

# **Annex 28A: Finance**

December 2021

# Annex 28A Finance

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## 1 Financeability

- This section explains what financeability means and why it is important

### Key points

- Financeability is the ability of businesses to attract and raise finance.
- Ofgem has a duty under the Electricity Act to have regard to the need to secure that licence holders are able to finance their obligations – the Financing Duty.
- The Financing Duty protects customers by ensuring that, when setting obligations within a price control Ofgem has to have proper regard to the need to be able to fund the whole price control. This increases investor confidence when deciding to invest, which, in turn, lowers the costs to customers over the long term.
- Investors should be able to invest, confident in receiving a fair return over multiple price control periods. If this is not the case – if investors have to bear unrewarded risks – then equity returns would have to increase to compensate.
- If we are not financeable, we will be unable to secure the funding to deliver our business plan and this may delay the path to net zero.
- The consequences of not being financeable means that the level and timing of investment needs will be driven by the available cashflow, rather than by the needs of customers.
- These constraints on investment will become particularly apparent in the event of non-predictable events, such as experienced during 2020 with COVID and during 2021 with the energy crisis.

***We note that issues relating to financeability were considered in the recent appeals to the CMA with respect to RIIO-GD&T2. The CMA’s detailed final determination was published on 1 November 2021. As we have not been a formal party to the CMA’s proceedings, we had not been able to see any of the detail of the CMA’s thinking, or its exposition of the views expressed by Ofgem or the other parties before that point. The timing of the publication of the CMA’s decision, and the date for submission of our final business plan, means that we have not yet had the opportunity to fully consider and reflect the detail of the CMA’s findings. We will continue to do so over the coming months and look forward to continuing to engage with Ofgem in this regard.***

### What is Financeability?

Financeability is the ability of businesses to attract and raise finance. It is critical for every company in the UK, ensuring cash is available to cover both the day to day needs of the business, and the need to continue to make investments to respond to customer needs and future growth in the network. It is by definition, a forward-looking concept and it must be assessed in the context of the upcoming price control, without undue weighting placed on past observations and performance.

Under the Electricity Act, Ofgem has, as its principal objective, the protection of the interests of existing and future consumers. In carrying out this objective it has a duty to have regard to “*the need to secure that licence holders are able to finance the activities [under the Act]*”. This duty is expressed

to the same standard as its duty to have regard to the need to secure that all reasonable demands for electricity are met. This duty is of clear relevance to the planning of investment needed to ensure that the economy can move to a Net Zero carbon economy. The financing needs to be available to support this ambition.

Ensuring financeability gives investors' confidence which helps keep bills low over the long-term. The regulator delivers financeability by setting fair price controls that allow networks to achieve strong investment grade credit ratings and by providing sufficient shareholder returns to attract investment.

This confidence is even more critical in coming regulatory periods. Delivering Net Zero requires significant investment in the UK's electricity distribution networks. Together with the ED1 decision to extend asset lives to 45 years, this will result in the costs of future new investment far outstripping the regulatory return of capital. This gap will be funded through new debt and equity investment.

Equity investors, in licensee groups of all sizes, should be confident that, over a sensible timeframe, their efficiently incurred debt costs will be funded. Ofgem recognised this when, in formulating the RII0 series of price controls, it stated, in particular regard to debt costs that *"if there is a commitment to remunerating efficiently incurred debt costs, it will facilitate a greater role for equity in the capital structure of regulated companies"*<sup>1</sup>. The approach taken in ED1, and proposed for ED2, of applying this principle at the sector level only means that it is not achieving this aim in practice.

Setting the cost of capital too low may give customers a short-term bill benefit, but this is of only temporary benefit and will lead to a position for customers that is worse over the longer-term. Equity investors will look to allocate their available funds based on the returns available internationally. By setting the equity allowance at the proposed level (4.40% CPI real) Ofgem risks potential delays in the net-zero programme. In addition, the adverse impact of ratings downgrades on borrowing costs will feed through into future debt allowance settlements via the 'actualised notional' sector average approach proposed by Ofgem.

The most immediate impact of a financeability problem is on debt ratios. Without enough headroom in interest cover and gearing ratios, as soon as there is any variation downwards in net income it becomes necessary to cut expenditures to match the fall in net income and preserve ratios. In practice, this is often targeted on investment expenditures and on those operating costs which can be more easily controlled. Crucially, these cuts would need to take place within the year to be effective, resulting in networks such as ourselves being very reactive and inefficient with the cancellation of projects to match cashflows. Inevitably this results in us running within tight financial tramlines and will mean that we will be unable to respond to any increase in investment requirements that are not funded within the year.

These risks would be compounded by a sudden increase in market interest rates. As Ofgem align to a 17-year trailing average, any market rate increase that took bond costs above this level would be underfunded, potentially for many years. Any company issuing in such circumstances would have to consider whether the rate rise was permanent, and therefore likely to be funded eventually, or merely a short term "blip". Issuing during a short-term blip in interest rates could mean a permanent underfunding of the debt costs. As such, it would be better to defer or reduce the funding by, for example, delaying investments, until the network could be confident about the direction of travel of interest rates in the longer term. Again, we do not think that it is in customers' interests to delay required investments for financing reasons.

