

ENA Response to
Ofgem RIIO-ED3
Framework
Consultation
15 January 2025

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ENA Response - ED3 Framework Consultation

Introduction

Energy Networks Association (ENA) represents the companies that operate and maintain the electricity network infrastructure in the UK and Ireland. Serving over 30 million homes and businesses in every part of the country, they are responsible for the transmission (long-distance, high voltage) and distribution (shorter-distance, lower voltage) network of overhead lines and underground cables that keep our lights on, our homes warm and our businesses running.

Background

ENA welcomes the opportunity to respond on behalf of its electricity distribution network operator (DNO) members to the Ofgem consultation on the framework for the next electricity distribution price control, RIIO-ED3. This response sets out those areas where there is broad agreement between ENA members, setting out a collective view of key common principles, points and areas of focus. This response includes a Finance Annex, supported by a number of reports that provide detailed evidence in support of ENA positions.

ENA members will be responding separately to the detailed framework consultation.

The DNOs are key enablers to the country's net zero and decarbonisation ambitions, with continued and increasing investment in the electricity distribution networks vital for an affordable, secure, and sustainable energy future. This investment will boost economic growth by increasing DNO activity, creating skilled jobs across GB, and enhancing investment in low carbon technologies as confidence in network upgrades rises.

It is vital that the detail of the next regulatory framework (and its application) is reflective of the need for DNOs to significantly advance the scale and pace of investments in their networks beyond current RIIO-ED2 levels and that it evolves to deliver against increasingly complex future requirements.

Ofgem's incentive based regulation has worked well and we do not believe wholesale change is required – its strong focus on outputs and incentives has delivered significant benefits for customers. We recognise, however, the need for the RIIO-ED3 framework to evolve to respond to both experience and to lessons learnt in RIIO-ED2, as well as to wider energy and economic policy changes.

Ofgem's consultation covers some, but not all, of the key elements of the regulatory framework. It will be critical to understand how all of the different components come together and interact, particularly in a world where DNOs will be delivering programmes of work that provide benefits across multiple drivers and such synergies should be encouraged. We welcome further engagement with Ofgem on this.

A long-term focus is required for RIIO-ED3 package design (Ofgem Section 7, Responsible Business)

We appreciate Ofgem's recognition that customer bill increases will be required for the RIIO-ED3 period because of the step-change in investment needed to deliver Clean Power 2030 and net zero. Longer-term decision-making is essential to improve financeability, investability and deliverability of net zero and decarbonisation policies. We must move away from the short-term focus on immediate bill impacts that has been seen in previous price reviews. Instead, Ofgem must have a long-term focus in assessing the appropriateness of individual elements of the financial proposals and the package as a whole. We recognise

that we will need to work with Ofgem to explain to customers and stakeholders how the package has been designed to meet the interests of both current and future generations of customers.

In the case of regulatory asset value (RAV) depreciation policy, Ofgem must review its policy to reflect the fact that continuation of its current policy would create very material problems for both current and future generations of customers. As we set out in detail in the finance annex to this response, the acceleration of RAV depreciation is needed to prevent inter-generational unfairness, to mitigate deteriorating financeability and investability and to reduce the risk of companies being unable to raise the finance necessary to deliver Clean Power 2030 and net zero. A number of alternative policy solutions are available that could mitigate these adverse effects. The assessment of these solutions need not be limited to consideration of alternative asset lives or depreciation profiles, however we note that regulatory gearing does not offer a credible solution to any financeability issues and would completely fail to address other issues such as intergenerational fairness. We will work with Ofgem to explore these ahead of the Sector Specific Methodology Consultation (SSMC).

Investing for the future / Investability of electricity networks (Ofgem Section 7, Responsible Business)

The context in which RIIO-ED3 financial policies will be determined is very different to the RIIO-ED2 context. Macroeconomic conditions have changed significantly since the RIIO-ED2 determinations. The monetary policy environment has abruptly changed in response to major global shocks that have affected both real and financial markets. The era of cheap money is gone.

At the same time, the risks associated with investing in DNOs are also increasing due to factors such as the scale and pace of investment programmes that will be required in RIIO-ED3, supply chain, inflationary and workforce availability pressures, increasing threats to the resilience and reliability of their networks arising from the effects of climate change and increasing threats such as cyber security. All these factors will further increase financing costs for RIIO-ED3 beyond the increases that will arise due to changes in the macroeconomic environment.

In general, we continue to believe that regulatory stability and transparency is fundamental to investor confidence and that evolution rather than revolution in policies will be needed. However, Ofgem will need to adapt its regulatory financial policies and decisions to recognise the very different circumstances under which DNOs will need to raise finance during RIIO-ED3, when compared to expectations during the RIIO-ED2 review.

The RIIO-ED3 finance policies need to achieve a package that is simultaneously investable, financeable and resilient. The key benefits associated with safe and reliable networks, the facilitation of the transition to net zero and supporting wider economic growth can only be achieved if DNOs are able to attract both debt and equity finance and remain financially resilient. It is not appropriate for Ofgem to “trade off” one of these key elements of the package against another. Ofgem’s Sector Specific Methodology Decision (SSMD) proposals for other sectors fail to adequately achieve investability, financeability and resilience. Further changes are required to ensure that DNOs can raise the finance necessary to deliver investment.

Ofgem is, however, right to introduce the concept of investability into the RIIO-3 framework. Long term investability is critical to securing the investment in the sector to deliver a significant increase in investment levels for a sustained period of time and must be a central component of Ofgem’s design of the RIIO-ED3 financial framework. Ofgem’s approach to investability for RIIO-ED3 must:

- Allow competitive, risk-adjusted returns to retain existing and attract new equity through the baseline allowed return on equity and potential for incentives (while reflecting that asymmetric downside risk, including political and regulatory risk, may not be fully reflected in historical betas);
- Provide an appropriately calibrated payback period for investors that is similar to other investments;
- Provide a compelling asset and earnings growth with potential for dividend capacity above 3% to compete with existing infrastructure investments globally;
- Ensure DNOs maintain strong investment grade credit ratings (BBB+/Baa1) so that equity investors have the confidence to invest and new debt financing can be secured; and
- Avoid an ongoing risk of “dilution” to existing equity investors, whether real or notional, that would itself make equity investments less attractive on an ongoing basis.

DNOs must have detailed sight of, and opportunity to comment on, Ofgem’s proposed investable financial package for RIIO-ED3 comfortably ahead of business plan development so that they can be confident that they can secure the finance necessary to deliver for customers.

Ofgem’s approach to financeability for RIIO-ED3 must:

- Retain tests of DNOs’ ability to maintain strong investment grade credit rating (BBB+/Baa1), based on the approach credit rating agencies currently take and also test for downside risks from any changes being actively considered by credit rating agencies;
- Test that the DNOs remain financeable into the long term, and that decisions taken for RIIO-ED3 do not simply solve issues for that price control period whilst storing up problems for future periods; and
- Robustly test the financeability of the DNOs against credible risk scenarios, including substantial investment funded via uncertainty mechanisms and sensitivity to variations against key financial forecasts.

We recognise that Ofgem implemented a series of changes to its approach to setting the cost of equity in its SSMD for RIIO-T3 that are consistent with some of the changes that ENA has been arguing for. We welcome such changes and believe that they should also be made for RIIO-ED3. However, assessment of the cost of equity range proposed in Ofgem’s SSMD for RIIO-T3 and RIIO-GD3 clearly shows that Ofgem’s proposed Capital Asset Pricing Model (CAPM) parameter ranges and cost of equity range remain too low. Cross checks to Ofgem’s cost of equity range also show that the midpoint of Ofgem’s SSMD range is too low.

In order to deliver an investable cost of equity, Ofgem needs to make a number of further changes to its approach to determining the cost of equity for RIIO-ED3. We set out details of these in the annex to this response.

In assessing an appropriate cost of debt for RIIO-ED3, Ofgem must ensure that the sector’s cost of debt is funded, including its issuance costs. In assessing this – amongst many other important considerations – Ofgem must reflect the changing market conditions and increasing capital programmes. Additional borrowing cost allowances will need to increase in RIIO-ED3 to reflect changes in market rates, improved estimation approaches and costs incurred by networks that are not compensated in Ofgem’s RIIO-ED2 approach.

Further detail of our response to Ofgem’s questions regarding the RIIO-ED3 finance package can be found in the attached annex.

In order to balance investment requirements during RIIO-ED3 with the best interests of customers, Ofgem should provide DNOs with sufficient ex ante allowances for investment ahead of need whilst retaining the RIIO framework's full potential to drive better outcomes for customers, where powerful incentives, including the totex incentive mechanism (TIM), encourage DNOs to make the right investments, driving efficiency and innovation.

The RIIO-ED3 framework should have in place uncertainty mechanism(s) for funding any additional allowances necessary for investments (e.g. as identified via new Regional Energy Strategic Plan (RESP) or by the DNOs themselves) that are required to facilitate the transition to net zero by 2050 in a timely manner. At this stage, Ofgem is not consulting on key components of the framework like the TIM, and careful consideration will be required of how different components of the price control work together to drive the right outcomes.

