve 9 to 10% returns in RIIO-T3 that would make the framework investable.

It is crucial that ahead of Final Determinations we reach the level of design detail necessary to see that new incentives for RIIO-T3 are a 'fair-bet' framework and have sufficient strength to make the overall framework investable. We provide further information in our response to the ET Annex of the consultation.

There is strong rationale for Ofgem's proposed cash solutions as the minimum required to support debt financeability and investability, and these need to be maintained

Investors value earnings growth aligned to asset growth. It supports financial sustainability and long-term legitimacy. A framework that does not appropriately balance these factors risks deterring capital investment and weakening the sector's ability to attract funding for future infrastructure expansion.

The cash characteristics in the Draft Determinations are the minimum required to meet credit metrics and be acceptable to investors. Ofgem are right to target strong investment grade credit ratings equivalent to Baa1/BBB+ in the Draft Determinations, and by maintaining the RIIO-T2 targets, have sent a powerful message to investors that strong access to debt capital is enabled and financial resilience is supported.

Depreciation is an appropriate and sustainable solution to resolve this issue, and we would like to discuss this ahead of future price controls. We are supportive of the fast money solution that Ofgem has applied in the Draft Determinations as appropriate for RIIO-T3 given the significant level of investment required. The long-term modelling Ofgem presents in the Draft Determinations shows a declining profile on the credit metrics, and we would like to review a longer-term solution for the future.

There is also a downward trend in credit metrics through RIIO-T3 showing there is less protection in the latter years for downside risk and the earnings profile is not smooth through the period. Revenue profiling adjustments should be implemented to support both financeability and investability. This is also in the consumer interest as it smooths the bill increase over RIIO-T3.

There remains a pathway to achieving an investable package for RIIO-T3 that allows for 9 to 10% nominal returns

Ofgem's Draft Determinations baseline return range for electricity transmission is 4.76-6.45% (CPIH real, 55% gearing). Ofgem must recognise that there is compelling evidence that the bottom half of this range is not credible for the reasons set out above. An investable baseline return can still be achieved by setting the return towards the top of the range. These changes to ensure investability have minimal impact on bills with, for example, an increase in allowed return of 50bps increasing customer bills by c.£1.50 per annum (23/24 prices, all electricity transmission owners).

A baseline return of at least 6% at 55% gearing, must be part of an overall package that is workable and eliminates asymmetric downside risk, ensuring totex and non-totex incentives are appropriately calibrated with reasonable opportunity for outperformance for high performing licensees (i.e. they are a "fair-bet"). They must recognise the level of stretch for TOs to deliver their plans given the unprecedented increase in scale of delivery.

Investors have been clear that they require earnings which keep pace with asset growth and nominal equity returns of 9 to 10% for high performing networks to be competitive with global investment opportunities. All of these elements need to be improved for an investable framework to be achieved.

Without the changes we are proposing to make the framework investable the delivery of CP2030 and the associated stakeholder expectations are at risk. The only way for TOs to manage this risk is to slow the pace of delivery. We remain fully committed to playing our part in this national endeavour to deliver the CP2030 mission and will work constructively with Ofgem ahead of Final Determinations to achieve this.

Allowed return on debt

Key messages:

- We support Ofgem’s proposal to estimating debt costs based on a RAV weighted indexation approach.
- We are supportive of Ofgem’s proposal to include ED to broaden the calibration group.
- We can support the proposal to start RAV-weighted additions from T1.
- We support the reduction of the index linked debt assumption to 10%.
- We disagree with the approach to setting the additional cost of borrowing allowances. Evidence provided in this response and by the ENA, demonstrates that Ofgem should increase the allowance for additional borrowing costs from 19 bps to 47 bps, mainly driven by increases to the cost of carry allowance.
- We agree with Ofgem’s implementation of inflation (option 1) and agree that a transition mechanism to implement option 1 is not necessary.
- We disagree that the close out mechanism for RPI to CPIH transition should only apply to the notional ILD assumption of 10%. Licensees will have financed with RPI linked debt based on the ILD assumption previously being 30% so the close out mechanism should apply to a licensee’s actual proportion ILD at the transition date up to a maximum of 30% ILD.

Certain questions in this section should be read in conjunction with the following reports:

Report	Relevant to questions
NERA, August 2025, Liquidity Cost and Cost of Carry Allowance at RIIO-ET3	FQ4

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

We agree with Ofgem's proposal to estimate debt costs based on a RAV addition weighted trailing average of a relevant index with a calibration adjustment to align the allowance with the sector's debt costs.

We agree with Ofgem's proposal to use a 14-year trailing average index and a 14-year refinancing period.

We agree with Ofgem's proposal to include ED to broaden the calibration cohort to calibrate the ETOs debt costs.

We can support Ofgem's proposal to start RAV addition weighting from the start of RIIO-T1.

We disagree with forecasting iBoxx as a flat figure as it is inconsistent with Ofgem's historic approach of using forward curves to forecast iBoxx. It is also inconsistent with use of forward curves elsewhere in RIIO-T3 e.g. to forecast SONIA. Ofgem's objection to using forward rates, that they may contain a term premium, should not invalidate their use. The Bank of England's research and operational frameworks show that forward curves offer richer information than flat curves, reflecting market sentiment and risk pricing. Choosing a flat curve means ignoring this market signal entirely. The Bank of England have stated that "market-implied paths of interest rates provide a useful benchmark for the MPC when assessing the appropriate stance of policy."

Ofgem should review its approach to forecasting iBoxx as a flat figure.

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+?

We agree with Ofgem's proposal to use a combination of iBoxx GBP A and BBB 10+ non-financial indices rather than the iBoxx GBP Utilities 10+, based on the rationale provided in the Draft Determination (DD).

Ofgem should maintain its current position at Final Determinations.

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

We agree with Ofgem's proposal to reduce the index linked debt assumption to 10%. A transition mechanism is not necessary because it creates complexity for little benefit.

We disagree that the close out mechanism for RPI to CPIH transition should only apply to the notional ILD assumption of 10%. Licensees will have financed with RPI linked debt based on the ILD assumption being 30%.

The close out mechanism should apply to a licensee's actual proportion ILD at the transition date up to a maximum of 30% ILD.

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

We disagree with the approach to setting the additional cost of borrowing allowances as it is significantly below the borrowing allowances evidenced by NERA.¹³

The total additional cost of borrowing allowances should be 47bps, consisting of 36bps cost of carry allowance, 5bps liquidity allowance, 5bps transaction costs, and 1bp CPlH basis risk mitigation.

Cost of carry

There are two issues with Ofgem's cost of carry calculation which leads to it being understated – the first is basing the cash to debt ratio on funding RAV growth between 2022 and 2024, the second is the use of a substantially lower than normal iBoxx to cash deposit spread rather than the forward market implied spread.

Ofgem estimate the cash to debt ratio should be c.8%. However, NERA shows that a greater cash balance will be required to pre-finance higher RAV growth over RIIO-T3.

high capex scenario may also drive an increase in the cash to debt ratio.

We suggest Ofgem provide a re-opener for the iBoxx A/BBB to 3 month SONIA spread, or the allowance for cost of carry is updated annually with the average iBoxx A/BBB to 3 month SONIA spread over the past year as part of the AIP process.

The total impact of these two changes increases the cost of carry allowance from the 11bps estimated by Ofgem to 36bps.

Liquidity allowance

Ofgem's estimate for liquidity cost allowance is 2bps which is in relation to commitment fees for undrawn facilities. NERA materially agree with this estimate. However, NERA advise that an additional allowance is needed for interest on drawn facilities and utilisation fees of 2bps. An allowance is also needed for upfront arrangement, legal and agency fees totalling 1bp. Therefore, NERA have evidenced that the overall liquidity allowance should be 5bps.

¹³ NERA, August 2025, Liquidity Cost & Cost of Carry Allowance at RIIO-ET3: A report for the ENA

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

We agree with Ofgem's implementation of Inflation Option 1 (nominal allowance on fixed rate debt) and agree with Ofgem that a transition mechanism to implement Option 1 is not necessary.

We disagree that the close out mechanism for RPI to CPIH transition should only apply to the notional ILD assumption of 10% for the reasons given in FQ3.

The evidence does not show that an adjustment to the CPIH inflation assumption to reflect the OBR's long-run wedge for Final Determinations (FD) is appropriate, and the evidence supports a CPI-CPIH wedge of nil. See our response to FQ8 for our reasoning and evidence.

Ofgem should maintain its current position at Final Determinations on implementation of Inflation Option 1, however the close out mechanism should apply to a licensee's actual proportion ILD at the transition date up to a maximum of 30% ILD.

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

An allowance should be given to issuers if there is evidence that those issuers could be adversely affected by infrequent issuance.

Allowed return on equity

Key messages:

- We welcome the continued positive intent and changes to the financial package since the Sector Specific Methodology Decision; however these changes do not go far enough and the current package is not yet investable.
- The financial framework for electricity transmission needs to be competitive in the real-life global competition for significant equity. Investors have told us that they need to see a credible pathway to 9 to 10% nominal returns for efficient, high performing companies. The Draft Determinations (DD) do not provide this credible pathway.
- Ofgem needs to apply a balanced and consistent consideration of evidence to cross checks. We disagree with Ofgem's chosen selection of cross-checks as well as the conclusions they have drawn from such evidence. Debt-based cross-checks should be added to Ofgem's selection.
- Cross check evidence shows that the proposed allowed cost of equity of 5.64% CPIH real is not sufficient; the cross checks ranges for hybrid bonds and debt premia are above Ofgem's RIIO-T3 DD point estimate. US utilities point to returns of 9 to 10% and Centrica has stated that its equity IRR for Sizewell C will be over 10% in downside case and over 12% in the upside case.
- Overall, evidence provided in this response and by the ENA points to a baseline return of at least 6% at 55% gearing as a part of an overall package that meets 9% to 10% returns.
- Ofgem has not identified the required level of return due to its selection of low-end estimates of the CAPM parameters; capital intensity points to a higher beta, total market return (TMR) should reflect high interest rates, risk free rate should reflect convenience yield.
- There is downside risk across the framework, including the position on totex and reopeners, that lowers expected returns further.
- The incentive framework is incomplete and insufficient to bridge the gap to 9 to 10% nominal returns for efficient, high performing companies.

- Ofgem must review the overall package to deliver a credible pathway to 9 to 10% nominal through baseline return, a workable framework and a well designed incentive framework.

Certain questions in this section should be read in conjunction with the following reports:

Report	Relevant to questions
Oxera, August 2025, RIIO-3 Draft Determination- CAPM parameters and debt-based cross-checks	FQ7, FQ8, FQ9, FQ10, FQ11, FQ12, FQ16
Frontier Economics, August 2025, Assessing regulators' approach to setting the TMR - Implications for RIIO-3	FQ9
Frontier Economics, August 2025, Cross check standards of evidence	FQ12, FQ16
Frontier Economics, August 2025, Updated cost of equity cross-check evidence	FQ9, FQ12, FQ16
Frontier Economics, August 2025, Equity returns for RIIO-T3	FQ12, FQ16, FQ17
KPMG, August 2025, Investability principles	FQ16
Barclays, March 2025, Barclays Corporate Broking analysis ("National Grid- growth in context")	FQ14, FQ16
Oxera, August 2025, Investability of RIIO-ET3 Draft Determination	FQ16

FQ7. Do you agree with our methodology for calculating the RFR?

We do not agree with the Ofgem methodology. Based on March 2025 data, RFR should be 2.25% which consists of 1.91% 20 year index linked gilts yield, 0.10% RPI-CPIH wedge and 0.24% adjustment to reflect convenience yield.

Gilts are held as hedging instruments, as holding requirements for financial institutions, and they have value for their relatively high liquidity compared to other instruments. All these points result in government bonds being more valuable than if a utility network offered a bond of the same maturity and credit rating. Therefore, there exists a convenience yield which means that using index linked gilts as the sole proxy for RFR is incorrect. The value of these features is likely to be stronger for ILGs than for nominal gilts, as evidenced by the fact that the difference in rate of returns between the two ('breakeven inflation') is typically greater than inflation forecasts produced by OBR and Bank of England. The marginal investor in the ILG market – e.g. UK defined benefit pension funds looking to hedge inflation risk rather than maximise returns– may not be the same as the marginal investor that regulated utilities are trying to obtain equity from.

In the Sector Specific Methodology Decision (SSMD), Ofgem adjusted AAA non-government bond returns downwards for credit risk and liquidity risk to show that these risks explain the different returns between AAA non-government bonds and nominal gilts without needing convenience premium to explain the difference.¹⁴ Oxera¹⁵ point to evidence that the credit risk premium is subject to a wide range of uncertainty so limited reliance can be placed upon it. Oxera also note that the extra liquidity in government bonds is consistent with being due to convenience premium, therefore it should not be removed from corporate bonds.

Ofgem has challenged the lack of evidence of a convenience premium for the 20 year time horizon. Oxera's response is to estimate the convenience premium in 3 ways:¹⁶

1. In the RIIO-T3 Draft Determination, Ofgem advised that a comparison of AAA corporate bond and zero coupon gilt yields should be done for instruments with duration of 20 years. To include review of instruments with long duration, Oxera have compared yields for all available iBoxx indices. They show that the spread is persistent across iBoxx non-AAA indices of different durations with an average convenience premium of 24 bps.
2. Oxera also look at all available AAA rated non-government bonds indices to identify periods in which some of the indices had a duration of around 20 years. Between April 2019 and March 2021 the 15+ AAA non-government bond index had an average duration of 20.04 years; the estimate of convenience premium is the two year average spread to duration matching 20 year gilts, which was 20bps for this period.
3. Oxera also consider the five year average of AAA 10+ and 10-15 year indices compared to the five year average yields on duration-matched zero coupon gilts with a maturity of 14 and 9.5 years. Oxera find a convenience premium of 24bps. This method is consistent with regulatory precedent set by CAA and CMA.

Together, these pieces of evidence in the same direction and of similar magnitude clearly demonstrate a convenience premium. Ofgem should adjust its estimate of RFR at FD to consider the convenience premium which, consistent with approach taken by CAA and CMA, Oxera estimate this to be 24 bps.

Consistent with these considerations, the Northern Ireland Utility Regulator's (NIUR) final determination of Northern Ireland Electricity Network's (NIEN's) RP7 transmission and distribution price control on 30 October 2024 considered a range of proxies to set the risk-free rate and specifically noted that ILGs are giving very different estimates compared to non-ILG instruments. NIUR ultimately estimated RFR based on an average of yields on 20-year ILGs adjusted for the RPI-CPIH wedge and an average of yields on CPIH stripped 20-year conventional gilts, AAA non-government 10+ year bonds and AAA non-government 10-15 year bonds. The CAA for H7 and the CMA for PR19 also recognise a convenience yield and set risk free rate based on an average of yields on 20-year ILGs and an average of yields on AAA non-government 10+ year bonds and AAA non-government 10-15 year bonds.^{17 18}

We agree with Ofgem's use of one month average yields on 20 year index linked gilts. We agree with Ofgem's calculation of RPI-CPIH wedge (0.10%). Therefore, overall, in line with Oxera, evidence points to RFR being 2.25% (1.91% + 0.10% + 0.24%) based on March 2025 data.

¹⁴ Ofgem, July 2024, SSMD- Finance Annex, para 3.49 & 3.50

¹⁵ Oxera, August 2025, RIIO-3 Draft Determination—CAPM parameters and debt-based cross-checks, section 2.1

¹⁶ Oxera, August 2025, RIIO-3 Draft Determination—CAPM parameters and debt-based cross-checks, section 2.1

¹⁷ CMA, Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations, Final Report, paras 9.241-9.244

¹⁸ UK CAA, Economic regulation of Heathrow Airport Limited: H7 Initial Proposals, para 9.127

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

We agree with Ofgem’s proposed approach in Sector Specific Methodology Decision (SSMD) to calculating the RPI-CPIH wedge which is based on a long-run CPIH assumption of 2% and no further wedge between CPI and CPIH.

The latest OBR long run CPI forecast is 2%.¹⁹ The evidence does not show that an adjustment to this forecast to obtain a forecast for CPIH, such as reflecting the OBR’s long-run CPI-CPIH wedge, for Final Determinations (FD) is appropriate. First, the evidence over longer time periods supports a nil CPI-CPIH wedge. Oxera looked at the historical CPI-CPIH wedge;²⁰ they find it to be -0.04% over the past 10 years and -0.12% over the past 20 years. They find that the sign of the wedge varies over time but that the wedge is typically small and the average wedge is immaterial. In RIIO-T3 SSMC and SSMD, Ofgem “*consider assuming that CPI is a close proxy for CPIH is appropriate*”.²¹

In addition, the OBR’s economic and fiscal outlook, October 2024, includes a short term forecast of the CPI-CPIH wedge. The OBR forecast of the CPI-CPIH wedge is c0.1% in 2027 and remains at approximately this level until 2030 i.e. for RIIO-T3 i.e. the wedge is immaterial for the RIIO-T3 period.

Overall, weighing up these pieces of evidence, Ofgem should maintain its Draft Determinations (DD) estimate of the RPI-CPI wedge and CPI-CPIH wedge at FD based on a long run assumption that CPIH is 2% in line with CPI.

Ofgem should maintain its current position at Final Determinations.

¹⁹ OBR, March 2025, Economic and fiscal outlook para 2.36

²⁰ Oxera, August 2025, RIIO-3 Draft Determination—CAPM parameters and debt-based cross-checks, section 2.2

²¹ Ofgem, July 2024, SSMD Finance Annex, para 3.56 & Ofgem, December 2023, SSMC Finance Annex para 3.39

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

In terms of the methodology for the ex ante TMR, we agree with Ofgem using DMS nominal data to estimate the ex ante TMR and ceasing to apply the COLI-CED adjustment. We also agree with removing the serial correlation adjustment as serial correlation is statistically insignificant. The reasons we can support these changes are outlined by Oxera in a report submitted with our business plan (Oxera, RIIO-3 cost of equity—CAPM parameters, November 2024).

Little, if any, weight should be placed on ex-ante approach because it is highly subjective and we are pleased to see that Ofgem's estimate of TMR is materially the same as the ex post estimate.

The question above is specifically about the methodology to calculate the ex ante TMR. However, we also challenge the value of TMR that Ofgem has proposed. The rest of this answer provides evidence on this point.

In our RIIO-T3 Business Plan submission, we explained the evidence which showed that TMR has increased since RIIO-T2 and that TMR for RIIO-T3 is higher than the Sector Specific Methodology Decision (SSMD) RIIO-T3 range.

Our estimate of TMR is a range of 7.0%- 7.5% (CPIH real), with a best estimate at the top of this range. Our range is based on:

- historic long run TMR.
- TMR implied by a dividend growth model.
- the clear historic long run relationship between risk free rate and total market return (the 'TMR glider') which shows that, when the interest rate is higher, TMR is higher, consistent with UKRN guidance.
- investor surveys, which point to an increase in TMR since RIIO-T2.

We now explain and submit updated and additional evidence that points to TMR needing to be at least 7.5%. We will cover the following points:

1. How TMR is currently set through the cycle means we may not be able to attract capital
2. Risk free rates are above the long term average
3. TMR is above the long term average
4. A balanced and consistent consideration of evidence means DGM evidence should not be dismissed
5. Regulators have historically moved TMR with interest rates and Ofgem should formalise this approach to benefit consumers
6. Other jurisdictions adjust cost of equity for interest rate movements

How TMR is currently set through the cycle means we may not be able to attract capital

Setting TMR on a through the cycle basis means that when interest rates are above their long term average, TMR and the allowed cost of equity may be too low to provide what investors require. In RIIO-T3, NGET will need to raise material levels of new equity capital. If the expected return is below that required by the market, it increases the risk that equity capital is attracted to other investment opportunities and is not available to fund NGET's critical infrastructure projects. This will have a detrimental impact on consumers' interests.