Getting Incentives Right for RIIO-ED3 (Ofgem Section 5, Regulatory Framework / Section 7, Responsible Business)

Incentive based regulation has to remain central to the design of the RIIO-ED3 framework, with incentives designed to reward desired behaviours. This was a core aspect of the RIIO framework when it was first introduced and has been diluted in RIIO-ED2. Ofgem's development of powerful ex ante incentives, focussed on the delivery of outcomes or outputs, has brought about many step-changes in the performance of networks. Examples include:

- (i) **Reliability**, where under Ofgem's Interruptions Incentive Scheme (IIS) the number of electricity supply interruptions and average duration of interruptions experienced by customers have more than halved over the time it has operated;
- (ii) **Customer Satisfaction**, where the associated performance improvements have seen average customer satisfaction scores increase to more than 9 out of 10 since its inception;
- (iii) **Average time to Quote/Connect**, where the overall average time to quote and connect for the relevant connections activities under the Ofgem incentive has reduced by 15 per cent since first introduced at the start of RIIO-ED1; and
- (iv) **Complaints**, where the average complaint metric scores have improved significantly over the period in which the incentive has operated.

The strong incentives introduced by such mechanisms focus management teams on delivering step-change improvements in performance for the benefit of customers. Investors earn additional returns within the price control period if stretching in-period targets are beaten, whilst customers receive better outcomes through improved performance in period, which can inform target setting in future periods. Such incentives can stimulate both technological and process innovation, as well as focussing management teams' attention at desired performance areas.

Refinement of existing incentives, plus the introduction of new ones, collectively placing greater upside potential than RIIO-ED2, will be key in providing clearer incentives in RIIO-ED3 for DNOs to deliver for customers. For example, encouraging further innovation in reducing costs and increasing efficiencies of investments and further striving to improve customer service (e.g. in connections) and resilience levels.

Evolution of the current framework of incentives will also be needed to recognise the value customers place on electricity as well as the challenges of climate change and net zero, so that further increases in network resilience and customer outcomes can be delivered in the future. This will require a combination of

appropriately calibrated incentive targets and the use of an appropriate balance of opportunity to earn rewards and less of a focus on simply avoiding penalties.

Network Investment (Ofgem Section 5, Regulatory Framework)

The grid is undergoing its biggest ever upgrade and electricity distribution networks sit at the heart of enabling decarbonisation. As such, we recognise the need for sufficient capacity on our electricity networks to deliver net zero. The DNOs are already delivering significant programmes of work to achieve this and to ensure their networks are ready to meet the changing needs of our customers.

We can see a potential case for a distribution sector specific plan and deliver approach being applied in some restricted circumstances, (e.g. if limited to load related network investment at higher voltages, for example specifically large EHV and 132kV or high financial value schemes, which may span multiple price control periods). Any 'extreme' version of plan and deliver will however limit the DNOs' ability to make trade-offs under totex and will fail to facilitate the efficient delivery of net zero goals. Any use of ex post regulation must be targeted and used sparingly. Ex post frameworks will create boundaries and associated distortions, remove incentives to find synergies, create regulatory risk and involve a high regulatory burden on both Ofgem and the regulated companies. Suitable ex ante allowances are required to give the regulatory predictability that is essential to bring forward large amounts of new long term investment and build the supply chain required.

Ofgem has, within the existing RIIO framework, tools that could be used to hold companies to account. The suitability of existing regulatory framework mechanisms will need to be fully assessed against the scale/scope of distribution investments, as well as deliverability challenges like supply chain constraints. Any use of regulatory mechanisms whereby Ofgem monitors/assures delivery of outputs and outcomes in period (e.g. output monitoring metrics or price control deliverables) must be proportionate and carefully developed to ensure they fully factor in deliverability and other external challenges, e.g. supply chain.

The plan and deliver approach is also not appropriate for asset health. We consider the Network Asset Risk Metric (NARM) has been an excellent regulatory mechanism to date, providing scope for DNOs to innovate, whilst holding them to account for delivery of outputs. We support continued evolution and proportionate expansion of the NARMs framework as proposed by Ofgem. We recommend more detailed consideration of climate resilience and how it sits within the RIIO-ED3 framework.

Institutional governance roles and clarity of tRESP outputs (Ofgem Section 6, Networks for Net Zero)

We support the introduction of the RESP and the need for transitional arrangements to support the timely development of business plans and consider this a significant opportunity to support customer decarbonisation and cross-vector coordination. The institutional governance changes will be vitally important and need to be done effectively in a timely way. Getting the role of the RESP right will be critical to ensure it delivers meaningful benefits, including how tRESP will work for RIIO-ED3 and its interactivity with the regulatory framework design.

Timescales for tRESP outputs will be crucial for compatibility with RIIO-ED3 planning and we are concerned they may not be available in sufficient time to be a key input for DNO load related investment plans for RIIO-ED3. Clarity is needed as soon as possible on the exact content of the tRESP and on the timeline/purpose of DNO/NESO interactions that will occur during 2025, before the tRESP product is published. Any in-period

uncertainty mechanism covering enduring RESP output should be upwards only from tRESP provided to inform DNO business plans (i.e. ex ante allowances should be appropriately set to meet the needs on a long term basis).

ENA members recognise the positive impact RESP could have in facilitating more agile and improved Ofgem decision-making of DNO investment proposals, informed by RESP whole system regional energy pathways. Our current understanding is that tRESP will contain: (i) **pathways**, (we understand these to be primarily electric vehicle and heat pump ranges at local authority level of granularity) for plan submission, ensuring DNOs remain positioned to deliver on all credible future pathways to net zero using a common methodology for determining detailed planning assumptions during 2025; and (ii) **assumptions**, for use in DNO DFES to derive network need.

We recognise the need for collaboration between energy networks, NESO, local authorities and other relevant actors to ensure its success. To achieve this, greater clarity of respective NESO and DNO responsibilities will be required, avoiding unnecessary duplication and ensuring RESPs focus on top down regional needs applying a cross vector view, to inform network requirements, rather than prescribing them. Network companies must retain responsibility for network planning.

DNOs are currently preparing for RIIO-ED3 with significant stakeholder and customer engagement and engineering development required to inform their RIIO-ED3 plans. It is our understanding that NESO plans to engage on a regional and national level. DNOs will continue to engage with their stakeholders on their DFES in the way they have done for RIIO-ED2. Together, the outputs of this work will help to inform a clearer understanding of what will be required to deliver national and regional decarbonisation targets and subsequently inform the required investments in energy networks for RIIO-ED3 business plans and thereafter.

tRESP should not be a "big bang" deliverable in January 2026 and should be delivered as soon as possible, on an iterative and incremental basis, building on existing successes and avoiding creating significant additional burden. We would encourage early delivery where possible and DNOs are committed to working with NESO to help it to deliver timely outputs.

There should be no additional tRESP iterations received after January 2026. December 2026 business plan submission deadlines could be jeopardised if DNOs are surprised by tRESP content. In this context it is also important that Ofgem set out broader business plan requirements, such as what common planning scenario should be used and the treatment of any other uncertain areas of work (e.g. Access SCR at RIIO-ED2). This would provide clarity on Ofgem's expectations on the balance of totex between ex ante and uncertainty mechanism funding, where this is provided as early as possible through publication of its draft and final Business Plan Guidance.

The Enduring RESP

The enduring RESP content should not overwrite business plans and the process for its implementation will need to be carefully managed as substantial changes could impact the deliverability of RIIO-ED3. We believe a reopener for load, specific to RIIO-ED3, is appropriate, catering for circumstances where the enduring RESP requires additional investment compared to the original tRESP. It is essential that the design of any such reopener is not seen as an opportunity for Ofgem to defer making decisions on ex ante allowances at the time of Final Determination and does not undermine the ability of DNOs to build supply chain capacity (to address the issues highlighted later in the response). As stated previously, any in-period reopener covering enduring RESP should be upwards only from tRESP provided to inform DNO business plans (i.e. ex ante allowances should be appropriately set to meet the needs on a long-term basis).

RESPs should not be making specific directions on what network interventions DNOs should make, i.e. it is not a CSNP. We do believe it is appropriate, however, for the RESP to make suggestions on new developments that may justify strategic need, but only after discussions with DNOs, which the DNOs will then fully assess and determine whether network investment is required.

DNOs expect to play a key role in the enduring engagement with customers, local authorities and other local stakeholders. Clarity will be needed on respective DNO and NESO roles in advance of RIIO-ED3 business plans being developed and submitted to ensure consistency of approach and understanding.

An enduring role for Flexibility in RIIO-ED3 (Ofgem Section 6, Networks for Net Zero / Section 8 Smarter Networks)

We believe in a principled approach that is generally based upon “touch the network once”, with a focus on planning towards the electricity network of 2050. To achieve this, there may be a case for more proactive investment. However, flexibility will remain an important part of the network planning toolbox, where the investment case can be proved and is in the interests of consumers.

We welcome the framework consultation’s recognition of the need for significant investment in the network on a proactive and programmatic basis to meet Clean Power 2030 and net zero 2050 targets. A combination of flexibility and reinforcement will be required to deliver future capacity and make the best possible decisions to intervene on the network with long-term goals in mind. Flexibility will:

- Support delivery but should not defer investment where there is a clear long-term need;
- Help manage uncertainty, and is particularly useful at the distribution level, where load investment is more demand led in nature due to shorter lead times, particularly at the lower voltages;
- Continue to have a key role where beneficial for consumers but needs to be investment case driven;
- Continue to have uses in expediting some connections delivery; and
- Continue to provide whole-system benefits.

Supply Chain and Workforce Resilience (Ofgem Section 6, Networks for Net Zero / Section 9 Resilient and Sustainable Networks)

DNOs face significant supply chain and skills challenges. DNO activity is spread across a wide range of voltages, customers and stakeholders, impacting upon large numbers of customers, connections, reinforcements and asset replacement projects. These challenges are intrinsically linked to the challenges faced elsewhere, including at transmission and in wider industry and will intensify as the global demand for the equipment and resources required to upgrade electricity networks increases. Further complexities, such as the European demand for SF6 free equipment will exacerbate this situation.

The impact of the global demand for key plant and equipment is already resulting in increased prices, beyond what is catered for under the current Ofgem real price effect mechanism. For example, the average price of certain transformers has more than doubled over the last 5 years. Lead times are also increasing, with delays of 6 to 12 months in some cases.

Workforce pressures are also increasingly being faced, with significant shortages in key trades such as jointers, senior authorised persons and lines people contributing to substantial negative impacts on the distribution supply chain. This lack of available resources is limiting completion of work and is stoking inflated labour rates as in-demand tradespeople move both within the electricity sector and across vectors. It will be vital that the sector prioritises investment in development and skills training, noting that growing the workforce will come at a cost that will need to be reflected in DNO allowances.

Whilst crossovers between transmission and distribution exist (most notably at the 132kV level), it is vital that any supply chain mechanism agreed by Ofgem to address transmission-level issues is considered and implemented with a wider lens of its impact on the distribution networks. Furthermore, it is vital that any supply chain mechanism applied to Ofgem's RIIO-ED3 framework takes into account the specific challenges faced by DNOs and recognises the fundamental differences between transmission and distribution. These include the more strategic grouping of transmission projects, investments being easier to predict, individual projects being of higher value and collectively requiring significantly less workforce commitment. It is also important to note that the direct impact of distribution projects is felt by a significantly larger number of customers and stakeholders.

The RIIO-ED3 price control package must include the ability for DNOs to recover their efficient costs (Ofgem Section 7, Responsible Business)

A fundamental component of a fair and balanced price control package must be ensuring that companies are able to recover their efficient costs. This must include not only ensuring that Ofgem's analysis of current efficient costs is robust but also that its assumptions about how those efficient costs will change moving forwards are appropriate.

DNOs' experience of the RIIO-ED2 policies (real price effects and ongoing efficiency) has been that there is a significant misalignment between Ofgem's assumptions about how efficient costs will evolve through the price control and the reality of the costs being incurred. DNOs have faced supply chain constraints, inflationary pressures and skilled workforce availability pressures, in particular due to the global competition for scarce resources needed to support the transition to net zero, that have resulted in inflationary pressures above underlying inflation (which is in contrast to the negative real price effects adjustment that DNOs are currently facing). This misalignment between Ofgem's current approach and the reality of current costs, leads to underperformance against this element of totex allowances for all DNOs, in turn leading to underfunding of efficient costs and reduced investability in the sector.

Ofgem's policies in this area need to be fundamentally reviewed for RIIO-ED3. Firstly, a review of the real price effects methodology must be undertaken to ensure a more appropriate mechanism for RIIO-ED3 which addresses the issues experienced in RIIO-ED2 to date. Secondly, the current ongoing efficiency assumption needs to be reviewed and better linked to relevant evidence. The recent UK economy productivity improvements have been below Ofgem's RIIO-ED2 1% assumption for some time. There is no rationale to expect energy networks to improve at a materially faster rate than the wider economy. We would welcome the development of a robust methodology that all stakeholders can have confidence in.

Annex – RIIO-ED3 financial policies

Introduction to this annex to our response

This annex provides our more detailed views on the following Ofgem questions, along with accompanying supporting evidence.

- Q45. Do you see any reason why we should not implement the proposed changes to the calculation of allowed returns, consideration of investability and assessment of financeability that we set out in RIIO-3 Sector Specific Methodology Decision – Finance Annex for ET, GT and GD?
- Q46. Do you see any reason why we should not implement the proposed updates to financial resilience requirements that we set out in RIIO-3 Sector Specific Methodology Decision – Finance Annex for ET, GT and GD?
- Q47. What are the key factors (including benefits and costs to consumers) that Ofgem should take into consideration when conducting its review of the appropriate approach to regulatory depreciation in ED3 and beyond?

This submission is supported by the following reports:

- Frontier Economics, Equity Investability in RIIO-3, 5 March 2024
- Oxera, RIIO-3 cost of equity—CAPM parameters, 8 November 2024
- Oxera, Review of the regulatory regimes and business mixes for relevant European comparators to strengthen the use of European beta data, 8 November 2024
- Frontier Economics, Updated Cost of Equity Cross Check Evidence, 22 November 2024
- Oxera, Evaluation of the ARP–DRP framework, 8 November 2024
- NERA, Additional Cost of Borrowing for the RIIO-3 Price Control, 22 February 2024
- Oxera, RIIO-3 risks and investability topics, 9 December 2024
- NERA, Depreciation Policy for RIIO-ED3, 15 January 2025

Several of these reports have previously been submitted to Ofgem as part of the RIIO-T3 and RIIO-GD3 process. We are re-submitting the reports with this consultation response so that they can be formally considered as part of the RIIO-ED3 process too.

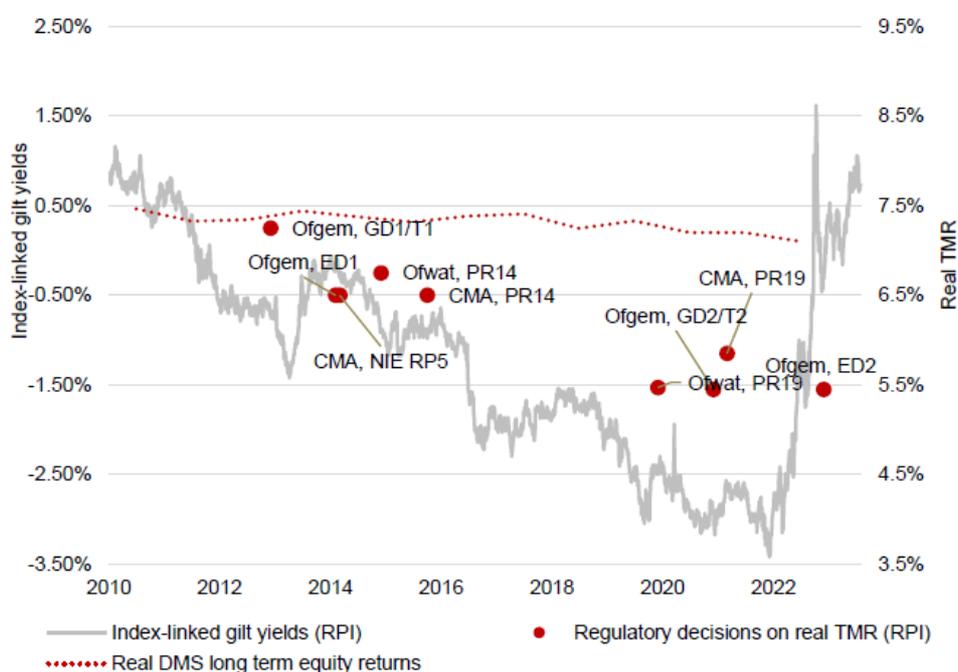
The context in which RIIO-ED3 financial policies will be determined is very different to the RIIO-ED2 context

Macroeconomic conditions have changed significantly since the RIIO-2 determinations and since the UKRN Guidance was developed

The RIIO-2 financial framework was determined during a period of sustained negative real gilt rates following the global financial crisis. Ofgem calibrated its returns for RIIO-ED1 and RIIO-2 in light of these prevailing economic conditions, lowering its estimates of TMR and therefore cost of equity over time in response to the fall in gilt yields and subjective assessment of wider market evidence including interest rates.¹ The UKRN guidance for regulators on the methodology for setting the cost of capital (“UKRN Guidance”) was also developed and consulted on during the same era of low-cost finance.

Macroeconomic conditions have changed markedly since then. The monetary policy environment has abruptly changed, in response to major global shocks that have affected both real and financial markets. As shown in figure 1, since RIIO-2 decisions, yields on ILGs have increased by around 3.5% - a huge increase over a relatively short period of time. Rates have increased further since this report was written.