Ofgem has recognised this issue for RIIO-T3:

In the RIIO-T3 SSMD, Ofgem said *"While we normally consider likely returns on a 'through cycle' basis, this may cause issues if there is a disconnect with our 'through cycle' estimate and current market required rates of return."*²²

In the RIIO-T3 Draft Determinations (DD), Ofgem said: *"We continue to believe that it is inappropriate to make manual adjustments to TMR to reflect prevailing interest rates. However, we plan to continue to use cross-checks to assess if our 'bottom-up' methodology for calculating TMR is materially out of line with what investors require."*²³

However, Ofgem has not addressed the issue in DD as it has neither set TMR based on current market required rates of return nor adjusted TMR based on relevant cross check evidence. We will provide evidence later in this answer that the cross checks show that Ofgem needs to increase its estimate of TMR.

Risk free rates are above the long term average

The UKRN cost of capital guidance notes that, whilst TMR declined following the financial crisis of 2007/8, there is

²² Ofgem, July 2024, RIIO-3 Sector Specific Methodology Decision – Finance Annex, para 3.265

²³ Ofgem, July 2025, RIIO-3 Draft Determination - Finance Annex, para 3.47

long-run empirical evidence that equity returns are more stable over time than the ERP,²⁴ i.e. for every movement of 1% in the risk free rate, TMR moves but by less than 0.5%. As TMR should partly move with the risk free rate, it is first useful to consider whether the risk free rate is above the long term average. Therefore, Frontier Economics have considered whether current government bond yields are above or below the long term average.²⁵

Government bond yields are not an accurate estimate of the risk free rate because, as noted in FQ7, they include a convenience yield. However, it is reasonable to expect that movements in government bond yields should align with movements in the risk free rate.

Frontier Economics first consider index linked gilts since Bank of England independence. Central bank independence can play a crucial role in forming inflation expectations and the variability in interest rates. In a regime with an independent central bank tasked explicitly with targeting inflation levels, the inflation expectations in the market are likely to be more stable than in a regime without an independent central bank. Frontier Economics find that the current 10-year ILG rate of 1.1%, is above the 0.4% average since the Bank of England's independence in 1997.²⁶

Assessment of TMR typically considers data looking back to 1900. Index linked gilts were only available since 1981. Therefore, Frontier Economics also consider deflated historical nominal bond yields. Specifically, they find that deflated 10-year yields since 1900 also show that 2024 yields (2.1%) are greater than the long-term average (1.4%).²⁷ At the time of writing in July 2025, yields have increased since 2024.

TMR is above the long term average

Frontier Economics provide several pieces of evidence that point to TMR being above the long-term average, summarised in the graph below.²⁸

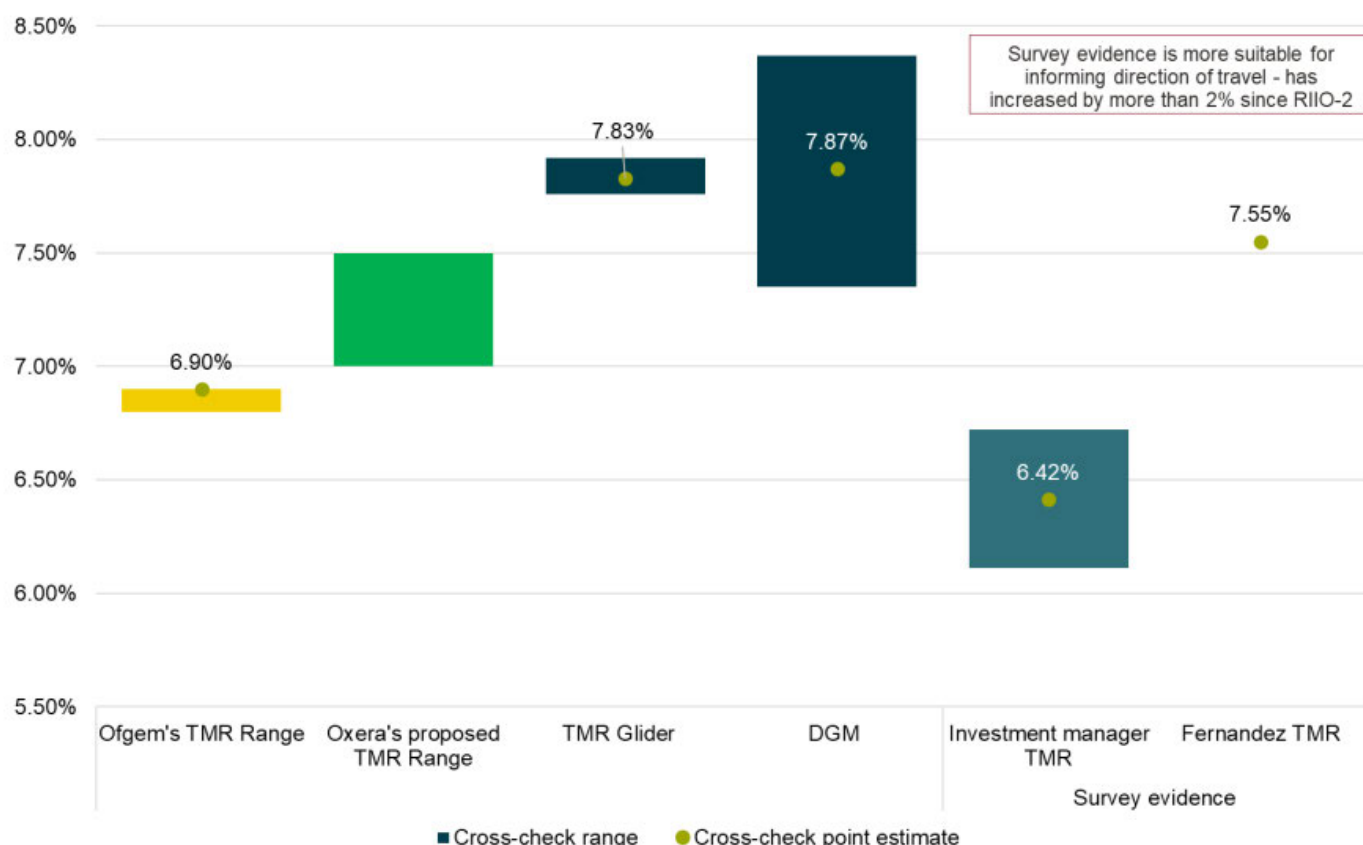
²⁴ UKRN, March 2023, UKRN guidance for regulators on the methodology for setting the cost of capital, pg 16, [CoC-guidance_22.03.23.pdf](#)

²⁵ Frontier Economics, August 2025, Updated cost of equity cross-check evidence, para 8.4.14

²⁶ Frontier Economics, August 2025, Updated cost of equity cross-check evidence, para 8.4.14

²⁷ Frontier Economics, August 2025, Updated cost of equity cross-check evidence, para 8.4.14

²⁸ Frontier Economics, August 2025, Updated cost of equity cross-check evidence, Figure 15



Source: Ofgem, Frontier Economics analysis, Oxera

Note: TMR Glider range represents the 20-80th percentile range over the last 24 months, which is 7.76% - 7.92%, with an average of 7.83%. All figures presented to 2 d.p.
 The DGM range represents the 20-80th percentile range over the last 24 months which is 7.35% - 8.37% with an average of 7.87%. All figures presented to 2 d.p.
 We derive CPIH-real figures using the Fisher equation and a CPIH assumption of 2%.
 The investment manager TMR range is constructed from the mean of all observations and the mean of observations included in Ofgem's sample at RIIO-2. The mid-point of these values makes up the point estimate.

Considering each cross-check bar in the graph above:

- **TMR Glider:** Frontier Economics look at how TMR has historically changed over time as gilt rates change, to estimate what TMR should be with current gilt rates. To do this, Frontier Economics regress TMR against index linked gilts to derive a TMR Glider. TMR estimated from the TMR Glider is above the long run average TMR; the 2-year moving average of the TMR estimated from the TMR glider is 7.8%.²⁹ Frontier Economics find that using recent data (from 2006 onwards) the interquartile range based on the glider is TMR of 6.5%-7.5%.
- **DGM:** Frontier Economics estimate TMR using the dividend growth model, whereby the required market return can be estimated based on current market price, current dividend and expected dividend growth. To use this model, Frontier Economics need to forecast dividend growth. For the next three years, Frontier Economics use short term dividend forward growth rates from Bloomberg. Beyond three years, Frontier Economics forecast long term dividend growth rates using long run forecasts of UK GDP growth from the IMF. Frontier Economics explain that a long run forecast of UK GDP growth is appropriate as a forecast for dividend growth on the basis of stability, credibility and common usage. Based on this analysis, the 2-year moving average of the DGM-implied TMR is 7.9%, similar to the 2-year TMR glider estimate and above the 125 year arithmetic average TMR in Draft Determination of 6.92%.³⁰
- **Calibrated DGM:** Frontier Economics introduce the concept of a "calibrated DGM" to address any concern about the growth rate assumption. Frontier Economics view the calibrated DGM as a robustness test of the DGM outputs so it is not a separate cross check on the graph above. The calibrated DGM solves for the long-term growth rate that forces the average DGM-derived TMR to match the long run average TMR. The long-term growth rate assumption is combined with short term dividend forecasts to estimate the short term TMR. The benefit of this approach is that it takes away the subjectivity of the growth assumption. Growth is:
 - solved for endogenously rather than specified exogenously; and
 - set at a level where the model, by construction, produces unbiased estimates of the long-run TMR.

²⁹ Frontier Economics, August 2025, Updated cost of equity cross-check evidence, para 8.4.11

³⁰ Frontier Economics, August 2025, Updated cost of equity cross-check evidence, para 8.4.10

The calibrated DGM also shows that TMR is currently above the long-term average TMR.³¹

- **Survey evidence:** Frontier Economics note that survey estimates may be biased so surveys are primarily of use to indicate movements over time in TMR.
 - The evidence from the Fernandez survey points to a significant increase in TMR between 2020 and 2024 – an increase of around 3 percentage points from 4.8% in 2020 to 7.6% in 2024 in real terms.³² As established above, weight should be placed on the Fernandez survey for RIIO-T3 as it is based on a significantly greater sample than Ofgem have considered.
 - Frontier Economics also look at how the sample of TMR forecasts from the investment managers that Ofgem used at RIIO-T2 has changed over time. The sample is small and much smaller than the Fernandez survey. Whilst Frontier Economics find a point estimate of 6.4%, what matters more is the movement from RIIO-T2 to RIIO-T3; Frontier Economics find a 2.4% increase in TMR for the same institutions from RIIO-T2 to RIIO-T3 for the funds Ofgem used in RIIO-T2 that published updated values in the past year.³³

Overall, the evidence points to a TMR of at least 7.5%.

A balanced and consistent consideration of evidence means DGM evidence should not be dismissed

Several of the pieces of evidence on the position of TMR rely on the Dividend Growth Model (DGM). Frontier Economics have evaluated the use of the DGM.³⁴ They find that the DGM has strong theoretical foundations, highlighted by its prevalence in core valuation textbooks. They find that the DGM is frequently adopted in various sectors and sources which shows the model's practical value and application. They find that in empirical tests, the DGM outperforms other approaches when seeking to understand what future equity market returns could be.

Ofgem needs to apply a balanced and consistent consideration of evidence in judging cross checks. Frontier Economics explain why Ofgem are not currently adopting a balanced and consistent consideration of evidence; in particular, Ofgem rejects Frontier Economics' use of DGM to estimate TMR but Ofgem relies on DGM for MARs.³⁵ If Ofgem did adopt a balanced and consistent consideration of evidence, Ofgem would take into account DGM evidence that TMR should be set above its long run average in FD.³⁶

Regulators have historically set TMR below the long run average when gilt rates were low so Ofgem should formalise how TMR moves with gilt rates and set TMR above the long term average for RIIO-T3 to benefit consumers

Our position is that Ofgem has set a lower TMR when gilt rates were low so Ofgem should set a higher TMR consistently now gilt rates have increased. Frontier Economics have reviewed historic TMR decisions by regulators.³⁷ They find that regulators have not adhered to a 'through the cycle' policy and have set TMR low when gilt rates were low. Ofgem's approach to setting TMR has lacked stability, predictability and transparency. These missing features could be detrimental for both investors and consumers, as uncertainty increases regulatory risks for investors, which in turn can result in an increase in the cost of capital and negatively impact consumers. Frontier Economics recommend that Ofgem should set TMR using an approach that is transparent and predictable, that reflects contemporaneous market expectations and that is stable and insulated from short-term fluctuations.³⁸

The benefit is that in times of high market interest rates, TMR would be set higher, which increases the allowed CoE so that investors would be prepared to invest, delivering value for consumers. Meanwhile, in times of low interest rates, TMR would be set lower so allowed CoE would be lower, which means consumers would benefit from lower bills. Without the possibility of allowing TMR to rise above the long-term average when the market requires, investors will conclude that through the cycle means that, on average, they won't receive the required return.

Other jurisdictions adjust cost of equity for interest rate movements

Frontier Economics have also reviewed approaches to adjusting cost of equity for interest rate movements for European jurisdictions with similar regulatory regimes to the UK.³⁹ Frontier Economics find that, in recent years, all the jurisdictions have adjusted allowed cost of equity upwards consistent with interest rate increases, either through an explicit link between allowed cost of equity and interest rates or through significant changes to their regimes to accommodate current market conditions and ensure companies can access capital markets. This analysis supports some recognition of market movements in setting each financial parameter.

³¹ Frontier Economics, August 2025, Updated cost of equity cross-check evidence, Figure 13

³² Frontier Economics, August 2025, Updated cost of equity cross-check evidence, Section 9

³³ Frontier Economics, August 2025, Updated cost of equity cross-check evidence, Section 9

³⁴ Frontier Economics, August 2025, Updated cost of equity cross-check evidence, Annex E

³⁵ Frontier Economics, August 2025, Cross checks standard of evidence

³⁶ Frontier Economics, August 2025, Cross checks standard of evidence

³⁷ Frontier Economics, August 2025, Assessing regulators' approach to setting the TMR - Implications for RIIO-3

³⁸ Frontier Economics, August 2025, Assessing regulators' approach to setting the TMR - Implications for RIIO-3, section 5.2

³⁹ Frontier Economics, August 2025, Equity returns for RIIO-T3, section 4

Ofgem should review the TMR parameter as overall the evidence points to a TMR of at least 7.5%.

FQ10. Do you agree with our methodology for estimating beta?

Due to the high degree of overlap between FQ10 and FQ11, we answer these together, and our response to this question is below in FQ11.

FQ11. Do you agree with our proposed set of comparators which also incorporates selected European utility stocks?

Due to the high degree of overlap between FQ10 and FQ11, we answer these together, and our response to FQ10 is also covered in this response to FQ11.

Methodology

In terms of the methodology to estimate beta, we agree with Ofgem's use of daily betas as use of daily beta provides a larger sample of observations making for more robust data.

We agree with Ofgem's inclusion of Pennon to estimate beta, given the high regulatory share of its business. We also agree with Ofgem's inclusion of the 4 European comparators. In our RIIO-T3 Business Plan submission, we included a report by Oxera which demonstrated that Spain and Italy have sufficiently similar regulatory regimes so inclusion of these comparators should better reflect ET sector risk.⁴⁰ Therefore the evidence we have already submitted supports Ofgem's current position for RIIO-T3 and we are not looking for any change or to present anything new on this point.

Capital intensity

Our RIIO-T3 Business Plan submission of c£35bn included a significant increase in capex spend. We provide evidence in FQ13 that this increase in capital intensity results in an increase in systematic risk. This evidence points to beta being set in the upper half of Ofgem's Draft Determinations (DD) range.

Low beta anomaly

Oxera point to extensive academic literature that using historical CAPM evidence to estimate beta underestimates forward looking beta.⁴¹ This evidence also points to beta being set in the upper half of Ofgem's DD range.

Low beta puzzle

We also note that in recent years, COVID-19, the Ukraine war and increase in investment for electricity networks would be expected to increase risk which we might expect to be reflected in an increase in beta. However, betas did not increase during the years 2020-2023.

In our Sector Specific Methodology Consultation (SSMC) response, we provided a Frontier Economics report that evidences this 'low beta puzzle'.⁴² The evidence showed that periods of high volatility are associated with a lower beta. This makes sense given that, formulaically, the level of utilities' beta is inversely related to market volatility, i.e. the higher the market volatility, the lower the beta. In periods of high volatility, the higher uncertainty means one would also expect the Equity Risk Premium (ERP) to increase; Frontier Economics also found empirical evidence of this relationship. In terms of estimating allowed cost of equity, during periods of high volatility, a reduction in beta should be to some extent offset by an increase in ERP. However, the methodology Ofgem uses for setting ERP is based on a 'through the cycle' view of TMR; Ofgem's stated interpretation of how to set TMR on a through the cycle basis is that *"it is inappropriate to make manual adjustments to TMR to reflect prevailing interest rates"* meaning TMR is likely to be relatively fixed so periods of high volatility will be associated with a reduction in ERP rather than an increase in ERP. Therefore, if periods of high volatility are included in beta and TMR is set based on a through the cycle approach the overall allowed cost of equity will be underestimated.

Summary

Ofgem should reflect all the above evidence when setting beta for RIIO-T3 by setting beta in the upper half of Ofgem's DD range (0.375- 0.45 asset beta).

⁴⁰ Oxera, November 2024, Review of the regulatory regimes and business mixes for relevant European comparators to strengthen the use of European beta data: a review of the regulatory regimes for European comparators to confirm if using European beta data is appropriate to set RIIO-T3 beta

⁴¹ Oxera, August 2025, RIIO-3 Draft Determination—CAPM parameters and debt-based cross-checks, section 4.3

⁴² Frontier Economics, March 2024, The Low Beta Puzzle

FQ12. Do you agree with the conclusions we have drawn from our chosen crosschecks?

We disagree with the conclusions Ofgem have drawn from crosschecks. Ofgem's cross check evidence points to a higher cost of equity than the point estimate of Ofgem's Draft Determinations (DD) range.

There are issues with Ofgem's chosen cross checks that should be considered. Ofgem has misconstrued the purpose of cross checks and has been inconsistent in its use of evidence to select cross checks. Ofgem should take into account new cross check evidence.

In this answer, we first consider cost of equity cross checks, then TMR cross checks.

Cost of equity cross checks

Ofgem's cross check evidence points to a higher cost of equity than the point estimate of Ofgem's Draft Determinations (DD) range

A simple average of the three sector cross checks gives a cost of equity of 6.5%,⁴³ significantly above Ofgem's DD point estimate of 5.64% at 55% gearing. Therefore, we disagree with the conclusion Ofgem has drawn from the cross checks not to make an adjustment in Step 2 (Checking our Step-1 estimate is neither excessive nor Insufficient) to cost of equity as a result of Ofgem's cross check evidence. Ofgem should place appropriate weight on cross checks evidence for RIIO-T3 and increase the allowed cost of equity.

There are issues with Ofgem's chosen cross checks that should be considered

- Infrastructure fund IRR: Frontier Economics find that, as of March 2025, the average implied equity IRR stands at 11.8% in nominal or 9.6% in CPIH-real terms,⁴⁴ above the figure in Ofgem's RIIO-T3 DD.
- MARs: Frontier Economics' review of Ofgem's MARs estimate⁴⁵ finds that the inference model used by Ofgem should be updated for the allowed cost of equity and BPI penalty/reward in PR24 Final Determinations (FD). Frontier Economics also adjust the assumption about outperformance to better reflect historic evidence. Having made these adjustments, Frontier Economics find that, whilst Ofgem's proposed CoE (5.64%) falls at the lower end of their modelled range (4.65%-9.19%), the positioning of the CoE within the range suggest that the CAPM-based range may be underestimating the true cost of equity. However, we note the wide breadth of this traded MAR range, which points to the high degree to judgment and uncertainty associated with estimating the cost of equity using trading MARs. We agree with Ofgem that *"the MAR model is more suited to traded MAR ratios rather than transaction MARs because of the difficulty in estimating the acquisition synergies arising from a transaction MAR"*.⁴⁶ However, the MAR model even applied to trading MAR provides limited information.