Figure 1 - Long run TMR as estimated by Dimson, Marsh and Staunton (DMS), regulatory decisions on TMR and yields on 20 year ILGs



Source: Bank of England, DMS, Frontier Economics²

¹ Frontier Economics, Equity Investability in RIIO-3, section 2.1.1, 5 March 2024

² Frontier Economics, Equity Investability in RIIO-3, section 2.1.1, 5 March 2024

Over the same period of time the Bank of England base rate has increased from close to zero to 4.75% today. The era of cheap money is gone. Ofgem needs to adapt its regulatory financial policies and decisions to recognise the very different circumstances under which networks will need to raise finances during RIIO-ED3.

Heightened risk for DNOs in RIIO-ED3

DNOs face heightened risks relative to RIIO-ED2. These risks will be reflected in investors' perception of the risks associated with investing in DNOs and therefore in the financing costs that DNOs will bear. We highlight some of the most significant here, including risks associated with:

- the increased use of electricity, including the associated increases to Distribution System Operator (DSO) activities;
- the unprecedented scale and pace of investment programmes;
- supply chain, inflationary and workforce availability pressures;
- the effects of climate change; and
- increasing threats such as cyber security.

The energy system is undergoing a period of significant transformation as it supports the changes needed to achieve net zero, including the government's Clean Power 2030 Action Plan.³ While the precise path to be taken to achieving net zero remains uncertain, all NESO's 2024 Future Energy Scenarios show marked increases in use of electricity.⁴ With these changes, the increasing activity of the DSO function is likely to result in increasing risks for DNOs.

The scale and pace of investment programmes in RIIO-ED3 will be significant, leading to increasing risks:

- Networks will need to deliver larger programmes than they have previously, meet customer requirements that are more uncertain and variable than ever and at much greater pace, with large penalties and risk of licence enforcement for late delivery.
- The sheer number of new projects and programmes, and the associated series of compressed outages means networks will be exposed to even greater risks associated with avoiding and managing delays, network faults, and major incidents. This requires a step up in operational procedures, capabilities, systems, and complexity in management of operations. Investors in DNOs will inevitably factor this increasing risk into the returns they expect for their investment.
- With the need for significant investment, the planning and consenting challenges, public opinion, and the reputational challenges posed to electricity networks are at a scale never experienced by these networks before. This pressure from politicians and from external stakeholder groups regarding the impact of this investment on the environment and communities will have a knock-on effect on the deliverability, costs, and risks of delivering necessary investment.

DNOs face further risk increases due to supply chain, inflationary and workforce availability pressures. Increased global demand for network investment has resulted in the supply chain being significantly constrained. There is pressure on DNOs' ability to secure supply chain capacity, more onerous terms and conditions, and from the pace required to achieve dates. The overall complexity of the supply chain, its need to scale, and the financial exposure to supplier failure, quality risks, and resource constraints exposes networks to supply chain risks at a scale never seen before.

³ Details available at [Clean Power 2030 Action Plan - GOV.UK](#)

⁴ Available at [Future Energy Scenarios \(FES\) | National Energy System Operator](#)

DNOs also face increasing threats to the resilience and reliability of their networks arising from the effects of climate change and increasing threats such as cyber security. Weather patterns are significantly changing due to the impact of climate change and provide an ever-growing risk of interruptions to capital delivery and to penalties due to service interruptions. DNOs also face a heightened security risk relative to the rest of the market due to the combination of increasing world instability, increasing global interconnectivity, and energy networks being critical national infrastructure. The price control must be designed to appropriately mitigate these risks via specific allowances and investments, but the increased threat is unlikely to be fully mitigated and will require continuous improvement as threat actors also become more advanced.

Lastly, the ongoing slow-down of regulatory depreciation implicit in Ofgem's RIIO-ED1 and RIIO-ED2 policy is itself creating further risks to debt and equity investors – both through the risks to equity investors that arise from a substantially larger RAV (and thus dividend requirements) and from the strain placed on financial metrics that will weaken credit ratios and increase the cost of raising debt. As we note later in the response, these issues should be addressed directly at source, through a regulatory depreciation policy that addresses the issues with the slow-down in the average rate of RAV depreciation.

All these factors will further increase financing costs for RIIO-ED3 beyond the increases that will arise due to changes in the macroeconomic environment and thus put greater risk to both debt and equity investability.

The stakes have never been higher

Customers and society have never been more reliant on the provision of safe and secure energy supplies, underscored by growing energy demand and the critical role it plays in our lives. This has become a top priority on the energy policy agenda, with government recognising the critical nature of energy supplies.

The combined effects of the investment that DNOs will need to deliver over the RIIO-ED3 period, changes to the macroeconomic environment and investor expectations and the risks that DNOs will carry in RIIO-ED3 mean that it is more important than ever that Ofgem gets its policies and decisions for RIIO-ED3 right.

The consequences for customers and society of getting RIIO-ED3 financing decisions wrong would be very significant. If the package does not deliver on investability, financeability and financial resilience, then there is a clear risk that companies may be unable to attract the capital needed to finance the investment required, or retain existing capital. If DNOs cannot attract and retain the required capital, then this will hamper the ability of any company to deliver what customers and society require of them.

The RIIO-ED3 finance package must deliver investability, financeability and financial resilience. It is not appropriate to “trade off” between these important deliverables.

The RIIO-ED3 finance policies need to achieve a package that is simultaneously investable, financeable and resilient. The key benefits associated with safe and reliable networks, the facilitation of the transition to net zero and supporting wider economic growth (through the creation of jobs and provision of the infrastructure necessary to connect the homes, low carbon technologies and industries of the future) can only be achieved if DNOs are able to attract both debt and equity finance and are financially resilient. It is not appropriate for Ofgem to “trade off” any one of these key elements of the package against another.

In general, we continue to believe that regulatory stability and transparency is fundamental to investor confidence and that evolution rather than revolution in policies is needed. However, Ofgem will need to further evolve its regulatory financial policies and decisions to recognise the very different circumstances under which DNOs will need to raise finance during RIIO-ED3. However, Ofgem's Sector Specific Methodology Decision

(SSMD) proposals for other sectors fail to adequately achieve investability, financeability and financial resilience. Furthermore, some of Ofgem's recent ring fence proposals might actually precipitate financial distress.

We also note instances of Ofgem seeming to compromise the delivery of one of the three in order to avoid failing one of the others, for example by suggesting that:

- the consumer costs associated with the adjustments required to achieve BBB+/Baa1 ratings may outweigh the potential costs of accepting a slightly lower credit rating for a period;⁵
- it might prohibit interest payments on loans from intercompany entities, shareholders or related parties once the lock-up is triggered⁶; or
- financeability might be achieved by reducing dividend yields.⁷

Such "trade offs" are inappropriate and result in a package that fails to deliver on investability, financeability and financial resilience.

We set out below details of what Ofgem's RIIO-ED3 package needs to achieve and some of the changes to Ofgem's policies that will be necessary to achieve this.

Ofgem is right to introduce the concept of investability into the RIIO-3 framework. However, Ofgem's proposed financial package for RIIO-T3 and RIIO-GD3 does not achieve an investable package

Ofgem is right to introduce the concept of investability into the RIIO-3 framework. The increasing capital programmes required to deliver Clean Power 2030 and net zero will require DNOs to secure and retain new equity and new debt investors. The very different macroeconomic environment, combined with global competition for capital, will make RIIO-ED3 a much more challenging environment in which to secure funding. Long term investability is therefore critical to the sector being able to deliver a significant increase in investment levels for a sustained period of time and must be a central component Ofgem's design of the RIIO-ED3 financial framework.

Ofgem's approach to investability for RIIO-ED3 must:

- Allow competitive, risk-adjusted returns to retain existing and attract new equity through the baseline allowed return on equity and potential for incentives (while reflecting that asymmetric downside risk, including political and regulatory risk, may not be fully reflected in historical betas);
- Provide an appropriately calibrated payback period for investors that is similar to other investments;
- Provide a compelling asset and earnings growth with potential for dividend capacity above 3% to compete with existing infrastructure investments globally;
- Ensure DNOs maintain strong investment grade credit ratings so that equity investors have the confidence to invest and new debt financing can be secured; and
- Avoid an ongoing risk of "dilution" to existing equity investors, whether real or notional, that would itself make equity investments less attractive on an ongoing basis.

Frontier Economics explains that equity financeability considerations apply equally to all equity investment in order to retain existing equity and attract new equity.⁸ It explains that, because today's "new" investor, will be

⁵ Ofgem, RIIO-3 Sector Specific Methodology Decision – Finance Annex, 18 July 2024, paragraph 5.33

⁶ Ofgem, Energy Networks ring fence review, 18 September 2024, page 10

⁷ Ofgem, RIIO-3 Sector Specific Methodology Decision – Finance Annex, 18 July 2024, paragraph 5.11

⁸ Frontier Economics, Equity Investability in RIIO-3, section 3.2, 5 March 2024

tomorrow's "old" investor, if Ofgem was to only apply the concept of investability to new investors, any investor would rationally appraise the full set of signals sent by Ofgem regarding their future returns and come to the conclusion that Ofgem's new policy was one where it offers attractive introductory rates, followed by a long period of lower rates. Such an approach would also be destructive to investor confidence as it would send a stark signal to equity investors that they should not expect to receive the required rate of return as soon as it was no longer necessary to raise fresh equity.

Ofgem's RIIO-T3 financial package fails to achieve an investable package. Oxera's report for Transmission Owners (TOs) notes that Ofgem's investability framework for RIIO-T3 fails to take into account wider factors that affect the attraction and retention of equity, but that do not affect the baseline cost of equity estimate. Oxera discusses some of the wider context that would usefully inform and underpin a holistic assessment of investability for RIIO-3 and also presents analysis and evidence on selected relevant considerations and drivers that are likely to influence the investability of the UK electricity transmission sector in RIIO-3.⁹

A number of important further changes will be required to Ofgem's proposed RIIO-3 financial package to secure a package that is investable.

The allowed cost of equity for RIIO-ED3 will need to be significantly greater than for RIIO-ED2 to create an investable package

Assessment of the cost of equity range proposed in Ofgem's SSMD for RIIO-T3 and RIIO-GD3 clearly shows that Ofgem's proposed CAPM parameter ranges are too low. Cross-checks to Ofgem's cost of equity range also show that the mid point of Ofgem's range is too low.

In order to deliver an investable cost of equity, Ofgem needs to make a number of further changes to its approach to determining the cost of equity for RIIO-ED3, including:

- Making a number of further changes to account for issues and errors in Ofgem's RIIO-T3 and RIIO-GD3 SSMD CAPM range;
- Taking account of evidence from important cross-checks to ensure that Ofgem's selected cost of equity is investable – including reflecting the returns premium that equity requires over debt;
- Taking account of asymmetry in its CAPM parameter assumptions in choosing a point estimate; and
- Aiming up within the cost of equity range to avoid welfare losses associated with underinvestment risk in a context of significant equity needs within an international competition for capital.

We set out further details of these below.

Further changes are required to Ofgem's CAPM parameter ranges

We recognise that Ofgem implemented a series of changes to its approach to setting the cost of equity in its SSMD for RIIO-T3 and RIIO-GD3, which are consistent with the evidence and positions that ENA had previously developed, in discussion with Ofgem.. We welcome such changes and believe that they should also be made for RIIO-ED3. These changes include:

- using the arithmetic mean as the only approach for calculating the ex post total market return (TMR);
- using the Consumption Expenditure Deflator (CED) series, new backcast CPIH series, and CPIH

⁹ Oxera, RIIO-3 risks and investability topics, 9 December 2024

estimates from the Office of National Statistics for deflating nominal historical returns as an improvement on the approach used at RIIO-ED2;

- including European comparators in the calculation of the beta; and
- signalling potential for the selection of an allowed beta from the upper half of the beta range to reflect the evolving circumstances and risk environment around RIIO-3.

However, there are areas where we disagree with Ofgem’s approach. Ofgem should:

- account for the convenience premium embedded in government bonds when estimating the risk-free rate (RFR);
- remove the Cost of Living Index (COLI)-CED adjustment in the estimation of the ex ante Total Market Return (TMR), and instead deflate the nominal data provided by Dimson, Marsh and Staunton (DMS) using the CPIH historical inflation series used by Ofgem;
- exclude the serial correlation adjustment in the calculation of the ex ante TMR;
- inform its TMR allowance predominantly on the basis of the ex post TMR, instead of placing 50% weight on historical ex ante approaches;
- recognise the relationship between the TMR and gilt yields, as has been done in previous regulatory decisions, as this is likely to be required for investability; and
- include Pennon in the sample of water companies considered in the estimation of the beta.

Oxera’s latest CAPM report¹⁰ that was prepared on behalf of ENA in its engagements with Ofgem, provides further information, analysis and evidence regarding the areas of disagreement in relation to Ofgem’s intended methodology for the estimation of the CAPM parameters. A summary of Oxera’s recommended CAPM parameter ranges, compared to Ofgem’s SSMD for RIIO-T3 and RIIO-GD3 is set out in the table below.¹¹

Table 1 - Summary of Oxera’s CAPM parameter ranges

CPIH real	Ofgem low	Ofgem high	Oxera low	Oxera high
RFR	1.27%*	1.27%*	1.54%	1.54%
TMR	6.50%	7.00%	7.00%	7.50%
Equity beta (at 60% gearing)	0.64	0.89	0.76	0.89
Cost of equity	4.60%	6.36%	5.70%	6.83%

Source: Oxera¹²

* Ofgem’s RFR values are updated to 1 July 2024 data to allow comparability

Oxera’s report shows that, after adjusting the RFR, TMR and beta for the points discussed above, a cost of equity range of 5.70–6.83% (CPIH-real, at 60% gearing) would be appropriate, before taking account of forward looking risks that are not reflected in historical betas.¹³ The midpoint of the range calculated using the Ofgem SSMD methodology is below the bottom of the Oxera cost of equity range, which implies that the midpoint of the Ofgem cost of equity range is too low.

In addition to the evidence set out in Oxera’s latest CAPM report referenced above, we provide further supporting evidence in support of changes to Ofgem’s approach to two CAPM parameters below.

¹⁰ Oxera, RIIO-3 cost of equity—CAPM parameters, 8 November 2024

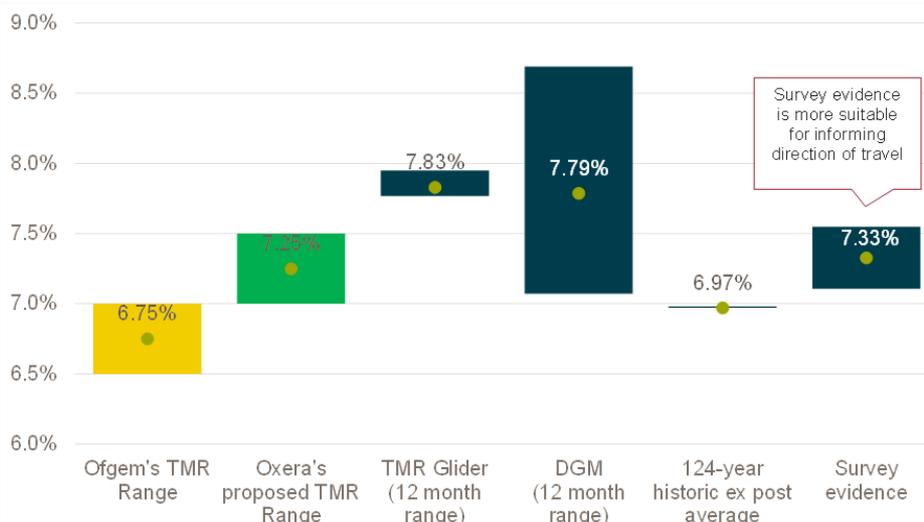
¹¹ Oxera, RIIO-3 cost of equity—CAPM parameters, 8 November 2024, page 7

¹² Oxera, RIIO-3 cost of equity—CAPM parameters, 8 November 2024, page 7

¹³ Oxera, RIIO-3 cost of equity—CAPM parameters, 8 November 2024, page 6

Frontier Economics has analysed a range of available TMR cross-check data.¹⁴ This cross-check evidence indicates that Ofgem’s TMR is insufficient. Frontier Economics finds that Ofgem’s TMR range in the SSMD is inconsistent with current market evidence, thereby introducing investability risks.

Figure 2 – TMR estimates and cross-checks



Source: Frontier Economics¹⁵

Frontier Economics concludes that a long-run unconditional TMR range of 6.5% - 7.5% CPIH-real would be appropriate as a stable but not fixed TMR range. However, the prevailing market conditions in the past two years would strongly suggest a RIIO-3 TMR range of 7.0% - 7.5%. Frontier Economics recommends that the TMR point estimate should be towards the top of that range.¹⁶

In its RIIO-T3 and RIIO-GD3 SSMD, Ofgem provisionally decided to expand the sample of companies used as beta comparators by adding five European companies with regulated energy networks (Enagás, Redeia, Italgas, Snam, Terna).¹⁷ In its report on European comparators,¹⁸ Oxera assesses the business mixes and the regulatory regimes of those five additional comparators. It concludes that the business mixes and the regulatory regimes of the five European comparators identified by Ofgem are sufficiently similar to GB energy networks for them to be included in the sample used to estimate the asset beta for calculating the cost of equity.¹⁹

¹⁴ Frontier Economics, Updated cost of equity cross-check evidence, 22 November 2024, part 2

¹⁵ Frontier Economics, Updated cost of equity cross-check evidence, 22 November 2024, figure 2

¹⁶ Frontier Economics, Updated cost of equity cross-check evidence, 22 November 2024, para 9.1.7

¹⁷ Ofgem, RIIO-3 Sector Specific Methodology Decision – Finance Annex, 18 July 2024, paragraph 3.199

¹⁸ Oxera, Review of the regulatory regimes and business mixes for relevant European comparators to strengthen the use of European beta data, 8 November 2024

¹⁹ Oxera, Review of the regulatory regimes and business mixes for relevant European comparators to strengthen the use of European beta data, 8 November 2024, page 34

Ofgem must include the debt-based cross-checks recommended by ENA in its “Step 2” cross-checking of the CAPM cost of equity

ENA asked Frontier Economics to consider how equity investability could be used and assessed. Frontier Economics’ conclusions are set out in its report that is appended to our submission.²⁰ This work shows how equity investability must include assessing whether the equity return on offer is competitive versus the set of other opportunities that exist in the wider international capital market.