Ofgem has misconstrued the purpose of cross checks and has been inconsistent in its use of evidence to select cross checks

In DD, Ofgem say that *"our broader concern with any debt-based cross-check is that we do not consider that it can definitively prove or 'back solve' to a required return on equity"*. This quotation shows that Ofgem has misconstrued the purpose of cross checks. The UKRN cost of capital guidance suggests that the purpose of cost of equity cross checks is to sense check the allowed cost of equity, rather than them being a tool to prove or back-solve to a required return on equity, as suggested by Ofgem. It is not possible in any of Ofgem's proposed cross checks to definitively back solve to a cost of equity. It is unreasonable and inconsistent to apply a higher standard of evidence to debt based cross checks but not to others.

Moreover, Ofgem has also applied an imbalanced and inconsistent approach when considering evidence to select cross checks. For example, Ofgem has rejected the evidence on the TMR glider stating concern with the dividend growth model (DGM) that using this model requires assumptions around future dividend growth. However, DGM is also used in the MARs cross check. Hence, Ofgem does not hold its own chosen cross checks to the standard of evidence applied to other cross-checks.⁴⁷

Importantly, corporate debt and gilt yields show that Ofgem's RIIO-T3 DD allowed cost of equity is insufficient.

Investors can choose between whether to invest in debt or equity. As at 31 July 2025, nominal yields were 5.4% on

⁴³ Ofgem, July 2025, RIIO-3 Draft Determination Finance Annex: Average from Table 19 of: Market to asset ratio (MARs)-implied CoE of 4.2–6.2% (5.2% CPIH-real midpoint); OFTO-implied equity IRR of 5.7% (CPIH-real); Infrastructure fund implied equity IRR of 8.5% (CPIH-real)

⁴⁴ Frontier Economics, August 2025, Updated cost of equity cross-check evidence, para 3.4.1

⁴⁵ Frontier Economics, August 2025, Updated cost of equity cross-check evidence, section 4

⁴⁶ Ofgem, July 2025, RIIO-3 Draft Determination - Finance Annex, para 3.107

⁴⁷ Frontier Economics, August 2025, Cross check standards of evidence

20-year UK government bonds,⁴⁸ c. 5.9% on long-dated sterling A corporate bonds,⁴⁹ and c. 6.3% on long-dated sterling BBB.⁵⁰ In comparison, the DD range results in only a small returns premium for equity. A rational investor would not choose to invest in equity when returns on debt are close to expected returns on equity given that debt is significantly less risky.

Our consultants have responded to Ofgem's feedback on cross checks

- *Hybrid bonds:*

In the Sector Specific Methodology Decision (SSMD), Ofgem rejected hybrid bonds as a cross check for two reasons which Frontier Economics have responded to.⁵¹ Firstly, Ofgem challenges the extent to which hybrid bonds are equity-like due to the short tenor between issuance and first call date. However, the equity-likeness of hybrid bonds is also driven by other factors such as the option to skip coupon payments and subordinated nature of hybrid bond payments relative to debt. Secondly, Ofgem considers that there is difficulty in consistently inferring the spread of hybrid bonds returns over debt, noting the wide range of spreads for Frontier Economics sample of bonds. However, the interquartile range for this sample is much smaller and narrower again for the 3 National Grid hybrid bonds.

Ofgem's cross checks can also be subject to criticism on the basis of sample size and assumptions that need to be made, yet Ofgem place weight on them; this view is supported by Frontier Economics.⁵² It is not satisfactory to raise concerns with cross check limitations that do not materially affect the outcome of the cross-check evidence or the key conclusions that would logically follow.

More broadly, these reasons for rejecting the cross check misconstrue the purpose of a cross check, which is to sense check the allowed cost of equity.

Frontier Economics⁵³ has tested the robustness of the hybrid bonds cross check by looking at wider samples of bonds and performing numerous sensitivities. The cross check points to Ofgem's point estimate of allowed cost of equity (5.64%) being below the bottom of the hybrid bonds range (5.8%-8.0%), meaning the allowed cost of equity is too low. Similarly, the latest yield on non-financials iBoxx A 10+ and iBoxx BBB 10+ plus spread at issue on hybrid bonds (i.e. excluding any equity premium above hybrid bonds) is almost in line with Ofgem's RIIO-T3 allowed cost of equity,⁵⁴ again implying that the allowed cost of equity is too low.

Overall, evidence from hybrid bonds is sufficiently compelling that Ofgem should use it as a cross check.

- *Debt premia (previously called ARP:DRP)*

On the debt premia cross check, Oxera find that, extrapolating the debt risk premium (DRP) to 100% gearing, the minimum cost of equity implied by the debt premia that passes all Oxera's specifications is 6.47% therefore Ofgem's allowed CoE of 5.64% is too low.⁵⁵ In contrast, Oxera's point estimate passes most of the specifications. Only Oxera's high point passes all specifications and therefore passes the cross check.⁵⁶ Overall, this cross check points to the entirety of Ofgem's allowed cost of equity range being insufficient for RIIO-T3.

Overall, evidence from debt premia is sufficiently compelling that Ofgem should use it as a cross check.

- *Long term profitability*

There is value in reviewing long term profitability as a cross check as it uses the reasonable assumption that investors will form expectations based on returns achieved in comparable sectors and markets. On this basis, Frontier Economics calculate the average nominal profitability for the period 2002-2024 based on utility indices for FTSE and S&P, converted to real profitability based on outturn CPI. The result is low profitability of 5.6%, median of 8.8%, high of 17.5%; Frontier Economics note the positively skewed high point and therefore set a range for this cross check based on low and median of 5.6%- 8.8%.

⁴⁸ Per Bank of England website, [UMLNZC | Bank of England | Database](#)

⁴⁹ iBoxx £ Non-Financials A 10+ index (ISIN: DE000A0JY837)

⁵⁰ iBoxx £ Non-Financials BBB 10+ index (ISIN: DE000A0JZAH1)

⁵¹ Frontier Economics, August 2025, Updated cost of equity cross-check evidence, section 2

⁵² Frontier Economics, August 2025, Cross check standards of evidence

⁵³ Frontier Economics, August 2025, Updated cost of equity cross-check evidence, section 2

⁵⁴ Frontier Economics, August 2025, Updated cost of equity cross-check evidence, section 2, Figure 2

⁵⁵ Oxera, August 2025, RIIO-3 Draft Determination CAPM parameters and debt-based cross checks, figure 6.1

⁵⁶ Oxera, August 2025, RIIO-3 Draft Determination CAPM parameters and debt-based cross checks, figure 6.2

- *US returns*

Frontier Economics provide evidence that authorised returns in the US for a set of comparable US utilities with a significant proportion of regulated activity are 9 to 10%.⁵⁷ These returns are for state-regulated energy networks. We note that Federal (FERC) allowed returns for electricity transmission are typically even higher.

We have compared Ofgem's approach to setting returns to the approach of US regulators with stable regulation that are most relevant to our business, FERC (federal) and NYPSC (state). We note the following differences in methodology in estimating the cost of equity between the UK and these regulators for the US:

- Discounted cashflow has been the most common model in the US, with CAPM accounting for no more than a 1/3 weighting. In the UK Ofgem primarily uses CAPM.
- Total market returns: In the US, market returns are estimated on a forward looking basis, whereas Ofgem primarily relies on long term historical real returns.
- Beta: The NYPSC and FERC adjust betas to reflect the tendency of beta to converge toward 1.0, which produces higher estimates for companies with beta less than 1.0. This adjustment is not made by Ofgem in the UK. So companies in the US with equivalent risk to UK networks will get a higher beta and therefore a higher return in the US than in the UK.
- FERC uses a 'base' + incentive ROE framework, with incentive ROE adders allowed for projects that meet certain risk and benefits criteria. The purpose of adders can be viewed as largely about driving new investment in projects and recognising the additional risks and challenges such projects face.
- The Hope & Bluefield legal requirements in the US means regulators need to balance both consumer and investor interests. In the US there are many regulators and many companies. Combined with the Hope & Bluefield legal requirements it is more difficult for an individual regulator to set a return materially different to the comparator pack of similar companies as networks would likely challenge the returns.

Whilst US regulation has some differences to regulation in the UK, it is not obvious if risk is higher or lower. We need to attract new investors and these investors are more likely to be generalists rather than utility specialists.

These investors are unlikely to have a detailed understanding of the regulatory framework in different jurisdictions so their visibility of forward-looking risk is likely to be less clear than their visibility of allowed returns. Therefore, headline returns are important by themselves and headline returns are higher in the US.

- *European returns*

Frontier Economics have also looked at major European international comparators. Frontier Economics find that the equity premium over the risk free rate with consistent gearing is below that in many comparable jurisdictions in Europe. On a post-tax basis, if countries in pre-tax systems are able to achieve moderate tax outperformance, the UK premium sits only above that of Germany and Portugal.⁵⁸ Again, this data points to Ofgem's cost of equity being too low.

Ofgem should take into account new cross check evidence

Since DD, the UK government has announced an allowed cost of equity for Sizewell C for the construction and initial operational phase of 10.8% CPIH real (65% gearing).⁵⁹ At 55% gearing, this allowed return is c.9% CPIH real, more than 300bps higher than Ofgem's DD.

This information is an important cross check as it is a revealed market price through bidding. Importantly, the return in question is the return on a wholly regulated set of cashflows, where investors benefit from the same regulatory safeguards and same legal protections as the ET networks. This market-based cross check is also more relevant than OFTO bid implied equity IRRs because OFTOs carry no construction risk and do not follow a RAB model.

It is noteworthy in this regard that the regulatory framework for Sizewell C provides for a more contained RORE range for Sizewell C than is the case for a conventional regulated network. Centrica has stated that its equity IRR will be greater than 10% in the downside case and greater than 12% in the upside case⁶⁰ – i.e. due to the significant regulatory protections, investors are now guaranteed a higher return at lower risk by investing in Sizewell C than investing in RIIO-T3 even in an extreme downside scenario. Therefore, Ofgem should place significant weight on Sizewell C bid cost of equity as a cross check. This cross check points to Ofgem's DD cost of equity being below what

⁵⁷ Frontier Economics, March 2025, Allowed Return on Equity for US Electricity Utilities; submitted to Ofgem 14/3/25

⁵⁸ Frontier Economics, August 2025, Equity returns for RIIO-T3, Section 4

⁵⁹ Centrica, 22/7/25, Regulated investment with predictable returns, [centrica-2025-sizewell-c-presentation.pdf](#)

⁶⁰ Centrica, 22/7/25, Regulated investment with predictable returns, [centrica-2025-sizewell-c-presentation.pdf](#)

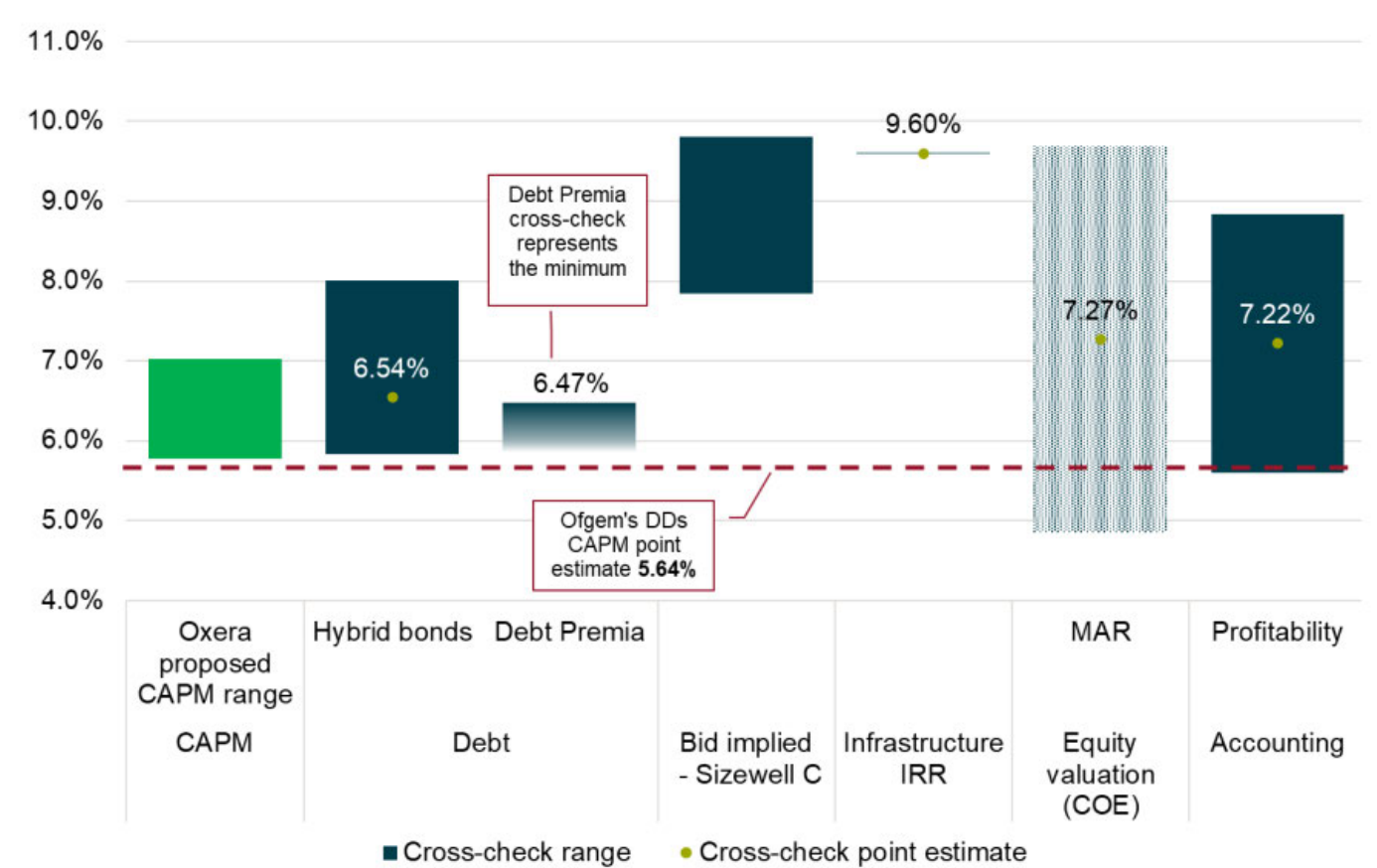
the market currently requires.

For a more detailed review of how Sizewell C compares to RIIO-T3, please see the Frontier Economics, August 2025, Updated Cost of Equity Cross Check Evidence report included with our submission.

Overall, cross check evidence demonstrates that Ofgem’s Step 1 (the Capital Asset Pricing Model calculations) allowed cost of equity is not sufficient and Ofgem needs to make an upwards adjustment in Step 2 (Checking our Step-1 estimate is neither excessive nor Insufficient)

The full suite of UK based cross checks compared to Ofgem’s RIIO-T3 DD and Oxera’s CAPM allowed cost of equity is below.

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.

Ofgem’s chosen cross checks point to a 6.5% allowed cost of equity. A balanced and consistent consideration of evidence means a broader range of cross checks should be considered. New debt based cross checks point to at least 6.5% cost of equity. Oxera’s CAPM report evidences a midpoint estimate of 6.38% at 55% gearing, with evidence that a higher point estimate in their range can be supported.⁶¹ When updated for movements in risk free rate, our RIIO-T3 business plan submission would give a cost of equity of 6% at 55% gearing. All these data points are consistent that Ofgem’s RIIO-T3 DD proposal of 5.64% at 55% cost of equity is far too low; it would be irrational to set a cost of equity this low. It would be clearly superior to select an allowed cost of equity of at least 6%.

It isn’t a surprise that the cross checks suggest the CAPM cost of equity is too low. Vallorii have recently published a paper that outlines various financial and economic assumptions that CAPM relies on and empirical issues with CAPM

⁶¹ Oxera, August 2025, RIIO-3 Draft Determination—CAPM parameters and debt-based cross-checks

estimation of beta and returns.⁶² In particular, Vallorij note that CAPM typically underestimate beta for assets with beta less than one, which includes most infrastructure assets, including all Ofgem's RIIO-T3 comparator sample for beta. Underestimation of beta means CAPM will underestimate allowed returns on equity.⁶³

Aside from the parameter evidence pointing to the allowed cost of equity needing to increase, there is in addition good reason to aim up on allowed cost of equity. Oxera show that the welfare effects of underinvestment on system reliability and delivering net zero are likely to be significant and greater than the saving to consumers from setting cost of capital too low.⁶⁴ The National Infrastructure Commission has produced a report that supports our position;⁶⁵ they advise that the long-term approach to investment should also be applied to the finance package and cost of capital i.e. attracting investors is more important than saving money in short term. Therefore, Ofgem should also aim up in cost of equity to reflect the asymmetric impacts of uncertainty in setting the cost of capital.

In addition, we disagree with the conclusions Ofgem has drawn from TMR cross checks, due to the rejection of most TMR cross checks.

Ofgem reject the DGM as a cross check for TMR and reject the TMR glider; these rejections are due to concerns about DGM as dividends fluctuate and DGM is highly sensitive to future dividend assumptions. These criticisms are unreasonable as they apply a different, higher standard of evidence to these cross checks than to Ofgem's preferred cross checks; Ofgem places significant reliance on the MARs cross check but this cross check also relies on the DGM.

Ofgem seem to reject the Fernandez survey due to the small proportion of responses (82) and lack of clarity around who respondents are. However, the number of respondents is still significant, and greater in number than the number of respondents to Ofgem's own TMR survey cross check of 9 financial institutions. Moreover, whilst it may not be clear who the respondents are, the survey is still independent. Overall, this evidence is compelling evidence that the Fernandez survey findings should not be rejected.

As with cross checks on the allowed cost of equity, Ofgem needs to apply a balanced and consistent consideration of evidence in judging TMR cross checks. Ofgem are not currently adopting this approach; if Ofgem did adopt a balanced and consistent consideration of evidence, Ofgem would place weight on the additional cross checks listed in this answer, as explained further by Frontier Economics.⁶⁶

In FQ9, we provide evidence that the long run interquartile range for TMR is 6.5%- 7.5%. We also provide evidence that TMR is above the long run average and this is consistent with government bond rates that are also above the long run average. The evidence of TMR cross checks points to a TMR at the top end of the range of 7.0%-7.5%.

Conclusion

The evidence referred to in this answer points to the need for Ofgem to review the cost of equity parameters with a view to increasing the cost of equity range or aiming up in Ofgem's RIIO-T3 Draft Determination cost of equity range.

⁶² Vallorij, June 2025, Using CAPM to regulate infrastructure: A critique, <https://www.vallorij.com/post/using-capm-to-regulate-infrastructure-a-critique> (on members' area; report available on request)

⁶³ Vallorij, June 2025, Using CAPM to regulate infrastructure: A critique, <https://www.vallorij.com/post/using-capm-to-regulate-infrastructure-a-critique> (on members' area; report available on request)

⁶⁴ Oxera, November 2024, RIIO-3 risks and investability topics, section 4. We submitted this report to Ofgem with our RIIO-T3 Business Plan

⁶⁵ National Infrastructure Commission, February 2025, Electricity distribution networks: Creating capacity for the future, pg 77 & 78

⁶⁶ Frontier Economics, August 2025, Cross checks standards of evidence

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

We disagree that capex spend risk is not systematic.

There is precedent to adjust beta for capital intensity: Ofgem said in RIIO-T1 Final Determinations (FD) that: *“We regard the scale of investment as the most significant differentiator of risk affecting both the asset beta (and, therefore, the cost of equity) and the appropriate level of notional gearing”*.⁶⁷

There is precedent in practice from Ofgem to adjust beta for capital intensity; either of the following approaches could be used to adjust beta for capital intensity in RIIO-T3:

a) In RIIO:

- In RIIO-T1, capital intensity was c13% for NGET, c15% for SPT and nearly 30% for SHET. The high capital intensity in SPT and SHET led Ofgem to set the same CoE for all three ETOs but with a lower gearing for SPT & SHET of 55% i.e. Ofgem implicitly chose a higher asset beta for SPT and SHET than for NGET in RIIO-T1.
- In RIIO-T3, NGET's capital intensity is c21% which is within the RIIO-T1 SPT-SHET range. Therefore:
 - NGET should get a higher asset beta in RIIO-T3 than the beta it was given in RIIO-T1. Based on RIIO-T3 debt beta of 0.075, RIIO-T1 equity beta of 0.95 implies, at 55% gearing, an asset beta of 0.47.
 - In addition, to apply Ofgem's RIIO-T1 approach, ETO and gas networks should get the same CoE but at their different gearing levels, 55% and 60% respectively.

b) Outside of RIIO: Ofgem's recent Decision on Interest During Construction (IDC) rates to be applied during 2025-26 to offshore transmission (OFTO) projects and electricity interconnectors granted the cap and floor regime⁶⁸ set betas on the following basis:

- An uplift at the lower end from 0.42 to 0.45 to the asset beta estimates used for construction-intensive regulated networks
- at the upper end, estimates of the asset beta pertaining to comparator firms in the construction and engineering sector
- Additional uplifts are then applied to reflect additional riskiness e.g. due to the marine environment:
 - Offshore transmission: no uplift at the low end, 0.05 uplift at the high end.
 - Interconnector: 0.05 uplift at the low end and 0.10 uplift at the high end.

Regulated networks will also be construction intensive in RIIO-T3 and will be doing significant work in the marine environment. Therefore, this evidence could suggest a beta of 0.42 is a low case and a high case could be 0.55 (based on 0.42+ 0.03 uplift for construction intensive regulated networks + 0.10 maximum uplift for marine environment). We think this range may be too high given that OFTOs and interconnectors are more construction intensive and more focussed on marine environments, but these decisions by Ofgem support uplifts in beta for capital intensity.

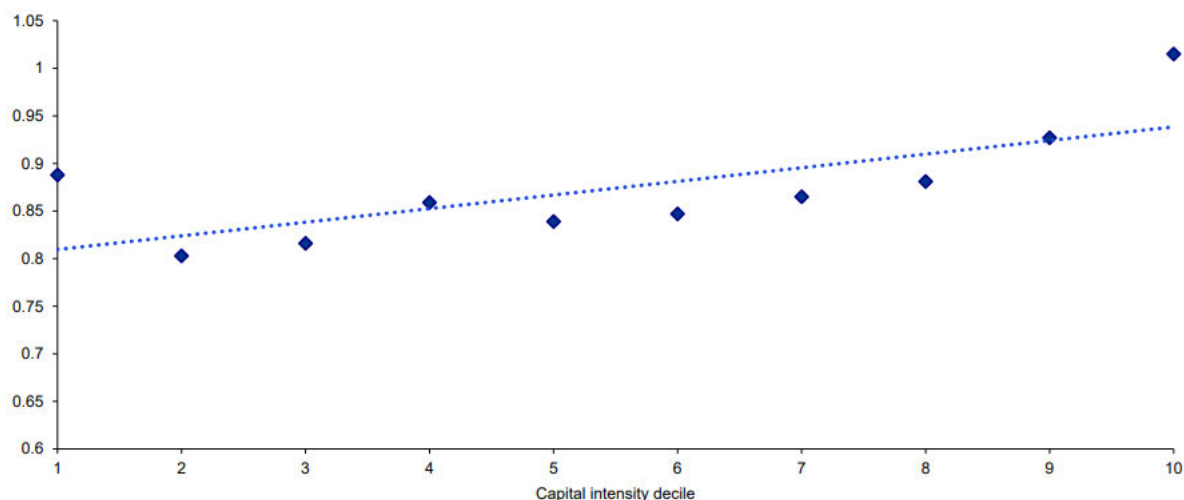
KPMG analysed non-financial UK stocks within the FTSE 350 and found a positive and statistically significant relationship between capital intensity and beta as shown in the following graph.⁶⁹ Based on NGET's capital intensity in RIIO-T3, NGET in RIIO-T3 would be in the 10th decile on this graph indicating an equity beta of nearly 1.

⁶⁷ Ofgem, 17/12/12, RIIO-T1: Final Proposals for National Grid Electricity Transmission and National Grid Gas - Finance supporting document, para 3.15

⁶⁸ Ofgem, 27/3/25, Decision on Interest During Construction (IDC) rates to be applied during 2025-26 to offshore transmission (OFTO) projects and electricity interconnectors granted the cap and floor regime

⁶⁹ KPMG, August 2024, Estimating the Cost of Equity for PR24, available at [AFW152.pdf](#), Figure 6 pg 57

Relationship between capital intensity and equity beta based on FTSE350 market-wide evidence



In practice, investors perceive that, due to the higher totex relative to RAV in RIIO-T3, there is higher risk for electricity transmission in RIIO-T3 and this higher risk requires a higher return, regardless of whether the risk is clearly systematic or not. Evidencing this point, on a call with investors following the publication of DD, Bernstein managing director Deepa Venkateswaran was *“not entirely sure that the risk reward balance for ET is actually factoring in that higher level of spend.”*

Ofgem therefore should to take account that a proportion of capex spend will be systematic in FD by selecting a sufficient value from the upper half of the beta range; this is consistent with RIIO-T3 Sector Specific Methodology Decision (SSMD) where Ofgem noted that estimating beta in the upper half of the beta range “explicitly addresses the potential for a different risk profile in RIIO-3 relative to RIIO-2”.⁷⁰

⁷⁰ Ofgem, July 2024, RIIO-3 Sector Specific Methodology Decision – Finance Annex, para 3.305

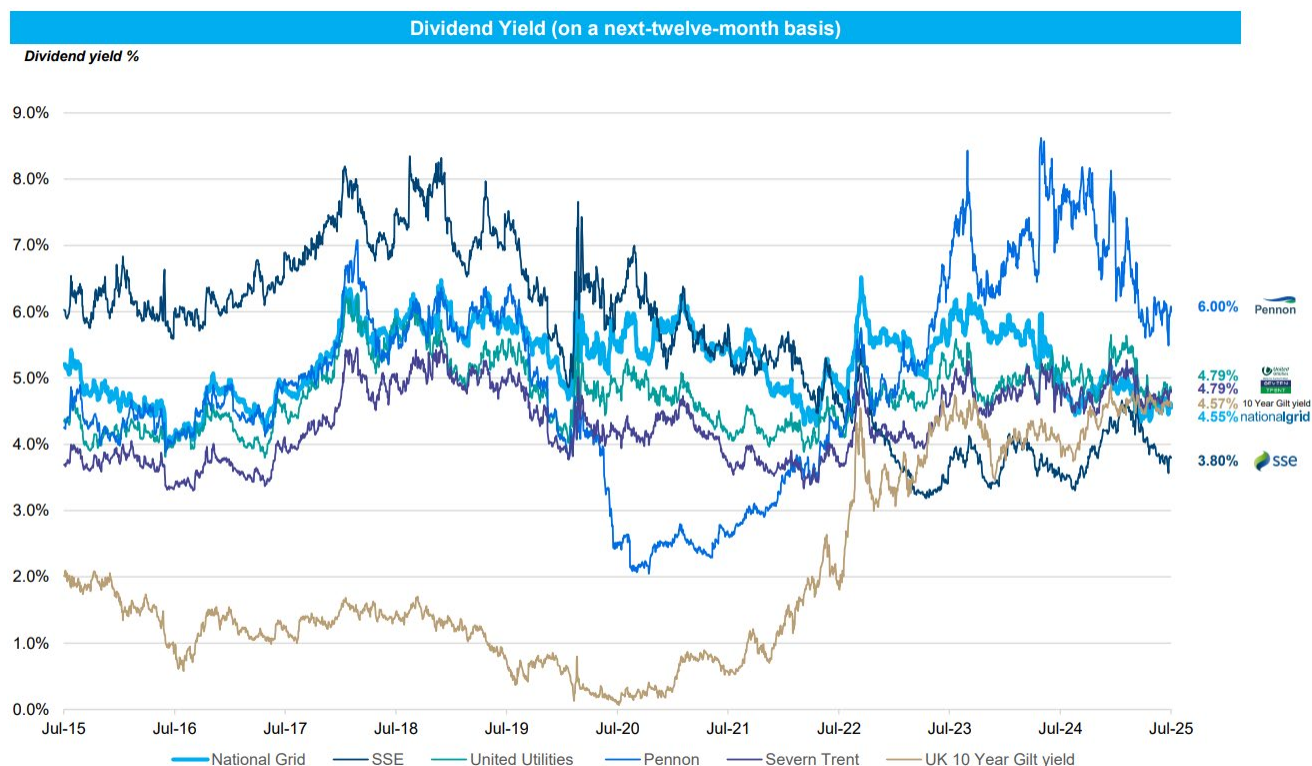
FQ14. Do you agree with our proposed dividend allowance policies for the notional gas and electricity companies?

In our business plan we assumed a 3% dividend yield to be compliant with the Sector Specific Methodology Decision (SSMD) but submitted evidence that 3% is not sufficient for investability. In our RIIO-T3 Business Plan, we submitted a report from Oxera which showed that utility comparators provide dividend yields of 5% therefore this is necessary for NGET for RIIO-T3.⁷¹

Based on its growth and returns profile, National Grid is not a growth stock; instead, it sits between the yield and TSR buckets. These lower growth buckets are associated with a higher dividend yield, so a strong dividend yield is important for NG investors. Dividend yields for NG and related networks over the past 10 years support this view, with dividend yields typically being around 5%:

⁷¹ Oxera, November 2024, RIIO-3 risks and investability topics

⁷² Barclays, March 2025, Corporate Broking analysis (slide updated August 2025)



Ofgem should take account of this evidence in Final Determinations and increase the notional dividend yield assumption to 5%.

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

The flat WACC concept was introduced to address the issue that, absent the flat WACC adjustment, the RIIO-T2 WACC for electricity companies would have been below that of gas companies despite being judged to have the same risk. Whilst we understand Ofgem's concerns with the theoretical basis of the adjustment, the same issue applies for RIIO-T3 and some form of adjustment is required.

Typically, a flat WACC or a WACC that increases slightly as gearing reduces, is what many theories would suggest unless the reduction in gearing makes a material difference to investor's view of the likelihood of financial distress or agency risk. For network utilities operating at strong investment grade credit ratings, a WACC that reduces as gearing reduces is counter intuitive.

Without flat WACC, using the ET semi-nominal cost of debt and notional structure from Draft Determinations (DD) the electricity transmission sector gets a lower WACC than the gas sector; please see the calculation below.

Parameter*	60% gearing	55% gearing with flat WACC	55% gearing without flat WACC
RFR	2.01% (A)		2.01%
TMR	6.90% (B)		6.90%
Debt beta	0.075 (C)		0.075
Asset beta	0.375 (D)		0.375
Notional gearing	60% (E)	55% (J)	55%
Equity beta	0.83 ($F = (D - E \cdot C) / (1 - E)$)		0.74
Cost of equity	6.04% ($G = A + F \cdot (B - A)$)	5.99% ($K = (I - (H \cdot J)) / (1 - J)$)	5.64%
Semi-nominal cost of debt	5.56% (H)	5.56% (H)	5.56%
Semi-nominal WACC	5.75% ($I = H \cdot E + G \cdot (1 - E)$)	5.75% (I)	5.59%

* Non-calculated inputs per Ofgem, July 2025, RIIO-3 Draft Determination - Finance Annex

This low WACC for ETOs is despite:

- a) ETOs and gas networks having the same asset beta; and
- b) ETOs having lower gearing: lower gearing is associated with higher operational risk. In RIIO-T2, Ofgem lowered NGET's notional gearing to 55% partly to reduce the risk that NGET would not achieve a strong investment grade credit rating of Baa1/BBB+. In our RIIO-T3 Business Plan submission, we submitted a report on relative risk which provided evidence that ET risk is higher than risk in gas distribution.⁷³

In terms of simple investability optics, some investors do not look at the gearing (they may not see much change in risk for 5%) so to them the electricity networks cost of equity is 40 bps below gas networks and this looks unattractive. The lower gearing for ET indicates higher operational risk, so the risk reward package looks even more unattractive and not investable. As evidence, on a call with investors following the publication of RIIO3 DD, Bernstein managing director Deepa Venkateswaran noted that an investor in gas networks could, compared to investing in ET, *"very easily get similar returns with much lower risk, so I'm not entirely sure that the risk reward balance for ET is actually factoring in that higher level of spend."* This is highlighting that why would an investor put their money into electricity transmission, when it could generate higher headline returns with much lower risk investment in gas.

Therefore, if Ofgem does not apply flat WACC, an alternative uplift is needed, such as aiming up on cost of equity. This is important to ensure investability of ET networks, at a time when ET network licensees need to raise substantial fresh equity.

We noted in FQ13 that in RIIO-T1, Ofgem gave SPT and SHET the same allowed cost of equity, at a lower gearing, as NGET. On the same basis, Ofgem could give the same allowed cost of equity at 55% gearing as at 60% gearing. The above table supports this idea; it shows that the allowed cost of equity at 55% gearing with flat WACC is already close to the allowed cost of equity at 60% gearing.

⁷³ KPMG, August 2024, RIIO-ET3 Relative Risk Assessment

Alternatively, Ofgem could set gearing for electricity transmission networks at 60%, in line with gas networks, whilst maintaining a target credit rating of Baa1/BBB+.

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

We do not agree that Ofgem's proposed package for electricity companies is investable.

This response is supported by a short executive summary and paper, 'Investability of RIIO-ET3 Draft Determination: Prepared for Ofgem on behalf of the Transmission Operators (TOs) 15 August 2025.⁷⁴' This sets out an independent view on investability that was submitted to Ofgem in August (alongside a letter to Ofgem from the three TOs) stating that the Draft Determinations (DD) package is not investable.

This FQ should also be read in conjunction with Frontier Economics' report Equity Returns for RIIO-T3, August 2025, included with our response.

The regulatory and financial framework for RIIO-T3 must enable us to attract the capital required to deliver the consumer and societal benefits of the energy transition. Our plan includes a total investment of £35bn, an increase of 2.5 times from RIIO-T2, as part of the delivery of £80bn across electricity transmission. In order to deliver this investment, NGET will require £9bn to £10bn of notional fresh equity during the next price control. We remain fully committed to playing our part in this national endeavour to deliver the Clean Power 2030 (CP2030) mission and realising the overall consumer and society wide benefits of achieving net zero. However, the regulatory framework set out in DD is not yet investable.

We share the aim that the framework needs to ensure that companies can access *"sufficient and low cost investment capital"* to fund investment, and agree that Ofgem's new net zero duty requires it to *"offer consistency, clear signals and direction so as to provide certainty and assurance to investors that projects are viable, investable and deliverable."*⁷⁵ We agree with the overall objective that has been set out for RIIO-T3 *"to implement a regulatory framework for energy networks that will help GB accelerate its transition to a clean power system by 2030"*.⁷⁶ It is critical that RIIO-T3 has a workable framework of reopeners that is deliverable, investable and financeable to achieve these objectives.

We welcome the continued positive intent expressed by Ofgem on both financeability and investability, and we recognise the changes to the financial package since the Sector Specific Methodology Decision (SSMD) as a positive step. This includes:

- introduction of a RAV weighted cost of debt;
- commitment to strong investment grade credit metrics equivalent to Baa1/BBB+;
- adjustment to capitalisation rates in light of financeability challenges; and
- introduction of European comparators for beta in the cost of equity

We welcome the explicit recognition that the network portion of the bill will need to increase, and that this increase is expected to pay for itself in terms of reduced constraint costs and protecting customers from wholesale price volatility. However, these changes do not go far enough, and the package is not yet investable as the DD fail to create the conditions needed to secure the unprecedented increase in investment required. They also do not meet Ofgem's objective to *"Create a competitive environment that protects consumers while attracting the scale of capital investment required, with fair but not excessive returns for investors."*⁷⁷

The DD put at risk our collective CP2030 mission and the associated benefits for consumers and society, including reducing and stabilising bills, and improving energy security. This will inevitably have a detrimental impact on consumers, and it will also hinder the Government's ability to meet its goal of driving economic growth.

Investors require earnings which keep pace with asset growth and nominal equity returns of 9 to 10% for high performing networks. Based on our analysis, DD delivers on the first of these but are far short of achieving the second because:

- **The baseline equity return is too low and must be increased to at least 6% at 55% gearing in the Final Determinations (FD);**
 - **The financial framework for electricity transmission needs to be competitive in the real-life global competition for significant equity; and**

⁷⁴ Oxera, August 2025, Investability of RIIO-ET3 Draft Determination

⁷⁵ Ofgem, July 2024, RIIO-T3 Sector Specific Methodology Decision- Finance Annex, paragraph 1.6

⁷⁶ Ofgem, July 2025, RIIO-3 Draft Determination Overview Document, page 8

⁷⁷ Ofgem, July 2025, RIIO-3 Draft Determination Overview Document, page 96, paragraph 9.2

- **Cross checks clearly demonstrate the baseline equity return of 5.64% (55% gearing) is too low to compensate for the inherent risk within the business, and given the returns available elsewhere, will not attract new equity;**
- **There is downside risk across the framework, including the position on totex and reopeners, that lowers expected returns further; and**
- **The incentive framework is incomplete and insufficient to bridge the gap to 9 to 10% nominal returns for efficient, high performing companies.**

There is strong rationale for Ofgem’s proposed cash solutions as the minimum required to support debt financeability, and these should be maintained.

Ofgem also needs to consider that the package needs to be investable to support its other duties, in particular net zero and growth.

In our response to this FQ, we focus on equity investors. We explain the requirements for investability (broadly relating to financeability) for debt investors in FQs 1-6 (cost of debt), FQs 18-21 (debt financeability and financial resilience) and FQ26 (regulatory depreciation).

Defining investability

In the RIIO-3 Sector Specific Methodology Consultation (SSMC), Ofgem defined investability as considering “*whether the allowed return on equity is sufficient to retain and attract the equity capital that the sector requires.*”⁷⁸ Ofgem extended this definition in SSMD to “*accurately capture and compensate efficient additional financing costs.*”⁷⁹ In DD, whilst Ofgem mentions dividend yields, it does not provide any evidence of what investors actually require in terms of dividend yields when proposing a yield of 3% for RIIO-T3.⁸⁰ Therefore, Ofgem’s assessment of investability in DD seems to still be based on cost of equity and equity issuance costs.

In our RIIO-T3 Business Plan submission, we used a broader definition of investability; we defined an investable package as one that is sufficient to attract and retain capital, however is not just about allowed return on equity. We said an investable package means the cost of equity must be set at a level that reflects investor requirements under current market conditions to enable us to attract and retain significant new equity. In addition, to be investable, the broad financial and wider regulatory package requires:

- a fair opportunity to outperform through the design of the incentive framework, and
- earnings growth that matches asset growth and supports acceptable dividend yields for investors when compared with other potential investment opportunities.

For further explanation of why the financial framework needs to include all of these features to be investable, please see our RIIO-T3 Business Plan submission and our RIIO-T3 SSMC response; our RIIO-T3 Business Plan submission builds on our RIIO-T3 SSMC response.