Frontier Economics explains that a meaningful investability cross-check must reflect the returns premium that equity requires over debt.²¹

It notes that investability can also be tested by considering the ‘inferred’ cost of equity from cross-checks, including those used by Ofgem at RIIO-2. However, it also notes that all such cross-checks come with imperfections and limitations. Nonetheless, given the weight placed by Ofgem on such cross-checks in the past, there is merit in considering what cost of equity cross-checks now show, and whether they now support moving allowed returns back up. While these cross-checks cannot provide a highly reliable estimate of the actual cost of equity of GB regulated energy networks, they can inform on the overall trends in equity returns.

If the equity investability tests are failed, one would not rationally expect an equity investor to deploy capital in a proposition that has been shown to be unattractive versus readily available competing opportunities.

The benefits for customers of introducing such an investability framework for RIIO-3 are clear: if the RIIO-3 framework does not provide an equity return that is competitive versus the set of other opportunities that exist in the wider capital market, networks will be unable to finance activities that customers and society need them to deliver.

In its latest cross-check report, Frontier Economics²² provides updated cost of equity cross-check evidence. The overall finding of these cross-checks is that the cost of equity range proposed in Ofgem’s RIIO-T3 and RIIO-GD3 SSMD is too low. Furthermore, the midpoint of Ofgem’s range will not satisfy its equity investability objective.²³

A summary of Frontier Economics’ latest cost of equity cross-check findings is replicated below. This latest cross-check evidence clearly shows that Ofgem’s cost of equity range in its SSMD for RIIO-T3 and RIIO-GD3 is too low.

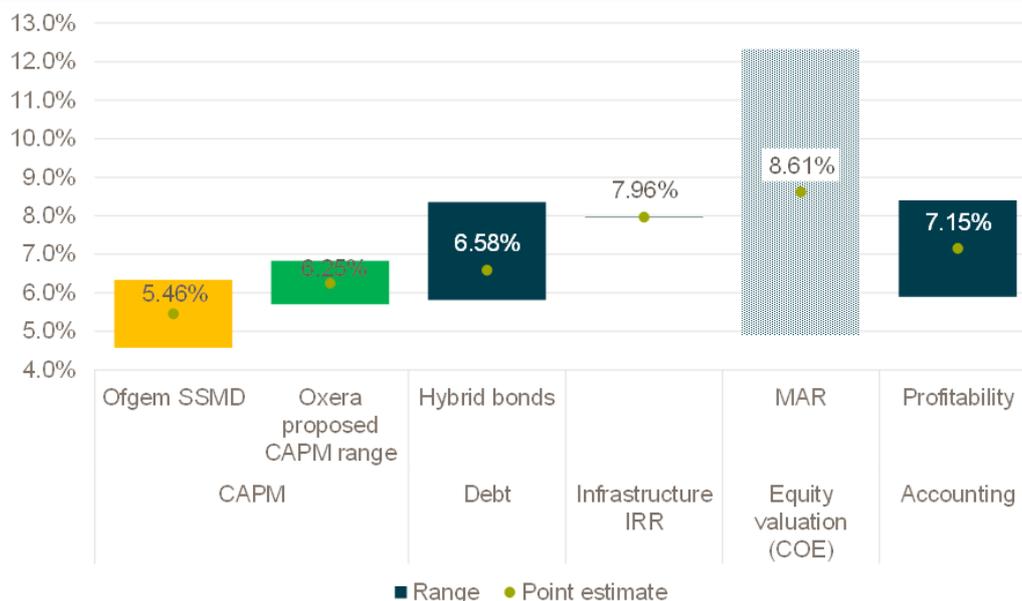
²⁰ Frontier Economics, Equity Investability in RIIO-3, 5 March 2024

²¹ Frontier Economics, Equity Investability in RIIO-3, para 7, 5 March 2024

²² Frontier Economics, Updated cost of equity cross-check evidence, 22 November 2024

²³ Frontier Economics, Updated cost of equity cross-check evidence, 22 November 2024, para 6.1.2

Figure 3 – cost of equity estimates and cross-checks (CPIH-real)



Source: Frontier Economics²⁴

In its SSMD for RIIO-T3 and RIIO-GD3, Ofgem expressed some reservations about aspects of the two debt-based cross-checks that have been proposed by ENA.²⁵ We also note that Ofwat, and its consultants Mason and Wright, have identified concerns with the application of the ARP-DRP framework. The accompanying reports provide answers to Ofgem’s and Ofwat’s concerns:

- In its report, Frontier Economics exposes its hybrid bond cross-checks to further robustness checking. It finds the data used in the cross-check is robust to wider checks, mitigating concerns raised by Ofgem in the SSMD.²⁶
- Oxera addresses concerns raised with its ARP-DRP framework in the appended report.²⁷ Oxera highlights that the relative measurement errors of the ARP–DRP framework are unlikely to be greater than the uncertainty inherent in a traditional application of the CAPM as used by the regulators. It also examines the relationship between gearing and the DRP based on specifications of a Merton model consistent with a regulated network company. Oxera finds empirically that the shape of the curve is much more likely to be convex than concave for regulated network utilities and therefore lead to underestimation of the ARP. This means that the lower bound of ARP can be applied to narrow the cost of equity range suggested by the CAPM by eliminating parts of the range that provide an inadequate risk premium relative to debt.

This new evidence provides further assurance that the debt-based cross-checks recommended by ENA are suitably robust for use in Ofgem’s “Step 2” cross-checking of the CAPM cost of equity. Furthermore, while we acknowledge that all cross-checks rely to a certain extent on assumptions (as indeed do the CAPM parameters

²⁴ Frontier Economics, Updated cost of equity cross-check evidence, 22 November 2024, figure 1

²⁵ Ofgem, RIIO-3 Sector Specific Methodology Decision – Finance Annex, 18 July 2024, paragraph 3.270 and 3.271

²⁶ Frontier Economics, Updated cost of equity cross-check evidence, 22 November 2024, section 2

²⁷ Oxera, Evaluation of the ARP–DRP framework, 8 November 2024

on which Ofgem relies), the debt-based cross-checks are less reliant on assumptions than many of the cross-checks that Ofgem has relied on historically.

A wide body of evidence supports selecting a cost of equity point estimate that is much higher than for RIIO-ED2

It is important to calibrate the return on equity allowance such that it ensures the investability of the regulatory settlement. In selecting a cost of equity point estimate for the RIIO-ED3 period from within its cost of equity range, Ofgem needs to consider a number of important factors including:

- redressing asymmetries in CAPM parametric uncertainty and in the package of cost allowances and incentives;
- avoiding the welfare losses of underinvestment and accounting for capital market constraints; and
- considering whether the equity return on offer is competitive versus the set of other opportunities that exist in the wider international capital market.

At this early stage in the RIIO-ED3 process, it is too early to discuss precise cost of equity values. However, we note that a significant body of evidence supports a significant increase to the cost of equity being required for the RIIO-ED3 period. We set out high level summaries of this evidence below.

Asymmetries in CAPM parametric uncertainty and in the package of cost allowances & incentives: As explained above, Ofgem's proposed CAPM parameter range for RIIO-T3 and RIIO-GD3 contains a number of issues that currently introduce significant downwards asymmetry in Ofgem's proposed cost of equity range. We believe that many of these are better addressed by correcting Ofgem's approach to determining its CAPM parameter ranges. However, even once these issues with Ofgem's proposed approach are addressed, we expect that some residual downwards asymmetry will remain in the CAPM parametric range in particular due to forward-looking risks not being reflected in historical beta data.

It is too early in the RIIO-ED3 process to comment on whether any asymmetry might exist in the RIIO-ED3 package that would also need to be reflected by aiming up in the cost of equity point estimate. In general, we note that such asymmetries are best avoided in the detailed design of a price control package; however we also note that the potential costs of aiming up in the cost of equity due to asymmetries would not be as large as the potential costs of setting the cost of equity too low. Assessment of whether any downwards asymmetry exists in the package must be supported by a robust analysis of whether the targets set for the efficient company are achievable or not and whether risks are symmetrically allocated.

Avoiding the welfare losses of underinvestment and accounting for capital market constraints: Ofgem must consider how it avoids setting the return on equity too low, as this could induce underinvestment risk, which could in turn lead to detrimental welfare consequences. The ambitious investment programmes to be delivered in RIIO-ED3 and beyond are necessary to decarbonise the energy system efficiently, and may also generate large welfare benefits through growth and job creation, consistent with the focus of Ofgem's new net zero and growth duties. In this context, the detrimental welfare consequences of setting the return on equity too low would be exacerbated. If Ofgem's allowed return is inadequate there may be underinvestment against these key programmes due to networks being unable to raise the finance necessary to support investment.