However, in addition to financial parameters, to assess whether the proposed package is investable requires consideration of the package as a whole and not just the financial framework. KPMG explain the key broader principles that need to be met for a price control to be investable.⁸¹ The full suite of principles is as follows:

Financing-related principles:

1. Robust, forward-looking investment appraisal: Investment characteristics supporting robust, NPV-positive, forward-looking investment appraisal based on the actual, marginal cost of attracting new capital.
2. Pricing in the scale of capital requirements: Allowed returns should reflect market pricing of the total quantum and types of capital required
3. Obligations to deliver and finance major investments when called for: The costs of meeting obligations to finance and deliver major investments—when called for by statute, policy or regulation—should be recognised and remunerated

Investment-related principles:

4. Investment programme specification and delivery: Investment programmes should be structured and specified to be deliverable against realistic timelines and market conditions.
5. Structure and bounded risk exposure: The total risk exposure should be assessed on a holistic and unbiased basis and should be consistent with investors’ targets and limitations for a given asset class.

⁷⁸ Ofgem, December 2023, RIIO-3 Sector Specific Methodology Consultation – Finance Annex, para 5.9

⁷⁹ Ofgem, July 2024, RIIO-3 Sector Specific Methodology Decision – Finance Annex, para 1.16

⁸⁰ Ofgem, July 2024, RIIO-3 Draft Determination - Finance Annex, para 3.109

⁸¹ KPMG, August 2025, Investability Principles for RIIO-T3

6. Regulatory consistency and predictability: The regulatory framework and commitments should be aligned with the long-term investment characteristics that support an acceptable level of variability and timing of returns.

In our assessment of whether the RIIO-T3 package is investable that follows, we will note instances where Ofgem needs to make changes and/ or do more to align with each of these principles.

The financial framework for electricity transmission needs to be competitive in the real-life global competition for significant equity

There has been an enormous amount of change since the RIIO-2 Determinations

The scale of investment in RIIO-T3 of nearly c.£80bn across the electricity transmission networks is unprecedented and compares with c.£20bn in RIIO-T2. At the same time, there is fierce international competition for capital across global markets, the inherent risk profile of the electricity transmission sector has increased significantly due to the scale of the investment alongside the associated scale up of supply chain and labour, and networks need to raise new equity as well as new debt to fund their investment programmes.

Providers of capital have a choice of where to invest. At the National Grid investor roundtable held with Ofgem in March 2025, equity investors were clear that they need to be able to see a credible pathway to a nominal return on equity of at least 9 to 10%.⁸² The base equity return is an important component of this, however in addition there needs to be sufficient visibility through the design of the incentive framework that high performing efficient networks can make up the difference between the base return and the 9 to 10% required by investors.

There is a host of supporting evidence for this including:

- returns available in US utilities of 9 to 10%, this is a particularly important comparison given the sheer size of the US energy investment requirement;
- recent announcements from UK listed water companies on targeted nominal returns (e.g. Severn Trent, Pennon targeting >9%); and
- inputs from the Global Infrastructure Investor Association (GIIA) into the recent Cunliffe review.

In the England & Wales listed water sector, Pennon announced they were targeting a real RORE of 7% i.e. a nominal RORE of over 9%.⁸³ Similarly, research analysts Barclays said that: "At first glance we see achieved returns could be in line with our expectations of a >9% RORE based on their performance versus Ofwat targets".⁸⁴

Frontier Economics provide evidence that authorised returns in the US for a set of comparable US utilities with a significant proportion of regulated activity are 9%-10%. These returns are for state-regulated energy networks.⁸⁵ We note that Federal (FERC) allowed returns for electricity transmission are typically even higher. For a comparison of Ofgem's approach to setting returns to the approach of US regulators with stable regulation that are most relevant to our business, see FQ12.

Whilst US regulation has some differences to GB regulation, it is not obvious if risk is higher or lower. We need to attract new investors and these investors are more likely to be generalist rather than utility specialists. These investors are unlikely to have a detailed understanding of the regulatory framework of different jurisdictions so their visibility of forward-looking risk is likely to be less than their visibility of allowed returns. Therefore, headline returns are also important by themselves and headline returns are higher in the US despite gearing typically being lower at c50%.

More recently, Centrica announced their Sizewell C investment, this also provides a strong viewpoint of the level of return and package that are required to attract capital into a significant multi-billion investment under a traditional regulated asset base (RAB) model (though this is less than half the investment needed in electricity transmission).

It is not credible that electricity transmission has a lower equity return than gas networks given the scale of equity to be raised. Ofgem states in the DD that gas and electricity have the same level of risk and has given the gas and electricity networks the same beta. However, as electricity transmission has a lower gearing at 55% it has a resulting lower equity return. This makes the electricity networks look unattractive to investors and was specifically raised by Bernstein at the Ofgem RIIO-T3 investor call on 1 July who questioned why an investor would put their money into electricity transmission, when it could generate similar returns with much lower risk by investing in gas.

The context of global competition is particularly important. Investors have been encouraged by the positive intent from Ofgem regarding investability through the RIIO-T3 process and are carefully assessing the final framework for RIIO-T3

⁸² Oxera, April 2025, RIIO-ET3 need for Investability; submitted to Ofgem 4/4/2025

⁸³ Pennon plc, January 2025, 'Investor Summary: PR24 Final Determinations', 28 January

⁸⁴ Barclays, December 2024, UPDATE: Final Determination Out: First glance positive, 19 December

⁸⁵ Frontier Economics, March 2025, Allowed Return on Equity for US Electricity Utilities; submitted to Ofgem 14/3/25

to ensure it follows up on that commitment. National Grid's May 2024 rights issue rightly referenced Ofgem's intentions regarding this as set out in the SSMC. Attracting capital to deliver what is needed by 2030 is only the beginning of the process of delivering the energy transition in the UK, and the decisions made by Ofgem this year on investability will influence investor decisions on where to place equity in the future.

Ofgem has not taken into account the relative increase in demand for and future scale of demand for capital; the changing demand for capital is only likely to increase investor requirements further. Underinvestment is a real risk.

On the demand for capital side, there will be increased spend on infrastructure investments from the RIIO-T2 period to RIIO-T3, demonstrated by the significant gap between infrastructure investment forecast and infrastructure investment needed.

We point to the following evidence that an increased demand for capital increases required returns;

- an academic study of US government debt, which showed that increased issuance of this debt increases yields⁸⁷ and
- a UK investment practitioner opinion piece on equities, which advised that increased supply of shares lowers prices⁸⁸, implying higher required returns.

At the micro level, these challenges may present as follows:⁸⁹

- investors have concentration and counterparty limits which restrict how much they can invest in given companies or sectors, meaning companies must offer more attractive returns to bring in new investors. For example, National Grid is not only one of the largest debt issuers in the Sterling public market, but also a significant issuer in Euro public and other markets
- where a significant quantum of equity is expected to be required in the medium term to support the significant ongoing investment required, future dilution may be a concern to investors if they are not able or willing to commit to meeting all future capital calls proportionately. That risk will be priced into the cost of capital with increasing scale.

On the supply of capital side, there is a tightening of supply.

Bank of England base rates have increased significantly since RIIO-T2, making gilts more attractive to investors, which may partly explain the reduced infrastructure fundraising.

These facts are backed by survey data. The 2025 survey by Marsh McLennan of senior leaders in the utilities sector identified that for energy networks, security of investor returns and lack of UK competitiveness as an investment location are key risks, based on likelihood and impact, sitting at number eight and nine in the top 10 overall risks respectively.⁹³ If Ofgem wants energy networks to deliver its objectives, the people in positions best placed to know those businesses are flagging that a secure and competitive investment environment is critical.

Cross checks clearly demonstrate the baseline equity return of 5.64% (55% gearing) is too low to compensate for the inherent risk faced by the business, and given the returns available elsewhere, will not attract new equity

This part of the response should be read in conjunction with FQ12 that disagrees with Ofgem's choice of cross checks.

It is critical that the baseline equity return is sufficient to compensate investors for inherent risk. We agree with Ofgem that a strong incentive package that allows efficient, high performing companies to outperform is critical for RIIO-T3. During a call with investors following the publication of RIIO3 DD, Akshay Kaul, Ofgem director general for infrastructure, advised that *"The incentivisation is much stronger in electricity transmission because we think the value at stake there for consumers is much, much higher"*. However, a sufficient baseline return that is supported by market cross checks, must first be achieved to enable investment.

⁸⁶ Barclays, March 2025, Corporate Broking analysis

⁸⁷ Greenwood, R. and Vayanos, D., 2014, Bond Supply and Excess Bond Returns. The Review of Financial Studies, 27(3):663–713.

⁸⁸ [A primer on how equity supply can influence returns](#)

⁸⁹ KPMG, 2025, Investability principles

⁹⁰ Barclays, March 2025, Corporate Broking analysis

⁹¹ Barclays, March 2025, Corporate Broking analysis

⁹² Barclays, March 2025, Corporate Broking analysis

⁹³ Marsh McLennan, 2025, UK utilities risk report 2025

Ofgem concluded in the SSMD that cost of equity cross checks would be the primary tool for assessing investability at RIIO-T3. However, Ofgem has failed to properly consider cross check evidence and this is one of the key reasons Ofgem has proposed a baseline return that is not sufficient:

- **Inconsistent and unbalanced standard of evidence:** Ofgem are not applying equal standards of evidence when selecting and rejecting cross checks. In the Finance Annex Ofgem state *“our broader concern with any debt-based cross-check is that we do not consider that it can definitively prove or ‘back solve’ to a required return on equity.”*⁹⁴ This fundamentally misunderstands the role cross checks play in determining the cost of equity and creates an insurmountable bar, as no cross checks meet this threshold. Ofgem is inconsistent in its approach to cross checks.⁹⁵ For example, Ofgem has rejected the evidence on the total market return (TMR) glider stating concerns with the dividend growth model (DGM) but DGM is also used in the market-to-asset ratios (MARs) cross check.
- **Ofgem cross checks:** Ofgem has relied on their preferred cross checks from RIIO-2; the three sector allowed return cross-checks have an average midpoint of 6.5%⁹⁶, which is 90bps higher than the DD allowed return for the electricity transmission sector.
- **Debt based cross checks:** Ofgem has discounted the strong evidence provided by new debt based cross checks, such as hybrid bonds, that consider the returns investors can achieve on lower risk debt capital. FQ12 explains why this evidence is informative. Gilt rates have risen by 300-400bps since RIIO-T2 and the premia for equity returns versus lower risk debt returns must remain attractive. These cross checks all suggest a lower bound of 6.5%. Oxera have looked at how the cost of new debt compares to Ofgem’s allowed cost of equity at 0% gearing.⁹⁷ The cost of equity at 0% should always be at least as high as the cost of new debt. Oxera show that the unlevered cost of equity (3.84%) is 0.15% lower than the cost of new debt (3.99%). Therefore, a rational investor would invest in less risky debt rather than equity so Ofgem’s allowed cost of equity is too low.
- **Sizewell C competitive CoE**⁹⁸: This cross check evidence is further bolstered by the recent allowed returns for Sizewell C under a traditional RAB model. Centrica has stated that the framework agreed includes an equity return of 10.8% (CPIH real, 65% gearing). While new nuclear build is acknowledged to be intrinsically risky, this risk is mitigated by the significant regulatory protections that allow for a strong return even in the downside scenario, estimated by Centrica at 10% nominal. These returns can be considered relatively low risk if 10% is the expectation if the project goes badly. Given the type of investors targeted in this competitive process, this is an important real-world, market tested benchmark for assessing RIIO-T3 returns. See FQ12 for more discussion on the relevance of this cross check.
- **US utilities returns:** In the DD, Ofgem stated they *“do not think US nominal returns in the region of 9% are significantly higher than the 7.7-8.2% cost of equity (nominal, assuming 2% inflation) we are proposing in RIIO-3.”*⁹⁹ We strongly disagree with this statement, a difference of 130bps for electricity transmission networks is highly significant to investors decisions and will result in capital being deployed to the US rather than the UK.
- **European equity premia:** Frontier Economics have also looked at major European international comparators. Frontier Economics find that the equity premium over the risk free rate with consistent gearing is below that in many comparable jurisdictions in Europe. On a post-tax basis, if countries in pre-tax systems are able to achieve material (but not maximum) tax outperformance, the UK premium sits only above that of Germany and Portugal.¹⁰⁰

The baseline equity return is too low and must be increased to at least 6% at 55% gearing in the FD

Our RIIO-T3 business plan submitted in December 2024 allowed for a baseline return of 5.83% (CPIH real, 55% gearing). A simple update for current market rates to the risk-free rate would imply a cost of equity of 6.00%.

Oxera has produced a report for the Energy Networks Association that suggests the available evidence lands a 6.38%

⁹⁴ Ofgem, July 2025, RIIO-3 Draft Determination - Finance Annex, paragraph 3.100

⁹⁵ See “Frontier Economics, August 2025, Cross-check standards of evidence” for more explanation

⁹⁶ Average of: Market to asset ratio (MARs)-implied CoE of 4.2–6.2% (5.2% CPIH-real midpoint); OFTO-implied equity IRR of 5.7% (CPIH-real); Infrastructure fund implied equity IRR of 8.5% (CPIH-real)

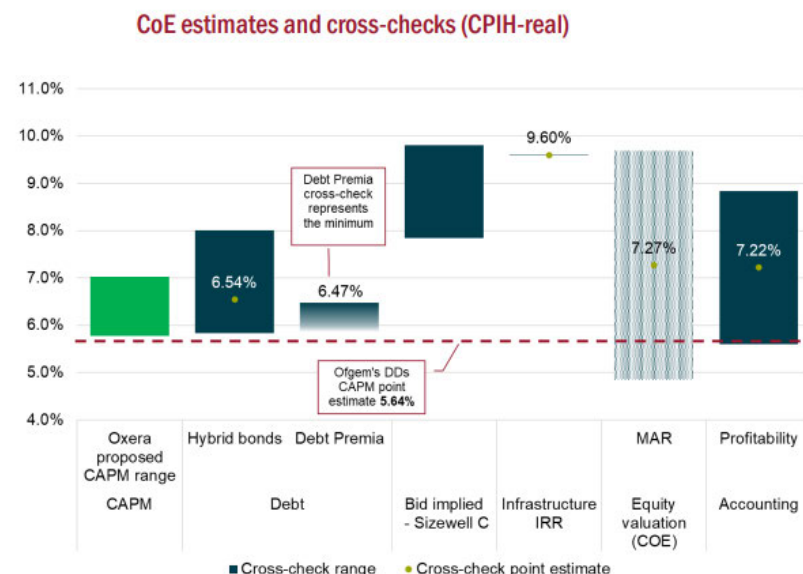
⁹⁷ Oxera, August 2025, RIIO-3 Draft Determination CAPM parameters and debt-based cross checks, table 6.1

⁹⁸ <https://www.centrica.com/media/cfwb43au/centrica-2025-sizewell-c-presentation.pdf>

⁹⁹ Ofgem, July 2025, RIIO-3 Draft Determination - Finance Annex, paragraph 3.111

¹⁰⁰ Frontier Economics, August 2025, Equity returns for RIIO-T3, Section 4

(CPIH real, 55% gearing) midpoint for the cost of equity, and can support a point estimate higher in their range.¹⁰¹



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.

There is compelling evidence from all the cross checks and market data that the baseline return proposed by Ofgem of 5.64% (CPIH real, 55% gearing) is too low. This point estimate sits either below, or at the bottom of the ranges produced by the wide range of cross-checks. In contrast, the top-end of the CAPM range set out in the DD has a greater degree of overlap with the cross-checks set out. Overall, this evidence suggests that significant investability risks remain in the DD and if left unchanged, this level of allowed equity return would not achieve Ofgem's stated objective of ensuring that the RIIO-T3 price control package is investable for an equity investor.¹⁰²

Earlier in this FQ, we noted that it is not credible that gas has a proposed higher return (6.04% CPIH real, 60% gearing) than electricity despite Ofgem asserting the same level of risk and beta. The removal of the flat WACC solution for RIIO-T2 has exposed a fundamental flaw that must be corrected by allowing for the same return as gas either by amending the cost of equity for electricity transmission or returning to a standard 60% level of gearing (whilst maintaining strong investment grade credit ratings equivalent to Baa1/BBB+).

The above evidence continues to support the credibility of our December business plan and the baseline return must be increased to at least the 6% at 55% gearing (at latest market risk free rate) as proposed in our business plan, with cross checks and other evidence suggesting that it should be higher.

Our supporting evidence provided by our advisors explains why Ofgem's return is too low and sets out the appropriate remedies that should be explored including:

- **An increase in TMR** - The evidence suggests the prevailing TMR is now 7.8-8.0% and the TMR glider also supports a number at the top of our business plan range of 7 to 7.5%. Currently, Ofgem are only proposing to increase TMR by 40bps from the RIIO-T2 level to 6.9% which is in line with the long-run evidence, whereas gilt rates have risen by 300-400bps and are above the long-run average. Ofgem has already stated, in SSMD, that the through the cycle approach *"may cause issues if there is a disconnect with our 'through cycle' estimate and current market required rates of return."*¹⁰³ The evidence demonstrates that Ofgem's TMR will cause issues and put at risk investability of the framework.
- **An increase in RFR** – Oxera provide new evidence confirming the existence of a material convenience premium including for longer tenor gilts.¹⁰⁴
- **An increase in return to account for high capital intensity risk** - Ofgem *"do not propose to adjust the ET beta for the higher capital expenditure anticipated during RIIO-3"*¹⁰⁵ failing to acknowledge a clear link between scale of investment and risk. Delivery of net zero is going to increase capital intensity for electricity transmission and in RIIO-T1 Ofgem made a specific adjustment to cost of equity for this and should do so again. Investors consider the increased capex to be a driver of increased risk and, regardless of any technical discussion of how much of that risk is beta risk, expect a higher return.
- **Aiming up on the CoE** - The available evidence that Ofgem must consider suggests Ofgem should select a point estimate at the top of the DD range to achieve a cost of equity supported by cross checks.

We note that Ofgem has not taken account of the call on capital i.e. the regulator's ability to choose when we are

¹⁰¹ Oxera, August 2025, RIIO-3 Draft Determination CAPM parameters and debt-based cross checks

¹⁰² Frontier Economics, August 2025, Updated cost of equity cross-check evidence

¹⁰³ Ofgem, July 2024, RIIO-T3 Sector Specific Methodology Decision- Finance Annex, paragraph 3.265

¹⁰⁴ Oxera, August 2025, RIIO-3 Draft Determination CAPM parameters and debt-based cross checks, section 2.1

¹⁰⁵ Ofgem, July 2025, RIIO-3 Draft Determination - Finance Annex, paragraph 3.63

required to deploy capital. Yet KPMG explain that remunerating the call on capital is an important principle to ensure investability, and explain how regulators could remunerate it;¹⁰⁶ Ofgem should follow these recommendations. Moreover, Ofgem has recognised the challenge of obliging investors to provide additional capital and taken steps to remove such an obligation elsewhere in the energy sector:

- Ofgem's recent decision on the CATO regime.¹⁰⁷ CATO providers expressed concern about the need to provide additional finance (i.e. a call option). For any additional investment beyond 20% of the baseline, Ofgem responded to these concerns by providing CATOs with a range of options, depending on size of % overspend. These options include for the CATO to 'self-finance', for Ofgem to provide pass through funding or for the CATO to agree a bespoke funding arrangement with Ofgem. Ofgem has therefore introduced measures to mitigate upfront the challenges of being committed to having to provide additional finance by limiting the impact of that commitment. Ofgem should take into account the call on capital for RIIO businesses too.
- The Secretary of State's recent decision on Sizewell C; Centrica published material on the package they have accepted, which includes no obligation on Centrica to fund beyond the higher regulatory threshold¹⁰⁸ i.e. the government has explicitly limited this call option for Centrica

Removing the obligation for networks to invest is not an option for RIIO-T3 but Ofgem should recognise the financial cost of this call option in the cost of equity it selects.

An increase in the baseline return to at least 6% at 55% gearing must be accompanied by changes to the overall framework to eliminate asymmetric downside risk, and to the incentive framework to allow for 9 to 10% nominal returns for efficient, high performing companies.

There is downside risk across the framework, including the position on totex and reopeners, that lowers expected returns further

DD do not consider the practical challenges and risks associated with a two and a half times increase in delivery to achieve the biggest expansion of the electricity system in a generation, at a time when across the globe others are seeking to achieve the same which is creating a constrained supply chain.

Ofgem's framework is not yet workable, and Ofgem has systematically proposed disallowances which are not supported by evidence

Under Ofgem's proposals (as with the current regime), delivering at the pace required for CP2030, and that our customers and consumers want, would require us to invest ahead of securing Ofgem approvals. This is because of the length of time it takes for Ofgem to undertake the assessment process. We are exposed to the risk of significant costs being disallowed – due to a lack of clear policy positions that are applied consistently, and Ofgem not appropriately considering the full range of relevant factors when reaching its conclusions. Ofgem has also proposed totex allowances that have asymmetric downside risk due to systematic disallowances.

Our full response to the DD covers the changes needed in detail to ensure the package is workable and therefore deliverable, in order for the package to be investable. The key points are summarised in the executive summary to this finance annex response, and also in the main executive summary to our overall DD response. The issues and changes needed are broadly aligned with KPMG's financing-related principles, which need to be met to achieve investability.¹⁰⁹

The Independent Water Commission (IWC) has found similar issues in the water sector and recommended that changes be made as a result. The IWC found Ofwat's approach to regulation overly complex,¹¹⁰ not clearly aligned to objectives,¹¹¹ and too reliant on largely historic benchmarks and economic modelling.¹¹² Ofwat's approach in developing the Price Control Delivery (PCD) is overly prescriptive on the "what" and "how"¹¹³ whilst the Outcome Delivery Incentive (ODI) regimes have created significant variability in financial risks which is unattractive to traditional infrastructure investors.¹¹⁴

¹⁰⁶ KPMG, August 2025, Investability principles in the context of RIIO-T3

¹⁰⁷ Ofgem, 2/7/25, Decision and updated policy position on the onshore electricity transmission Early Competition commercial framework

¹⁰⁸ Centrica, 22/7/25, Sizewell C, Regulated investment with predictable returns, [centrica-2025-sizewell-c-presentation.pdf](#)

¹⁰⁹ KPMG, August 2025, incipiles in the context of RIIO-T3

¹¹⁰ Independent Water Commission, 21/7/25, Final Report, para 181

¹¹¹ Independent Water Commission, 21/7/25, Final Report, para 181

¹¹² Independent Water Commission, Final Report, 21/7/25, para 417

¹¹³ Independent Water Commission, Final Report, 21/7/25, para 966

¹¹⁴ Independent Water Commission, Final Report, 21/7/25, Box 40

In our response to FQ17 we set out the results of our modelling¹¹⁵ of the DD package, covering cost and output delivery incentives (ODIs, including the risk of being found in breach of licence in the event of materially late delivery of ASTI/CSNP). This work reveals:

- rather than offering an opportunity to outperform and boost baseline returns, the current package creates a range of outcomes that are skewed to the downside;
- underperformance is more likely than outperformance; and
- the scope to achieve the kind of upside that would be needed to deliver outturn returns within the range of 9 to 10% nominal is very unlikely indeed, even if we were able to very materially beat our own expectations.

Further detail is provided below on the incentive framework, however, these issues demonstrate that the regulatory framework is not a fair bet, and investors may expect that even the baseline returns are not achievable. We have set out in the overall executive summary the key changes required to ensure the package is workable, deliverable and therefore investable.

The incentive framework is incomplete and insufficient to bridge the gap to 9 to 10% nominal returns for efficient, high performing companies

The power and design of incentives is critical to both the investability of RIIO-T3 and in driving performance, innovation and customer value. Investors require a credible path for TOs with strong performance to earn 9 to 10% returns.

We welcome Ofgem's intent for a more powerful incentive framework than in RIIO-T2. Ofgem have, in setting out an illustrative RoRE range in the DD, suggested that there is over 200 bps of outperformance from cost and performance incentives. However, the incentive framework is weaker than Ofgem suggest, contains design flaws, is incomplete and lacks clear targets or understanding of how Ofgem will set them. This makes it difficult for investors to assign any value to the incentive framework and is likely to drive a negative perception of value. This has resulted in Ofgem not achieving their aim to set out a powerful incentive framework. More specifically:

- The scope for totex outperformance is limited by costs being set relatively late for a material share of totex and by tight market conditions.
- Connections is a critical incentive for driving customer value and meeting Government's ambitions for CP2030 and economic growth. It is impossible, given the limited level of development, to assess if targets will be 'fair bet'. This incentive could have more downside risk than upside opportunity if targets do not reflect realistic 'deliverability' of connections alongside protections against delays outside TO's control.
- The Innovative Delivery Incentive is intended to drive innovation roll-out, but the panel-based assessment is too subjective. The value of this incentive should be directly linked to TOs retaining a share of the consumer value from innovations. The design of the mechanism does not appear to be able to deliver the size of contribution to returns as Ofgem suggests (i.e. 50-100bps).
- The eligibility criteria for defining what actions are incentivised under the SO:TO incentive are unclear. This ambiguity diminishes the power of this incentive which has, to date, provided material consumer benefit.
- Assuming an appropriate calibration of delivery dates, the new delivery incentive for projects under the CSNP-F regime is a positive step but the majority of projects that it will apply to will not be delivered until after 2030 resulting in this incentive having limited impact over RIIO-T3.

Putting this together, we cannot see a credible path for high-performing networks who generate additional value for consumers to close the gap to achieve 9 to 10% nominal returns in RIIO-T3 that would make the framework investable.

It is crucial that ahead of FD we reach the level of design detail necessary to see that new incentives for RIIO-T3 are a 'fair-bet' framework and have sufficient strength to make the overall framework investable. We provide further information in our response to the ET Annex of the consultation.

There is strong rationale for Ofgem's proposed cash solutions as the minimum required to support debt financeability and investability, and these need to be maintained

¹¹⁵ Frontier Economics, August 2025, Equity returns for RIIO-T3

Investors value earnings growth aligned to asset growth. It supports financial sustainability and long-term legitimacy. A framework that does not appropriately balance these factors risks deterring capital investment and weakening the sector's ability to attract funding for future infrastructure expansion.

The cash characteristics in the DD are the minimum required to meet credit metrics and be acceptable to investors. Ofgem are right to target strong investment grade credit ratings equivalent to Baa1/BBB+ in the DD, and by maintaining the RIIO-T2 targets, have sent a powerful message to investors that strong access to debt capital is enabled and financial resilience is supported.

Depreciation is an appropriate and sustainable solution to resolve this issue, and we would like to discuss this ahead of future price controls. We are supportive of the fast money solution that Ofgem has applied in the DD as appropriate for RIIO-T3 given the significant level of investment required. The long-term modelling Ofgem presents in the DD shows a declining profile on the credit metrics, and we would like to review a longer-term solution for the future.

There is also a downward trend in credit metrics through RIIO-T3 showing there is less protection in the latter years for downside risk and the earnings profile is not smooth through the period. Revenue profiling adjustments should be implemented to support both financeability and investability. This is also in the consumer interest as it smooths the bill increase over RIIO-T3.

The package needs to be investable to support Ofgem's other duties, in particular net zero and growth

Ofgem must also consider the importance of its growth and net zero duties and the role that ensuring investability has in discharging them. A package that is not investable will not deliver the net zero duty or the growth duty.

The government and relevant government departments have recently emphasised the importance of growth, noting that getting investment into the energy sector is key to drive growth. For example, installing a new chair of the UK's competition watchdog as it was felt by government ministers that the Competition and Markets Authority (CMA) had failed to convince them it was sufficiently focused on growth.¹¹⁶ Meanwhile, in Jonathan Brearley's State of the Market keynote speech at the Energy Networks Association (15/4/25), he said that Ofgem's duties should be clarified and rationalised and these changes should include fully incorporating net zero and economic growth duties.¹¹⁷ He noted that one of the things Ofgem need to drive growth is to secure investment in the energy sector.

The government is clear on the benefits of growth. The Business and Trade Committee recently (4/8/25) announced a new enquiry about financing the real economy. Rt Hon Liam Byrne MP, Chair of the Committee, said: *"Britain has world-class science, world-class entrepreneurs, and world-class capital. But we lack a world-class system to connect them. That's what this new inquiry is about. Not tweaks at the margins — but a new architecture of investment for a new age of risk. Because if we don't rethink access to finance now, we won't just miss our growth targets. We'll miss the future."*¹¹⁸

Therefore, the government and Ofgem have indicated that an increase in taxes or bills (respectively) is a price worth paying for growth. For example, the government has announced a £600 million Strategic Sites Accelerator to bring industrial sites to market faster.¹¹⁹ In addition, the discount for energy-intensive businesses on the fees they pay to connect to the Grid will increase from 60% to 90%; the cost of this discount under the British Industry Supercharger will ultimately be paid for by other electricity bill-payers including households.¹²⁰ By analogy, Ofgem should therefore support net zero investments that enable growth especially as there is a relatively small cost of these investments.

There remains a pathway to achieving an investable package for RIIO-T3 that allows for 9-10% nominal returns

Ofgem's DD baseline return range for electricity transmission is 4.76-6.45% (CPIH real, 55% gearing). Ofgem must recognise that there is compelling evidence that the bottom half of this range is not credible for the reasons set out above. An investable baseline return can still be achieved by setting the return towards the top of the range. These changes to ensure investability have minimal impact on bills with, for example, an increase in allowed return of 50bps increasing customer bills by c.£1.50 per annum (23/24 prices, all electricity transmission owners).

A baseline return of at least 6% at 55% gearing, must be part of an overall package that is workable and eliminates asymmetric downside risk, ensuring totex and non-totex incentives are appropriately calibrated with reasonable opportunity for outperformance for high performing licensees (i.e. they are a "fair-bet"). They

¹¹⁶ BBC, 21/1/25, [Government ousts UK competition watchdog chair - BBC News](#)

¹¹⁷ [Jonathan Brearley: State of the Market keynote speech | Ofgem](#)

¹¹⁸ UK Parliament, 4/8/25, ["No tweaks at the margins. Britain needs a new architecture of investment for a new age of risk" - BTC launches new inquiry on financing the real economy - Committees - UK Parliament](#)

¹¹⁹ Utility Week, 23/5/25, [Industrial strategy sets up GB Energy to fund network upgrades - Utility Week](#)

¹²⁰ Guardian, 19/6/25, UK manufacturing poised for funding boost to reduce energy cost

must recognise the level of stretch for TOs to deliver their plans given the unprecedented increase in scale of delivery.

Investors have been clear that they require earnings which keep pace with asset growth and nominal equity returns of 9 to 10% for high performing networks to be competitive with global investment opportunities. All of these elements need to be improved for an investable framework to be achieved.

Without the changes we are proposing to make the framework investable the delivery of CP2030 and the associated stakeholder expectations are at risk. The only way for TOs to manage this risk is to slow the pace of delivery. We remain fully committed to playing our part in this national endeavour to deliver the Clean Power 2030 mission and will work constructively with Ofgem ahead of FD to achieve this.

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

No; we do not agree that there is risk symmetry within the aggregate balance of the whole price control.

This response should be read in conjunction with FQ16 (Do you agree that our proposed package for gas and electricity companies is investable?).

We concluded in FQ16 that the Draft Determinations (DD) package is not yet investable and does not provide investors with a credible pathway to achieving 9 to 10% nominal returns for efficient, high performing companies in line with the global opportunities that we are competing with for significant equity.

The answer to FQ17 also supports our strong evidence (in FQ16) for Ofgem to increase the baseline return to at least 6% at 55% gearing, and that this must be accompanied by changes to the overall framework to eliminate asymmetric downside risk, and to the incentive framework to allow for 9 to 10% nominal returns for efficient, high performing companies.

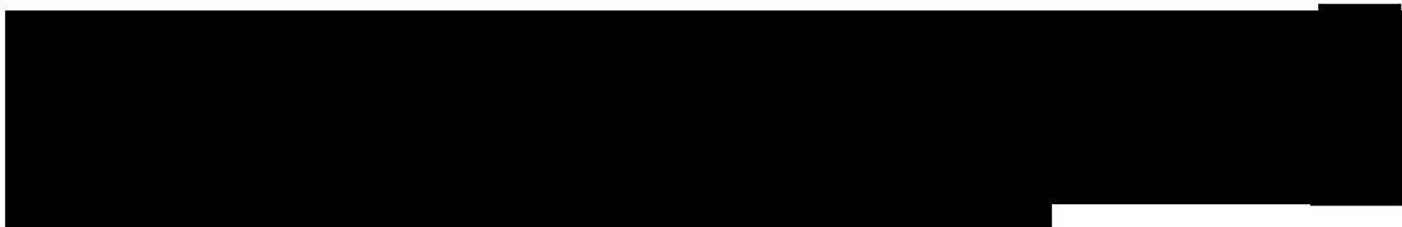
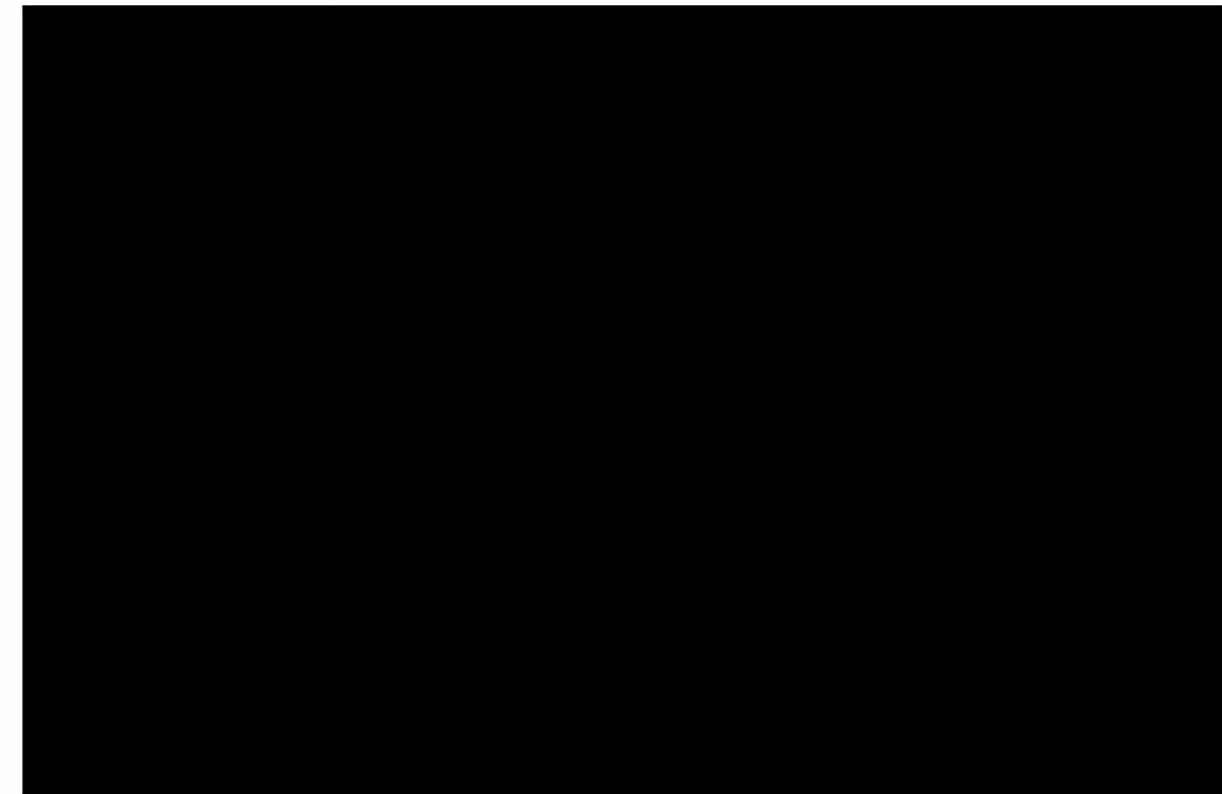
Frontier Economics has modelled the expected overall operational performance in RIIO-T3, based on the DD. They conducted this exercise using Monte Carlo techniques, to capture uncertainty and the spread of outcomes as well as the correlation between various outcomes.

The results, and additional supporting information, are shown in Frontier Economics' report Equity Returns for RIIO-T3, August 2025, included with our response.

Inevitably, any forward-looking analysis of this type will be driven, at least in part, by the assumptions made. Frontier Economics have modelled the DD and other key regulatory elements such as ASTI in detail and have engaged extensively with subject matter experts within NGET to ensure the assumptions made are reasonable. Frontier Economics also tested alternative assumptions and found that they do not materially change the broad conclusions reported here.

The analysis of the DD package, covering cost and output delivery incentives (ODIs, including the risk of being found in breach of licence in the event of materially late delivery of ASTI/CSNP), reveals that:

- rather than offering an opportunity to outperform and boost baseline returns, the current DD package creates a range of outcomes that are skewed to the downside;
- given this, underperformance is more likely than outperformance; and
- the scope to achieve the kind of upside that would be needed to deliver outturn returns within the required target range of 9 to 10% nominal (approx. 100 bps or more of upside) is very unlikely indeed.



We consider the approach¹²² adopted by Frontier Economics to model operational risk to be clearly sufficient to provide a strong indication of the likely spread of outcomes that can reasonably be expected to arise from the DD package. However, we consider that we are likely to be exposed to a range of further risks not included in the modelling results above. These risks include:

- the risk that the selected real price effect input price series do not track well the input prices actually faced by NGET in the event of a wider shock to the economy, such as a trade blockade, a war or some other event that may lead to a highly limited supply of key inputs;
- the scope for Ofgem to impose material disallowances in respect of projects that are already “in flight”, based on requested scope/design changes that cannot then be accommodated (in line with recent experience from submission under recent MSIP processes¹²³); and
- the risk that a small number (e.g. one) of ASTI or other large late ex-ante projects sees a very large increase in cost.¹²⁴

These are risks that are hard to parameterise and hence difficult to quantify, e.g. as their likelihood of occurring is difficult to forecast with accuracy. Given this, we refer to these additional risks as off model, lower probability, high consequence events.

Each of these risks represents a potential further negative shock to which we may be exposed. By excluding these from the modelling, it is reasonable to conclude that the modelling is conservative – and had a way been found to include these off model events directly, it could have had the effect of shifting the expected distribution of outcomes for RIIO-T3 further downwards.