Evidence as to whether the equity return on offer is competitive versus the set of other opportunities that exist in the wider international capital market: As explained above, macroeconomic conditions have changed significantly since the RIIO-2 determinations. If the RIIO-ED3 framework does not provide an equity return that is competitive versus the set of other opportunities that exist in the wider capital market, DNOs will be unable to finance activities that customers and society need them to deliver. Latest cost of equity cross-checks point to cost of equity allowances needing to be much higher than RIIO-ED2 allowances.

Further considerations on selecting a cost of equity point estimate can be found in Oxera's and Frontier Economics' reports.^{28,29,30}

The RIIO-ED3 regulatory package must enable appropriate dividend payments to be made

In addition to ensuring that cost of equity allowances are appropriate, the RIIO-ED3 package must also ensure that dividend yields can be maintained at a level that is consistent with investors' expectations and benchmarks. Oxera explored the importance of this in its report for TOs.³¹ Oxera concluded that, from a theoretical perspective, investors in utilities might favour dividend payments over share price appreciation as a form of remuneration due to clientele effects, and noting that safeguards already exist against unreasonable distributions of cash by networks through ring fence requirements, it concluded that networks should be able to adopt a dividend policy that reflects their investors' preferences. Oxera also showed that this preference is evidenced by empirical data, as European electricity networks have maintained a stable dividend yield relative to the profile of their investments over time, at an average level that is higher than the 3.0% base assumption in Ofgem's SSMD for TOs. Similarly, UK utilities have consistently exhibited higher dividend yields than the market average. We note that Ofwat has recently revised its approach to the financeability assessment to include a base dividend yield of 4%.³²

Cost of debt allowances must ensure the cost of debt and associated issuance costs are not underfunded at RIIO-ED3

Cost of debt allowances for RIIO-ED3 must be designed to allow DNOs' efficient debt costs to be recovered.

In an environment where the interest rate on newly issued debt has risen substantially, and where capital programmes (and therefore the requirement to issue new debt) are increasing, it is imperative that Ofgem ensure its debt allowances for RIIO-ED3 are calculated to recognise these issues, and ensure that the sector is not under-funded for new debt costs, while still recognising and giving appropriate weight to the cost of existing, embedded, debt so that customers continue to benefit from the debt that companies issued at ultra-low rates. The debt allowance calculation that is established must be robustly tested against a range of scenarios, including higher than anticipated investment, in order to ensure it adequately funds the companies.

Additional borrowing cost allowances will need to increase in RIIO-ED3 to reflect changes in market rates, improved estimation approaches and costs incurred by DNOs that are not compensated in Ofgem's RIIO-ED2 approach

ENA asked NERA to refresh its RIIO-2 assessment of additional borrowing costs required for RIIO-3. NERA's analysis and evidence sources are set out in the appended report.³³ NERA estimates additional costs of borrowing of 57 bps p.a. for RIIO-3, with a range of 54 to 59 bps, compared to Ofgem's RIIO-2 allowance of 25 bps. Additionally, NERA estimates an infrequent issuer premia of 14 bps p.a.

²⁸ Frontier Economics, Equity Investability in RIIO-3, 5 March 2024

²⁹ Frontier Economics, Updated Cost of Equity Cross Check Evidence, 22 November 2024

³⁰ Oxera, RIIO-3 risks and investability topics, 9 December 2024, section 4

³¹ Oxera, RIIO-3 risks and investability topics, 9 December 2024, section 3

³² Ofwat, PR24 final determinations, Aligning risk and return, December 2024, page 5

³³ NERA, Additional Cost of Borrowing for the RIIO-3 Price Control, 22 February 2024

We recognise that Ofgem has already reviewed this work as part of its RIIO-T3 and RIIO-GD3 SSMD and plans to set out its further thinking at draft determinations.³⁴ Ofgem now has access to the data that supported NERA's analysis which we trust will also be helpful in allowing Ofgem to determine an appropriate allowance for RIIO-ED3.

The risks that DNOs will face during RIIO-ED3 mean that robust debt financeability assessment is more important than ever

The risks that DNOs will face during RIIO-ED3 mean that robust debt financeability assessment is more important than ever. Ofgem's approach to financeability for RIIO-ED3 must:

- Retain tests of networks' ability to maintain strong investment grade credit rating (BBB+/ Baa1), based on the approach credit rating agencies currently take, and also test for downside risks from any changes being actively considered by credit rating agencies;
- Test that companies remain financeable into the long term, and that decisions taken for RIIO-ED3 do not simply solve issues for that price control period whilst storing up problems for future periods; and
- Robustly test the financeability of companies against credible risk scenarios, including investment funded via uncertainty mechanisms and sensitivity to variations against key financial forecasts.

Ofgem already has a comprehensive suite of ring fence obligations and mechanisms in place. Networks take those obligations very seriously. Any future changes to those arrangements need to be assessed very carefully and associated costs must be fully funded.

The key benefits associated with safe and reliable networks can only be achieved if networks are financially resilient as well as able to source sufficient investment.

Ofgem already has a suite of robust ring fence arrangements in place. Companies take their obligations very seriously. We note that Ofgem has recently issued a call for input on its ring fence arrangements and has yet to conclude on the next steps in that process in light of the evidence that it submitted. ENA responded to that request and has since met with Ofgem's team to better understand their concerns and provided further feedback. It is important that Ofgem formally concludes that process. In doing so, it must take account of interactions with its price control review processes, including its assessment of investability and financeability. Ofgem must ensure that future price controls deliver investability, financeability and financial resilience. If, following robust Impact Assessment, Ofgem concludes that any onerous measures are in customers' interests and must be introduced, the costs associated with meeting the new obligations must be fully funded via the price controls.

³⁴ Ofgem, RIIO-3 Sector Specific Methodology Decision – Finance Annex, 18 July 2024, paragraph 2.82

The current policy for RAV depreciation must be reviewed to accelerate depreciation in order to prevent inter-generational unfairness and to mitigate deteriorating financeability and investability

The design of the RIIO-ED3 financial package must move away from the short-term focus on immediate bill impacts that has been seen in previous price reviews. We appreciate Ofgem's recognition that customer bill increases will be required for the RIIO-ED3 period. Ofgem must have a long-term focus in assessing the appropriateness of individual elements of the financial proposals and the package as a whole. There is a very real risk that focussing unduly on artificially achieving lower bills for current customers results in much higher costs for future customers, as a result of, for example, the risk of companies being unable to raise the finance necessary to deliver Clean Power 2030 and net zero, higher financing costs in the long term or unsustainably high future electricity bills.

In the case of regulatory depreciation policy, Ofgem must review its policy to reflect the fact that continuation of its current policy would create problems for both current (RIIO-ED3) and future generations of customers. Ofgem's 2011 policy for RAV depreciation introduced a move to 45-year depreciation for new RAV additions through RIIO-ED1,³⁵ with the RIIO-ED1 review implementing the policy with an eight year transition period. The ending of the period of 20-year depreciation of pre-RIIO legacy RAV results in depreciation allowances reducing rapidly, to a low point at 2035 (i.e. 20 years after the end of DPCR5) but the depreciation of RIIO RAV additions under the longer 45-year rule does not fully build up until the late 2060s. Ofgem acknowledged that the change to depreciation rules created a depreciation trough over the period of RIIO-ED1 to the 2060s, as part of its evidence to the BGT appeal.³⁶

This depreciation trough creates a number of adverse effects for customers in RIIO-ED3 and beyond. In the appended document from NERA,³⁷ NERA sets out analysis of this issue for a hypothetical notional DNO. We summarise key points below.

The historical policy of accelerated depreciation means that current customers are already enjoying lower bills than they would have, had depreciation always been set at 45-years, since this policy helped to keep the RAV (and associated financing costs) relatively small. By maintaining the move to a 45-year asset life, Ofgem will be conferring an even bigger benefit on current customers. This comes through what is, in effect, a depreciation payment holiday – wholly paid for, and to the detriment of, future customers.

NERA assesses the scale of the depreciation under-recovery under RIIO rules against three benchmarks as summarised in the following table.

³⁵ Ofgem, Decision letter on the regulatory asset lives for electricity distribution assets, 31 March 2011

³⁶ CMA, British Gas Trading Limited vs GEMA, Final determination, 29 September 2015, pages 125, 127-128

³⁷ NERA, Depreciation Policy for RIIO-ED3, 15 January 2025

Table 2 - Summary of NERA’s assessment of the RAV depreciation under-recovery against relevant benchmarks

NERA benchmark	Benchmark basis*	Under-recovery per hypothetical notional DNO £, 2020-21 prices, RIIO-ED3 onwards
1	compared to DPCR5 depreciation rules i.e. a 20-year asset life	2.1 bn ³⁸
2	compared to NERA’s proxy for the economic depreciation charge, a 45-year asset life (Ofgem’s assumed economic asset life) applied to all historical capex	1.6 bn ³⁹ **
3	compared to capex , an alternative proxy for the economic depreciation charge	2.1 bn ⁴⁰

Source: NERA⁴¹

* in all benchmarks, capex held constant at RIIO-ED1 levels to remove effect of increasing capex.