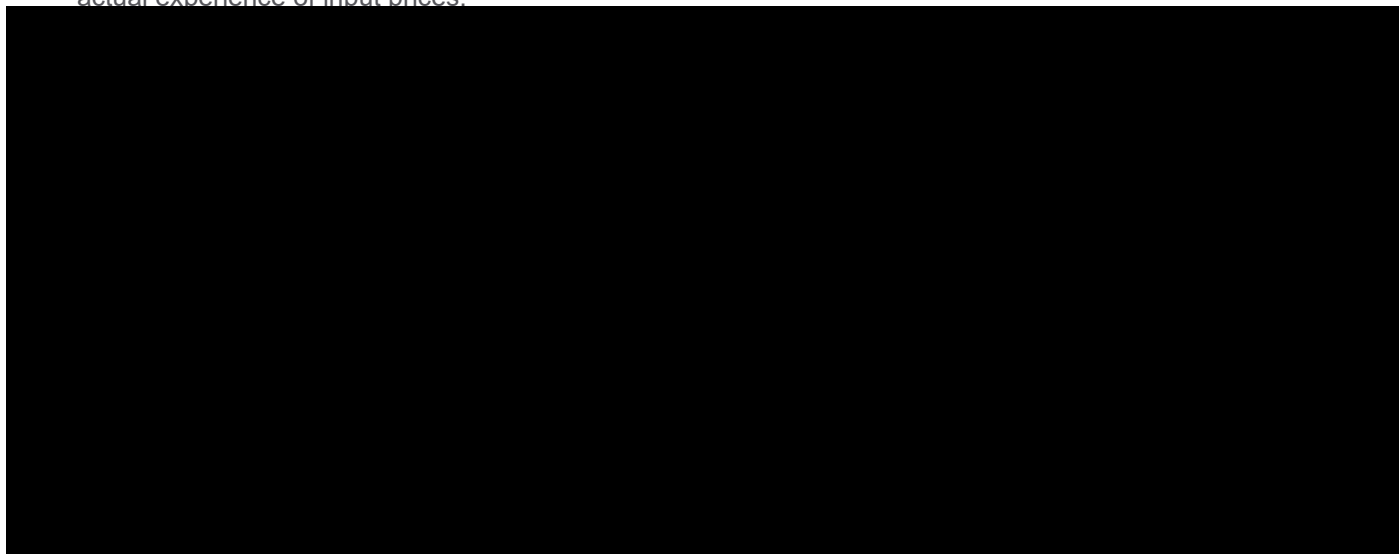
¹²² Frontier Economics, August 2025, Equity returns for RIIO-T3, Annex

¹²³ See for example, [RIIO-2 Reopener Application 2024 Draft Determination – ET Annex](#), Table ET 6 ‘Summary of Proposed Adjustments on NGET’s 2024 MSIPs’. NGET has suffered further material disallowances to in flight projects from its 2025 MSIP submissions.

¹²⁴ We note that Ofgem has proposed to include ASTI projects within a single pool of TIM alongside other spend in its DD. If adopted, this approach would remove the project specific caps/collars that were previously part of the ASTI design, leaving NGET with greater exposure to this risk.

While we have not included these risks in the model, we have sought to develop some quantification so that their potential impact can at least be gauged alongside the Monte Carlo results.

- In respect of real price effects, we have modelled a range of cases where Ofgem's proposed index fails to track actual experience of input prices.



- In respect of spend at risk for inflight projects, we have developed a quantification based on our recent experience from our MSIP submission and Ofgem's DD in relation to this submission.
 - In its recent DD in respect of our 2025 MSIP submission, Ofgem disallowed 34% (c. £29m) from projects where spend is already committed and changes cannot now be made.
 - [REDACTED] We therefore assess that a similar risk exists across this suite of deliverables.

[REDACTED] Ofgem's recent draft decision to disallow spend was based on, inter alia, their views over the appropriate deployment of GIS. [REDACTED]

[REDACTED]

[REDACTED]

- Lastly, we have considered an extreme overspend scenario in respect of one ASTI project.
 - [REDACTED]

[REDACTED]

While the likelihood of these risks crystallising is uncertain, were any of them to do so they would individually be highly material to performance, but not so material as to trigger any regulatory protection, e.g. through Return Adjustment Mechanisms (RAMs).

None of these exposures are individually sufficient to shift performance into the 5% TIM step, assuming none fall in a single year of the price control. But in combination with other lower probability high consequence risks, and/or a poor outcome on modelled totex, and/or if exposures were concentrated in a single year, they could. In such cases, then certain of the individual exposures quoted above would be slightly mitigated by stepped TIM.

We consider that this represents a plausible scenario where we would face a very material negative exposure. In our view, any modest mitigation from a stepped TIM against such material downside would provide little comfort to investors appraising the investability of the DD package overall. Such a scenario would effectively place us in a position where:

- we would markedly underperform our baseline return;
- any ability to perform on other areas of totex would have been swamped by materialising risk elsewhere; and
- we are facing a TIM rate of 5%, giving little incentive or ability to correct this performance.

As we set out elsewhere in our response, for example in our submissions on how to make the framework workable, Ofgem needs to recognise and address these risks.

In the Final Determinations (FD), Ofgem must make changes to ensure there is risk symmetry in the whole price control:

- Downward skew in the price control must be corrected to ensure the price control is a fair bet, including improving the position on totex, ongoing efficiency and reopeners;
- The design of the incentive framework must be improved so efficient, high performing companies can deliver 9 to 10% nominal returns and be competitive with global competition for significant new equity;
- There needs to be protection for the additional plausible risks that will have a high consequence if they occur. For example, providing for additional true up mechanisms and funding additional risk through risk and contingency (please see our response to OVQ18); and
- We are operating in a period of unprecedented volatility in geopolitics with a number conflicts and a retreat from global free trade. In the event that lower probability and high consequence events occur (for example, geopolitical impacts on supply chain), Ofgem should consider all the tools available to them to compensate networks for these events that are outside of their control.

Debt Financeability

Key messages:

- There is strong rationale for Ofgem's proposed cash solutions as the minimum required to support debt financeability (and investability), and these need to be maintained.
- We fully agree that credit metrics should be targeted at strong investment grade ratings equivalent to a minimum of Baa1/BBB+ and this must be maintained in the Final Determinations
- We support Ofgem's approach and solutions to solve financeability in RIIO-T3, in terms of Ofgem's decision to adjust capitalisation rates 2 to 85% across all ET licensees.
- The long-term modelling Ofgem presents in the DD shows a declining profile on the credit metrics, and we would like to review a longer-term solution for the future; a review of both asset lives, and depreciation profiles should be addressed ahead of RIIO-T4.
- There is a strong rationale that revenue profiling should be utilised during the period. This approach could allocate revenues from the earlier years in RIIO-T3, when financeability metrics are stronger, to the later years of the price control period where we anticipate increased pressure on credit metrics.

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

We agree with many of the elements of Ofgem's assessment of financeability for RIIO-T3 and we welcome Ofgem's decision to target a minimum investment grade rating of Baa1/BBB+.

We also welcome Ofgem recognising the importance of a long-term view of financeability given the capital intensity NGET will face over the RIIO-T3 period and longer. However, Ofgem's modelling shows there is a declining profile for metrics (AICR and FFO/Net Debt) that should be addressed in the future¹²⁵.

We also note that any changes rating agencies choose to make to their current thresholds and/or methodologies will need to be considered and adjusted to ensure that the networks maintain the minimum targeted Baa1/BBB+ ratings when the Final Determinations (FD) are published.

We therefore agree with the general approach to assessing financeability. However, we continue to stress the importance of ongoing dialogue to ensure sustainable cash-based financeability is maintained, not just on a notional basis but also in the context of actual investor behavior and credit agency views.

We support the following elements of the Draft Determinations (DD), although have concerns on longer term financeability that should be addressed for the next price control period

Credit Rating Threshold – Target Baa1/BBB+

This provides an appropriate floor for investment-grade ratings and reflects realistic financing needs for the capital-intensive period NGET will face. The requirement for a minimum of Baa1/BBB+ strengthens the credibility of the rating threshold and accounts for differences in methodology to give strong signals to the market and to protect from the risk of a downgrade which will, in turn, have networks incur higher debt costs at the expense of the consumer.

We note and support that the financeability assessment performed by Ofgem achieves the Baa1/BBB+ threshold for more than one rating agency. We are supportive of this and recognise this aligns with the new financial resilience requirement to ensure we hold 2 investment grade credit ratings (please see our response to FQ21).

Inclusion of Long-Term Financeability Considerations

The long-term view is critical given the size of the investment in RIIO-3 for net zero investments, which will continue into RIIO-T4 and may require further intervention for financeability. Acknowledging long-term constraints allows for more stable decision-making and reduces the risk of overreliance on short-term fixes or excessive equity injections.

We do note that in Ofgem's long-term analysis¹²⁶ there are early warning signs that the metrics continue to fall through the price controls and without intervention will fall below the required target rating.

We are supportive of the DD proposal to adjust capitalisation rate 2 for RIIO-T3 to support financeability (see response to FQ19), however the long-term analysis shows that the proposed intervention will need to be reviewed in RIIO-T4 to ensure a sustainable solution. In the DD, the long-term assessment relies on extending the 85% capitalisation rate into RIIO-T4 to maintain the required target ratings, before removing this lever in RIIO-T5 on the assumption that the underlying pressures will have been resolved. We believe this assumption is not supported by evidence and relying long-term on capitalisation rates will not address the core drivers of declining financeability metrics, such as sustained higher real financing costs, and regulatory depreciation policy. Instead, the impact is deferred, resulting in a sharp deterioration once the lever is withdrawn as shown in the Ofgem analysis.

Ofgem's own analysis does not demonstrate a natural recovery in metrics; rather, it shows a continued decline beyond RIIO-T3 in the absence of further financeability solutions. From a financeability perspective, designing a profile that appears compliant in RIIO-T3 but signals a continued fall thereafter risks undermining investor confidence, increasing perceived regulatory risk, counter to the statutory duty to secure the ability of licensees to finance their activities. We therefore consider that whilst appropriate for RIIO-T3, reliance on a capitalisation uplift is not a credible long-term solution and that sustainable solutions should be used to address the root causes in future price controls.

This topic is covered in more detail in FQ20.

Other issues to note

Acknowledgement of Rating Agency Methodology Shifts

¹²⁵ Ofgem, July 2025, RIIO-3 Draft Determination- Finance Annex, para 5.71

¹²⁶ Ofgem, July 2025, RIIO-3 Draft Determination- Finance Annex, para 5.71

The shift to semi-nominal returns is untested from a credit rating perspective. Past rating adjustments (RIIO fast money changes) showed that current rating methodologies can quickly become disconnected from actual rating outcomes. Monitoring these changes over the coming months, especially any updates from Moody's on how semi-nominal returns affect the indicative scorecard is essential. Ofgem should ensure that the Baa1/BBB+ targets are maintained in the FD should rating agencies make any changes.

Ofgem must engage with credit rating agencies ahead of FD to ensure that any methodological changes (particularly Moody's treatment of semi-nominal returns), are fully understood and reflected in the final financeability assessment. Failure to do so risks relying on outdated or incomplete assumptions that do not align with how ratings will be determined.

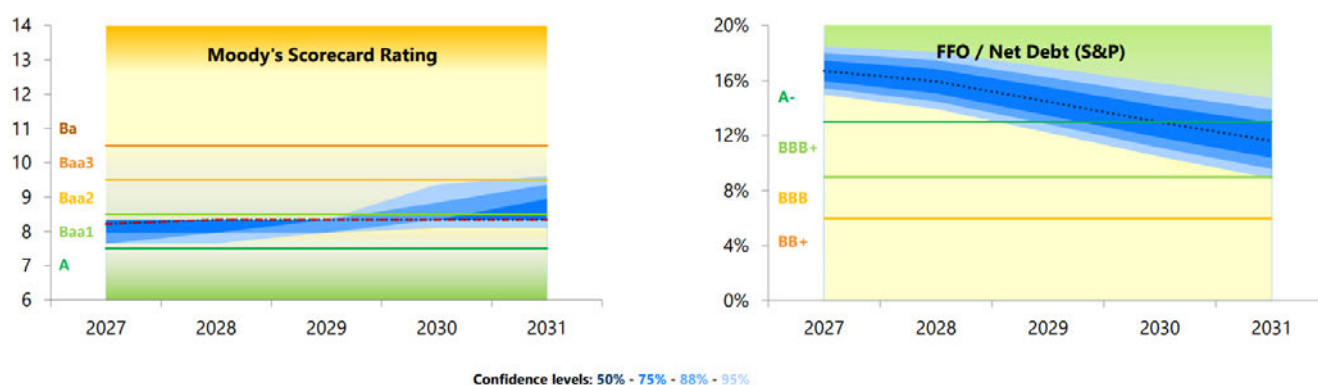
Equity injection thresholds

We are pleased that Ofgem have confirmed in response to our DDQ – 087 that the equity injection threshold remains at 2.5% and not the 5% quoted in the DD finance annex in section 5.49 *"In our modelling, we also include equity injections or special distributions where the modelled level of gearing exceeds or falls below a pre-defined level, namely five percentage points from notional gearing assumption"*. Ofgem should correct this in the FD as this deviates from the BPFM standard scenario and does not align with our expectations. Ofgem must ensure that the figure is reverted to the original 2.5% above target for NGET.

Ofgem must take action to ensure there is an investable framework that can attract the significantly assumed notional equity injections in the financeability assessment

The notional financeability assessment assumes equity injections are available at significant levels to support the £35bn investment programme in our RIIO-T3 business plan. Ofgem must have regard to real-world investor expectations, including the actual appetite for continued equity investment under the proposed risk return profile, and taking into account global competition for capital.

Ofgem need to increase the level of allowed return on equity to an investable level in order to support the assumption that the equity injections assumed in the financeability modelling will be available. Ofgem should also assess financeability in a stress scenario, where equity injections are delayed, to ensure sufficient headroom against rating metric thresholds. We discuss return on equity and investability in FQ7-17.



In addition, whilst we support the proposal in DD to adjust capitalisation rates in RIIO-T3, from our analysis there is a downward trend in credit metrics for RIIO-T3 and there is less protection in the latter years for downside risk. Ofgem's BPFM Moody's scorecard weights the final years heavier than the earlier years and this will have a bigger impact on the overall score of the price control. Ofgem must consider options to address this.

There is a strong rationale that revenue profiling should be utilised during the period. This approach could allocate revenues from the earlier years in RIIO-T3, when financeability metrics are stronger, to the later years of the price control period where we anticipate increased pressure on credit metrics. Implementing revenue profiling would also benefit consumers by allowing for a more gradual increase in bills (due to implementation of semi-nominal returns and high fast money in years of high investment). This is also likely to be acceptable to investors who prefer gradual earnings growth trajectory rather than significant fluctuations year on year.

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?

We agree with Ofgem's decision to adjust capitalisation rate 2 to 85% across all ET licensees. This step meaningfully boosts financeability by increasing near-term cashflows via 'fast money', and this helps protect credit metrics under the period of high capital investment.

We support the outcome of the approach, which is to maintain an appropriate combined level of fast money and regulatory depreciation in relation to the size of the RAV. This supports investability through both reported earnings and appropriate credit metrics, including a reasonable level of headroom above credit rating downgrade thresholds overall for the price control period.

There is an immediate uplift to financeability metrics from continuing to use an 85% rate in bucket 2 which raises short-term cash cover, directly improving credit metrics (particularly FFO/Net Debt) that struggle in prior modelling of RIIO-T3 with natural capitalisation rates. The proposal for 85% bucket 2 capitalisation supports stable Baa1/BBB+ grade credit ratings, allowing some absorption of risk of unforeseen financial shocks.

Without fast money support, financing risks could emerge due to cash shortfalls under high capex scenarios. The 85% rate reduces this tail risk, contributing to resilience for investors and consumers alike.

We would like Ofgem to initiate early discussions and engage with ET licensees on long-term financeability measures well ahead of the next price control (RIIO-T4), particularly depreciation policy, RAV differential, and any alternative measure that promote sustained cashflows. This would allow networks to explore regulatory levers such as depreciation or RAV differential in conjunction with fast-money in RIIO-T4 and beyond.

The answer to this question should be read in conjunction with FQ18 and FQ20.

Ofgem should maintain its current position at Final Determinations.

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

Please read in conjunction with FQ18 and FQ19.

As per our response to FQ18 and FQ19, we support the outcome for financeability in RIIO-T3 including adjusting bucket 2 capitalisation rates from natural to 85% for ET licensees. We also support embedding long-term financeability in the RIIO-T3 financeability assessment.

Ofgem's long-term analysis demonstrates issues that need to be addressed, including a reassessment of asset lives and depreciation profiles in RIIO-T4. We believe Ofgem need to review depreciation policy to address these on a sustainable basis for future price controls.

Long-Term Financeability Considerations

We remain concerned that the long-term financeability outlook under the Draft Determinations (DD) is fragile and is reliant on levers that do not address the underlying problem in the future. Ofgem's own long-term analysis¹²⁷ shows a continued deterioration in key credit metrics through future price controls, with a clear risk of falling below target thresholds without sustainable measures being taken. The reliance on extending the 85% capitalisation rate into RIIO-T4, masks the underlying problem. The issue is fully exposed in the model when the additional fast money is removed in RIIO-T5 assumptions, and credit metrics drop. Sustainable measures are required in RIIO-T4 and beyond to address the root causes, including persistent higher real financing costs and regulatory depreciation policy. The risk of a 'cliff-edge' drop in RIIO-T5 remains. This not only undermines the credibility of the long-term outlook but also creates uncertainty for investors, increasing perceived regulatory risk and likely to raise the cost of capital.

Appropriateness of Proposed Asset Lives

We believe the question of asset lives should be approached as part of a broader depreciation policy strategy, with a focus on improving the sustainability of cash flows and financeability outcomes. While adjusting capitalisation rate 2 is an acceptable solution in RIIO-T3, Ofgem should signal an intention to explore alternative depreciation methods in future price controls. Examples include 'sum-of-digits' methods or adjusted run-off rates, which front-load depreciation and align cash recovery more closely with asset usage patterns and investment cycles. These approaches could serve as a permanent tool to manage financeability pressures without relying on levers such as capitalisation rates in the long-term.

Such changes would need careful engagement and transparency to maintain and enhance intergenerational fairness, and could offer a more sustainable alternative to capitalisation rates. We are keen to start discussing this with Ofgem ahead of the RIIO-T4 price control process.

We discuss further our views on depreciation policy in FQ26.

Ofgem need to reassess asset lives and depreciation profiles in RIIO-T4. We believe Ofgem need to review depreciation policy to address these on a sustainable basis for future price controls.

¹²⁷ Ofgem, July 2025, RIIO-3 Draft Determination- Finance Annex, para 5.71

Financial Resilience

Key messages:

- We are supportive of Ofgem's financial resilience measures, and further measures beyond these changes are not required.
- We do not support introducing similar changes to those proposed for the England and Wales water sector as such changes risk reducing the attractiveness of investment in GB energy networks, at a time of significant investment.

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?

Yes. We are able to support these measures but further measures beyond these are not required. We refer to our response to Ofgem's recent Call for Input on the Energy Networks ring fence review for further explanation of our position on financial resilience.¹²⁸

We also note the recommendations from the Independent Water Commission Final Report,¹²⁹ to give regulators powers to:

- Block material changes in control of water companies
- Direct parent companies and ultimate controllers to take certain actions
- Set minimum capital levels for water companies

In a similar vein to our response to Ofgem's recent Call for Input on the Energy Networks ring fence review, the issues in the England and Wales water sector that these proposals seek to address are not evidenced as issues for GB electricity transmission networks. However, making these changes risks reducing the attractiveness of investment in GB energy networks at a time of significant capital need. We therefore do not support introducing similar measures to those proposed for the England and Wales water sector.

Ofgem should maintain its current position at Final Determination and note the points in our Call for Input response in any future review.

¹²⁸ National Grid, 7/11/24, National Grid response to Ofgem's call for input – Energy Networks ring fence review

¹²⁹ Independent Water Commission, 21 July 2025, Final Report

Tax

Key messages:

- We agree with Ofgem that a tax forecasting penalty is not required.
- We believe there are sufficient controls and robust protections already provided within RIIO-T2 and the limit of these is sufficient to be carried over into RIIO-T3
- We agree with the proposed definitions for ANDt and TDNI, except of the inclusion of Taxable / Deductible Fair Value movements.
- Fair Value movements are outside of Licensee control and could inadvertently trigger a tax clawback and affect allowed revenue which is currently non-recoverable when fair value movements reverse.

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?

We agree and believe that, both in functional and practical senses, a tax forecasting penalty is not required.

We believe the controls in place in RIIO-T2 were sufficient to ensure licensees operate in line with a tax efficient notional company. We acknowledge and appreciate Ofgem listening to the concerns raised by licensees in Licence Drafting & Price Control Financial Modelling Working Groups with regards to the implementation of the proposed tax forecasting penalty, and then subsequently removing it based on this feedback.

In RIIO-T2 there is the licence obligation to provide tax reconciliation Board assurance statements and not have any material unexplained variances from the trace between the actual tax liability position in the CT600 and the regulatory view of allowed tax. This, plus data assurance guidance (DAG) assured tables and Agreed Upon Procedure (AUP) documents means we believe there are already sufficient controls in place with regards to allowed tax revenues and the forecasting of these, including tax pool allocations. These obligations are carried over from RIIO-T2 into RIIO-T3, and therefore we question the need for further controls proposed in the revised Price Control Financial Handbook (PCFH).

Furthermore, during the annual iteration process of the PCFM, licensees provide transparency of the tax pool allocations and explain any deviations from previous iterations. This process should prevent the situation where tax pool allocations are materially incorrect, rendering the need for a tax forecasting penalty unnecessary.

In advance of the Final Determinations (FD) we would appreciate Ofgem articulating what measures and processes Ofgem will use in determining whether the ‘tax-related variable values used may not represent the behaviour of a notional efficient company’, as described in one of the new control measures in the Price Control Financial Handbook.

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

Ofgem's Draft Determinations (DD) and RIIO-T3 definitions in relation to the terms ANDt and TDNI should be consistent with the recent decisions made following a call for input relating to the Tax Clawback¹³⁰.

With the exception of Taxable/Deductible Fair Value (FV) Movements we agree with the definitions of ANDt and TDNI proposed under the DD Finance Annex, paragraph 7.41.

FV movements are excluded from notional company interest calculations whereas they are included within the CT600 statutory accounts tax liability. FV movements should be a timing difference that net to nil over the life of the instrument, however where a tax clawback arises as a result of deductible FV movements, which are outside the control of the Licensee, there is no corresponding mechanism in the PCFM to allow for a recovery of this clawback when those FV movements reverse.

Licensees could therefore suffer a one-sided clawback on genuine commercial funding arrangements as a result of FV movements that are out of their control. To eliminate this risk, we would suggest continuing the current approach to remove FV movements from the definition of TDNI. We would further highlight that this is a short-term timing issue that would manifest in the RFPR tax reconciliation and therefore be visible to Ofgem.

Alternatively, we ask Ofgem to consider the impact of FV movements and if these can be accounted for within the RFPR's calculation of the ANDt and TDNI terms or the PCFM's Tax Clawback calculation to eliminate the risk of a one sided Tax Clawback arising. We would welcome the opportunity to further engage with Ofgem and our peer group on this matter.

Further to our comments in the aforementioned Tax Clawback call for input, we noted that the calculation of 'actual gearing' in the RFPR is different from that in the PCFM due to the former using an average RAV position and the latter using a closing RAV position. We advocate for consistency between these two respective models, especially given the ANDt & TDNI dependencies between PCFM & RFPR. We also highlighted the fact the RAV can change after the submission of the RFPR but before the final iteration submission of the PCFM due to totex forecasts evolving.

We suggest the Tax Clawback be modified to introduce a tolerance for the gearing element of the tax clawback calculation to mitigate an erroneous triggering of this mechanism. We suggest the tolerance be aligned to match the threshold at which equity issuances are triggered in the PCFM / BPFM which, as per FQ18, we understand to be 2.5%. Additionally, Ofgem should consider allowing licensees to re-forecast the ANDt and TDNI during the PCFM dry-run annual iteration process. This will remove the risk that the debt forecasts in the PCFM may be inconsistent with the totex forecasts which could cause unwarranted adjustments to revenue.

¹³⁰ Ofgem, April 2025, Call for Input Tax Clawback response summary

Regulatory Depreciation

Key messages:

- We support Ofgem’s approach for solving financeability with fast money in RIIO-T3
- In RIIO-T4 however, Ofgem should reassess their economic depreciation policy.
- Changes to regulatory depreciation offers a more sustainable and predictable way to address concerns over financeability, investability and intergenerational equity, and will reduce the need for a quantum of additional fast money.

Certain questions in this section should be read in conjunction with the following reports:

Report	Relevant to questions
NERA, May 2025, Depreciation under-recovery from RIIO-1 extension of asset lives	FQ26

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?

We are not responding to this question

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

We are not responding to this question

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

In our RIIO-T3 Business Plan submission, we proposed adjusting regulatory asset lives. In Draft Determinations (DD), Ofgem instead adjusted capitalisation rates. This approach increases revenues and reduces RAV growth so has a similar short-term effect to adjusting regulatory depreciation. We therefore agree with the outcome of Ofgem's RIIO-T3 approach; see FQ18-20 for more detail. However, the evidence we presented in our RIIO-T3 Business Plan submission is still relevant for RIIO-T4 so Ofgem should adjust regulation depreciation for RIIO-T4.

We evidenced in our RIIO-T3 Business Plan submission that technical asset lives are expected to fall from RIIO-T2 asset lives of 45 years, and we explained that intergenerational fairness requires that the revenue associated with these assets is also collected over this shorter period to match the benefit and cost to consumers over time.

Since this publication, Ofgem's recent decision on CATO advises that new onshore transmission assets will have regulatory economic lives of 40 years.¹³¹ Ofgem also notes that if an asset lasts 40 years there will be expenditure before the end of that 40 years to refurbish or replace those assets.¹³² For example, from an intergenerational perspective near the end of an asset's life, it is unfair to pay for a share of that asset's cost as well as a share of the cost of new replacement assets, which means the economic life for depreciation purposes should be lower than the technical economic life.

We also noted that consumers today and in the coming years are benefiting from the accelerated depreciation of assets installed pre-privatisation and from 1990 to 2021, but without making any contribution towards funding a similar benefit to future consumers after c. 2045 on assets that are now being installed. Since our business plan submission, NERA have considered this issue in more detail.¹³³ They find that the depreciation gap is £7.2bn- £11.8bn, with an additional £4bn if Ofgem does not reduce asset lives from 45 to 40 years; this estimate is prudent as it removes the effect of real totex growth in the RIIO period.

NERA find that there are several reasons why depreciation revenues should increase:

- Consumers today benefit from accelerated depreciation of historic assets at the expense of future consumers, so it improves intergenerational fairness to increase depreciation charges today and lower these charges in future.
- Bringing forward cash improves financeability metrics over RIIO-T3 at a time when these metrics would otherwise be under significant pressure due to the scale of capex. We note and support this has been solved by adjusting capitalisation rates specifically for RIIO-T3.
- If depreciation revenues are not brought forward, NERA show that the RAV grows to the extent that returns revenue is the majority of NGET's income by the 2070s. Assuming Totex returns to a steady-state level after 2050, returns revenue will also be significantly greater than Totex by this time. Such a high depreciation revenue is likely, in future, to mean that the public and media calls into question the legitimacy of this returns revenue. Investors will anticipate this impact and therefore start requiring higher returns to provide capital to NGET. Moody's changed its outlook for regulated gas and electricity networks to negative outlook, reflecting the fact that regulators cannot fully protect network companies from public or political scrutiny of network.¹³⁴ That the public or media will call into question the legitimacy of returns is also evidenced today by the scrutiny of the England and Wales water sector. Therefore, reducing asset lives is likely to lower overall costs to consumers in the medium term.
- The green book discount rate is lower than the NGET's WACC so bringing forward revenues is NPV positive. The deferral of depreciation under RIIO policy imposes costs of £1.3-£2.4bn in PV terms (23/24 prices) to NGET customers.

We note that rather than adjust regulatory depreciation, in DD, Ofgem have adjusted capitalisation rates. This approach increases revenues and reduces RAV growth so has a similar short-term effect to adjusting regulatory depreciation. However, NERA's arguments are also relevant to RIIO-T4 too. Therefore, we suggest Ofgem changes regulatory depreciation starting in RIIO-T4 as this would be an enduring solution that provides more regulatory predictability and stability than adjusting capitalisation rates. We would like to start discussions with Ofgem on this well ahead of the RIIO-T4 process.

We recognise that there is uncertainty about future asset lives. Therefore, Ofgem could maintain the existing regulatory asset life of 45 years but use a sum of digits approach for new additions with a catch up for the existing RAV balance. This approach is also consistent with the following points:

¹³¹ Ofgem, 2/7/25, Decision and updated policy position on the onshore electricity transmission Early Competition commercial framework

¹³² Ofgem, 2/7/25, Decision and updated policy position on the onshore electricity transmission Early Competition commercial framework, para 7.18

¹³³ NERA, March 2025, Depreciation under-recovery from RIIO-1 extension of asset lives: A report for NGET

¹³⁴ Moody's, 10/4/25, Regulated Electric & Gas Networks – Europe Outlook changed to negative as large investments for energy transition weigh on key credit metrics, pg 7

- There is some uncertainty about use of assets; an asset is most likely to be used at the start of its life
- Assets have a spread of asset lives, some less than 45 years, some more than 45 years. Therefore, even if the average asset life is 45 years, the majority of use of the assets will be incurred early in the period; straight line regulatory depreciation does not take this effect into account. For example, if we have 2 assets costing £100, one with a 20 year life and one with a 70 year life, after 20 years, on a straight line basis, £129 of economic use will have been incurred after 20 years, whereas £89 of straight line regulatory depreciation would have been recognised after 20 years if all assets had 45 year lives.

Overall, whilst it was not our preferred solution we accept Ofgem's approach for RIIO-T3 to use fast money. However, in RIIO-T4, Ofgem should reassess the economic depreciation policy and consider a reduction in asset lives for new assets in RIIO-T4 (currently assessed to be 40 years).

Changes to regulatory depreciation offer a more sustainable and predictable way to address concerns over financeability, investability and intergenerational equity. This would reduce the need for a large quantum of additional fast money in future price controls, as current long-term financeability modelling suggests would otherwise be required. Fast money should then only be considered to solve additional financeability concerns if they still exist.

Ofgem should adjust regulatory depreciation for RIIO-T4.

Return Adjustment Mechanisms

Key messages:

- We support Ofgem's proposals on no changes to Return Adjustment Mechanisms (RAM) thresholds and adjustment rates from RIIIO-T2, in line with our view at Sector Specific Methodology Consultation (SSMC).
- Narrower thresholds would risk damaging the incentive properties of other parts of the regulatory framework as incentives are significantly reduced once a network triggers the RAM. Broader thresholds would offer less protection to consumers and investors.
- We agree that including ASTI within RAM supports investability and ultimately consumers. Separate RAM would make the price control more complex.

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

Yes, we agree as there are no changes to the threshold levels and adjustment rates from RIIO-T2. We have always been of the view that the methodology did not need to be amended.

In our Sector Specific Methodology Consultation (SSMC) response, we argued narrower thresholds would risk damaging the incentive properties of other parts of the regulatory framework as incentives are significantly reduced once a network triggers the RAM. Broader thresholds would offer less protection to consumers and investors. Modifying the rates would be change for the sake of change and would give the appearance of a more complex price control rather than stability and simplicity.

Ofgem should maintain its current position at Final Determinations.

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

Yes, we agree as the introduction of separate RAM for ASTI would make the price control more complex. We agree that including ASTI within RAMs supports investability and ultimately consumers.

Ofgem should maintain its current position at Final Determinations.

Indexation of Regulatory Asset Value

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

Yes, however we would like to ensure that the RIIO-T2 RAV achieves full indexation for FY26.

We broadly agree with Ofgem's proposals on RAV indexation for RIIO-T3. We're pleased that Ofgem have taken on board our changes to the semi-nominal WACC calculation to ensure it works in the way it's intended. It also creates greater transparency and consistency between the WACC, and the indexing mechanism used to grow the RAV.

Ofgem should confirm in the Final Determinations (FD) that the full RAV will be indexed up to the end of RIIO-T2 (31st March 2026), before the semi-nominal adjustment begins in RIIO-T3. Ofgem should also clearly outline the transition mechanism between RIIO-T2 and RIIO-T3 indexation periods in its model and ensure all relevant excel models (e.g. PCFM) implement this change accurately and transparently. Any discrepancies from this would result in a misalignment between the rate of return and the RAV growth, potentially leading to higher or lower returns/depreciation if not indexed correctly.

We appreciate Ofgem's intent to fully index the RAV up to 31st March 2026, maintaining continuity of the RIIO-T2 regime until the start of RIIO-T3. We are happy to assist Ofgem over the coming months to ensure that this is implemented correctly.

Other finance issues

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

See key points from our debt financeability responses (FQ18-20).

For capitalisation rate 1 we support Ofgem's methodology in setting the current capitalisation rate based on the natural rate.

For capitalisation rate 2 we support the Draft Determinations (DD) solution to provide for a rate of 85%, however would like a more in depth assessment of the potential long-term impacts of regulatory depreciation and capitalisation rates on companies' finances (credit metrics and revenue profiles) for future price controls.

Ofgem should maintain its current position at Final Determinations.

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

Yes, we agree with Ofgem's approach to the treatment of disposals within the RIIO-T3 regulatory reporting and financial modelling aspects.

However, strictly speaking, there is a difference between what is being proposed in RIIO-T3 relative to RIIO-T2 in that in RIIO-T3 disposal proceeds will be deducted from totex whereas they are deducted from Allowances in RIIO-T2. We are in favour of this new approach.

Ofgem should maintain its current position at Final Determinations.

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

With some caveats, as a principle we agree with the proposal of using ex-ante base revenue to calculate re-opener materiality thresholds. Using an ex-ante approach provides greater clarity to licensees on the process and minimum value requirements to get a re-opener sanctioned.

In advance of the Final Determinations (FD), we would appreciate Ofgem explaining why some re-openers fall into the 'default' materiality threshold value (£12.7m) whereas others have a bespoke value or a value nearly twice (£25m) as much as those proposed in this default range. For consistency and commonality of understanding, we would recommend all re-openers adopt the same materiality threshold of £12.7m.

We would also appreciate Ofgem providing further transparency as to how the 'annual average ex-ante base revenue' figure is calculated for Draft Determinations (DD) as we could not reconcile to the figure used in the Finance Annex, and then what the new figure will be using an adjusted FD base revenue.

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?

We agree with the proposal to use an ex-ante holistic view of totex, including uncertainty mechanisms, on-going efficiency, and real price effects (RPEs) as part of the mechanism to set ODI caps and collars.

Setting the ODI cap and collar range ex-ante is advantageous for revenue forecasting and therefore mitigates potential revenue true-up corrections. It also helps with other annual regulatory reporting requirements. The cost to achieve ODI performance is built into all aspects of a licensee's price control work and therefore using a holistic view of totex we feel to be appropriate.

However, we would like Ofgem to explain the RoRE %'s and bps ranges Ofgem are suggesting per incentive, and how these fit in with the overall potential performance range caps and collar. Furthermore, as per FQ32, in advance of Final Determinations (FD) we would appreciate Ofgem providing information as to how the quoted £m cap and collar ranges have been calculated.

Further information on our response to the ODI package can be found in our response to the Electricity Transmission annex, chapter 3.

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

Yes, we agree with the proposal to move to using nominal WACC as the single uniform TVOM. The principle reasoning being, WACC is most commonly used in net present value calculations.

Ofgem should maintain its current position at Final Determinations.

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

We understand Ofgem's rationale for introducing a base revenue forecasting penalty, looking to drive improvements in revenue forecasting accuracy and create less volatility through correction term true-ups. However, as per the paragraphs below, we believe elements of the mechanism need to be changed.

Furthermore, as per our response to FQ36, we do not agree with the threshold that has been set for NGET in relation to our peers given the increased investment NGET is forecasting in RIIO-T3 coupled with the proposed changes to the financial framework generating more in-year revenue in RIIO-T3 relative to RIIO-T2.

Given the increased forecast in spend within the pass-through category and how this is inherently not within licensees control, we think it unfair to potentially penalise licensees for deviations to forecast caused by these. For example, Government dictated changes to rates affecting Business/Prescribed rates that occur outside of the annual iteration process should be excluded from the base revenue forecast penalty calculation. Notwithstanding the points made in the paragraphs below, with the ambition of operating efficiently, it would be simpler and therefore beneficial if pass-through costs could just be excluded from this penalty mechanism rather than licensees having to apply for a waiver, which may then have to be applied to a future year's correction term, and thus generate some revenue volatility between years, which is what this process is trying to mitigate in the first instance.

We agree with the Draft Determinations (DD) Finance Annex paragraph 11.110 to carve out inflation from the base revenue forecasting penalty, particularly in relation to the transition to semi-nominal RAV. This proposal has not been implemented in the DD BPFM or PCFM, so we would appreciate this being done in readiness for Final Determinations (FD).

We appreciate Ofgem suggesting a waiver to the base revenue penalty could be applied pending unforeseeable events occurring, however licensees are yet to understand the process involved in determining the application and granting of this waiver, and which items or types of expenditure are eligible for it.

Please note, we acknowledge and appreciate Ofgem's decision to remove forecasting penalties (for the Electricity Transmission Operators) in relation to recovered revenue and tax forecasting.

Ofgem need to make changes to the mechanism, including thresholds as explained in FQ36, to ensure fairness and the base revenue forecasting penalty works as intended.

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

No, we disagree with the threshold of 6% used for NGET. It is too low given the significant changes to the financial framework, most notably the increased proportion of fast money and higher return on RAV due in part to the move to semi-nominal RAV. Furthermore, NGET's 6% is lower than both our ETO peers and the RIIO-3 sector average.

In RIIO-T2 fast money and return accounted for ~50% of NGETs calculated revenue. Due to changes in capitalisation rates and the move to semi-nominal RAV, amongst other factors, this figure increases to circa 72% in RIIO-T3.

Furthermore, with the majority of NGET's allowances and forecast spend linked to uncertainty mechanisms and the overall quantum of spend potentially increasing almost three-fold in RIIO-T3 compared to RIIO-T2, the ability to accurately forecast costs and therefore revenues year on year is more challenging. This increase in cost base and the uncertainty of the timing of delivery and achieving project milestones creates additional volatility risks in RIIO-T3 compared to RIIO-T2

Licensees base revenue can also be impacted by Ofgem decisions relating to re-opener valuations. These can impact prior years and therefore cumulatively flow through RAV impacting both return and depreciation revenues. This is outside of the licensee's ability to forecast due to asymmetry of information. We would expect this to be protected under the waiver as stated by Ofgem, however we are yet to understand this process and the eligibility for this.

Whilst we acknowledge that pass-through costs make up a relatively small proportion of base revenue, they are still nonetheless a feature of it. By the definition of pass-through costs, these are items outside of the licensee's control and therefore potentially difficult to forecast. We are currently experiencing volatility in prescribed rates and are anticipating an increase in these, and with two new pass-through cost terms in RIIO-T3, this creates additional uncertainty and forecasting complications. As pass-through is essentially equivalent to 100% fast money for a non-controllable item, we request Ofgem remove this from the base revenue forecasting penalty.

Real price effects (RPEs) growth rates are another factor outside of licensee controls. As experienced in RIIO-ED2, changes to these can have a material impact on allowances and performance. With the proposed stepped totex incentive mechanism (TIM) and increase in allowances during RIIO-T3 licensees base revenue is more susceptible to change due to movements in RPEs.

In advance of the Final Determinations (FD), potentially as part of the licence consultation, we think Ofgem should:

- **Better describe the waiver process and prescribing which movements in variable values would be eligible for this exemption.**
- **Increase NGET base revenue penalty threshold to be aligned with the other electricity transmission operators.**
- **Work with the licensees to make sure the base revenue penalty is working properly in the PCFM and can exclude factors outside of the licensee's control.**

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