** NERA also considers a 10-year sensitivity around the 45-year asset life assumption (applying straight line depreciation between 35 and 55 years to all historical capex). This sensitivity shows a notional DNO would under-recover depreciation by £0.7-2.3bn (2020-21) prices.⁴²

Although there is uncertainty around the depreciation under recovery from the RIIO-1 policy change, given that the true economic depreciation charge is uncertain, all three of NERA’s benchmarks point to an under-recovery of around £2bn per notional DNO (2020-21 prices).

This depreciation trough goes against the principles of good stewardship, since a valuable asset to all customers (the existing RAV being relatively small, relative to the size of the physical asset base) is being fully exploited to the benefit of current customers. And beyond the immediately visible costs of higher charges for future customers, it also exposes them even more heavily to the risks that an uncertain future might bring (such as the possibility of a materially higher cost of capital, for example).

As a direct result of low depreciation allowances relative to benchmarks of indicative economic depreciation charge, RAV balances will grow significantly. This compounds the RAV growth that will arise due to the investment needed to deliver Clean Power 2030 and net zero. As shown in NERA’s analysis below, this extra RAV growth is permanent – i.e. it does not reverse once depreciation reaches “steady state”. Companies will therefore need to finance this growing RAV through increased WACC allowances that will perpetuate. Future customers will fund this extra WACC through permanently increased customer bills.

³⁸ NERA, Depreciation Policy for RIIO-ED3, 15 January 2025, slide 14

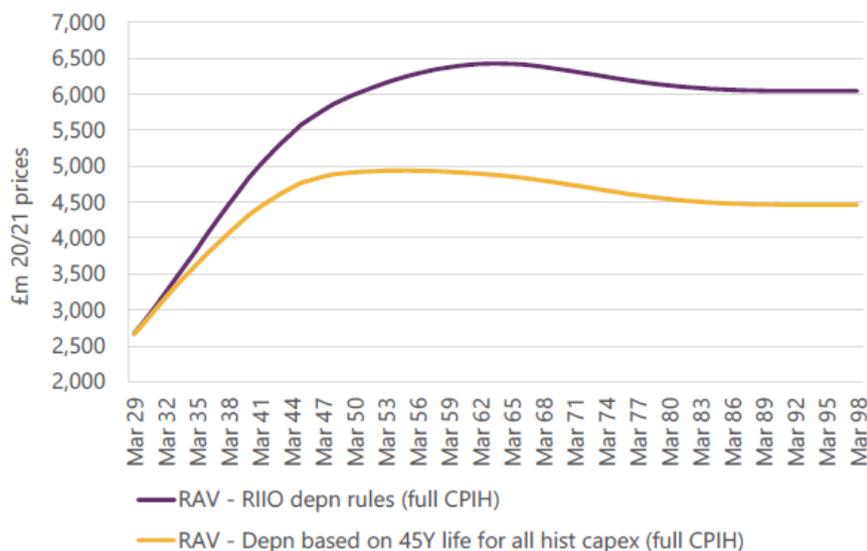
³⁹ NERA, Depreciation Policy for RIIO-ED3, 15 January 2025, slide 15

⁴⁰ NERA, Depreciation Policy for RIIO-ED3, 15 January 2025, slide 15

⁴¹ NERA, Depreciation Policy for RIIO-ED3, 15 January 2025, section 3

⁴² NERA, Depreciation Policy for RIIO-ED3, 15 January 2025, slide 15

Figure 4 – If RIIO-1 depreciation policy unchanged, the under-recovery of around £2bn results in a permanent increase in RAV

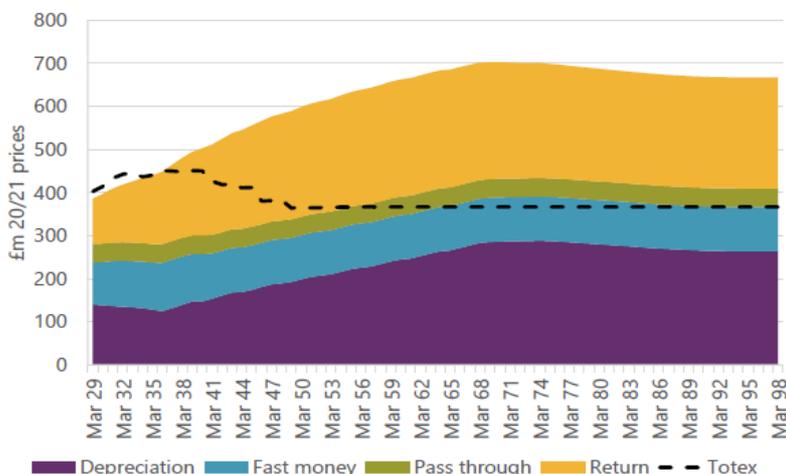


Source: NERA⁴³

It is likely to be difficult for future customers and stakeholders to understand the basis of these future bill increases, especially as bills will continue to increase significantly even after the point where the increased capital intensity associated with the transition to net zero concludes. Figure 5 below shows the disconnect between totex profiles and allowed revenue profiles under current depreciation rules. Against this backdrop, the high dividends necessary as a consequence of the RAV growth may lead to public and political pressure, which is against the interests of investors and also against the interests of customers (who must ultimately pay higher finance costs when investors perceive such risks more strongly).

⁴³ NERA, Depreciation Policy for RIIO-ED3, 15 January 2025, slide 20

Figure 5 – Allowed revenues and composition under RIIO-1 depreciation rules and full CPI indexation



Source: NERA⁴⁴

The overall effect is that the current approach to depreciation policy artificially reduces the costs borne by customers over the next few decades at the expense of all future generations of customers. This inter-generational unfairness must be addressed through the acceleration of RAV depreciation.

Using the Green Book methodology and its social time preference rate (STPR) of 3-3.5 per cent, NERA estimates a real cost to customers of around £200-500 million (present value, 2020-21 prices) for a notional DNO from the deferral of depreciation under RIIO policy, reflecting that customers prefer to pay depreciation charges today than deferring them into the future via a higher RAV, at the cost of a WACC*RAV return.⁴⁵

The systematic reduction in depreciation allowances also results directly in deterioration in several of the metrics considered by credit rating agencies when assessing the financeability of networks both in the short and long term.⁴⁶ While the extent of deterioration may vary between companies and will also depend on the interaction with other price control policies, all companies will see a significant deterioration in a number of key ratios over a very protracted period. And this deterioration will leave them more exposed to the possibility of financial distress, under plausible downside scenarios, than they would otherwise have been.

This deterioration in financial ratios will come at a time when all companies will be seeking new debt to fund the investment needed to deliver Clean Power 2030 and net zero. The acceleration of depreciation is therefore also necessary to avoid a significant reduction in financial resilience that may jeopardise companies' ability to raise finance at this crucial time or may increase debt costs that customers will ultimately fund.

These revenue, RAV, customer bill and financeability profiles will also be visible to equity investors and, without policy change, will adversely affect the investability of the RIIO-ED3 package. Firstly, equity investors will assess the financial resilience of DNOs when assessing whether or not to invest, as well as the riskiness of the investment and the returns that they expect for investing. Secondly, investors are likely to be very cautious about the potential for future political pressure adversely affecting their ability to receive returns of and returns

⁴⁴ NERA, Depreciation Policy for RIIO-ED3, 15 January 2025, slide 22

⁴⁵ NERA, Depreciation Policy for RIIO-ED3, 15 January 2025, slide 24

⁴⁶ NERA, Depreciation Policy for RIIO-ED3, 15 January 2025, slides 25-27

on their investment in the period after the peak investment in electricity networks has concluded but bills continue to rise.

Overall, the acceleration of RAV depreciation is needed to prevent inter-generational unfairness, to mitigate the risk of increasing financing costs due to deteriorating financeability and investability and to reduce the risk of companies being unable to raise the finance necessary to deliver Clean Power 2030 and net zero. A number of policy solutions are available that could mitigate this effect by increasing RAV depreciation. NERA shows that any move to semi-nominal cost of debt would, at most, mitigate half the effects of the depreciation trough on RAV and network charges and less than half of the effect on credit metrics.⁴⁷ Even in a scenario where semi nominal cost of debt is implemented, further policy changes would be required to mitigate the adverse effects. The assessment of these solutions needs not be limited to consideration of alternative asset lives or depreciation profiles, however we note that regulatory gearing does not offer a credible solution to any financeability issues and would completely fail to address other issues such as intergenerational fairness. We stand ready to work with Ofgem to thoroughly explore those various options so that a solution can be consulted on in Ofgem's Sector Specific Methodology Consultation for RIIO-ED3.

Next steps

We trust that ENA's evidence is helpful to Ofgem in the development of its RIIO-ED3 finance policies. We would be happy to meet with Ofgem to explore our evidence in more detail, and to provide Ofgem with access to our advisers.

We stand ready to work with Ofgem and look forward to discussing our proposals and evidence with you.

⁴⁷ NERA, Depreciation Policy for RIIO-ED3, 15 January 2025, slide 26



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