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<sup>1</sup> [https://www.ofgem.gov.uk/sites/default/files/docs/2010/10/riio\\_handbook\\_0.pdf](https://www.ofgem.gov.uk/sites/default/files/docs/2010/10/riio_handbook_0.pdf), para 12.13

Given the significant changes in market interest rates over the last decade, the current approach, without adjustment, means that smaller licensees are at greater risk of being under (and over) funded for their efficiently incurred debt costs.

Given the uncertainty of predicting future demand, and therefore future investment, as the economy moves towards Net Zero, these constraints could operate against customers' interests in the short term. The additional risk to the providers of finance (both debt and equity) resulting from limited headroom in credit ratios would lead to an increase in financing costs over the long term, which is not in customers' long-term interests.

### The importance of UK infrastructure investment

Climate change is the defining issue of our time. The UK Government has set a target to reach net-zero emissions by the year 2050. This means that any greenhouse gas emissions caused by human activity must be reduced and measures put in place to cancel out the effects of any emissions.

Energy networks have a leading role to play in delivering this target, by connecting greater levels of renewable energy and providing the infrastructure and technology we need to cut carbon emissions in areas such as heat and transport. Significant innovation and new investment is required if these targets are to be met. It is clearly in consumers' interests to take steps to ensure that investment in UK energy infrastructure, in this and future price control periods, remains attractive compared to national and international capital markets. This is facilitated by providing an appropriate level of expected returns to debt and equity investors.

The cost of capital allowance must be set at a level which ensures appropriate levels of investment, without overcompensating investors at the expense of customers.

The Committee on Climate Change forecasts the UK economy will need to spend between 1-2% of its total wealth each year to reach net-zero emissions by 2050<sup>2</sup>. This requires significant long-term, stable and sustained investment, without delay or disruption, to ensure the safe keeping of our environment.

Ofgem has to balance the critical need for investment against managing the costs to customers. It has to balance the interests of customers in the short-term, for example with respect to ED2 bills, with the interest of customers in the long-term in maintaining investor confidence and thereby retaining access to the low-cost capital needed to fund the investments over many price control periods. The UK is now at a critical juncture for low carbon investment and without a financeable ED2 business plan, our key stakeholder objectives cannot all be realised. To facilitate Net Zero there is an imminent need for infrastructure investment on a scale not seen in generations. Electricity Distribution companies will play a key role in delivering the UK Government's 2050 target date. We will perform this role for the economy and people of the North West.

Some of our key regional stakeholders, including the Greater Manchester Combined Authority<sup>3</sup>, the Zero Carbon Cumbria Partnership<sup>4</sup> and Lancashire County Council<sup>5</sup> have gone one step further, aiming

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<sup>2</sup><https://www.theccc.org.uk/wp-content/uploads/2019/05/Net-Zero-The-UKs-contribution-to-stopping-global-warming.pdf>

<sup>3</sup> <https://www.greatermanchester-ca.gov.uk/news/mayor-sets-out-bold-ambition-for-greater-manchester-to-be-carbon-neutral-by-2038/>

<sup>4</sup> <https://cafs.org.uk/our-projects/zero-carbon-cumbria-programme/>

<sup>5</sup> <https://www.lancashire.gov.uk/news/details/?Id=PR21/0058>

to be Net Zero by dates in the 2030s. We are taking a leading role in the strategic developments of Net Zero working with local partners in developing credible and sustainable plans underpinned by appropriate investment in the electricity distribution network. Local ambitions are clear: achievement of Net Zero is paramount. **A non-financeable business plan puts the delivery of Net Zero at risk.**

Ofgem have also recognised the critical importance of the Electricity Distribution Networks in realising Net Zero. Their reference to it in the opening paragraph of the SSMC serves to underline the pivotal role we will play:

*"The electricity distribution networks will be at the forefront of the changes needed to support Net Zero"*<sup>6</sup>

Key to enabling the changes needed is that shareholder returns are set at a level that incentivise infrastructure investment. This investment will be taking place around the world, and the UK has to remain competitive in its attractiveness to investors. In this, returns and investor confidence are key. It has been shown in academic studies<sup>7</sup>, and in the Competition and Markets Authority (CMA) findings for PR19<sup>8</sup>, that the consumer detriment caused as a result of underinvestment outweighs the impact of a small cost increase to consumers by aiming up in a cost of capital range.

The CMA acknowledged two concerns with respect to how returns may influence the level of investment in its final report on the PR19 appeals:

*"Our concerns in respect of the level of investment relate to two, related issues:*

*(a) First, that regulation should create a supportive long-term investment environment. The long-term investors in infrastructure that the companies need to attract to support a long-term low cost of capital will not be attracted if there are frequent sharp changes to the way regulators determine the cost of capital. An approach which is both cautious in responding too quickly to market fluctuations and is consistent over time should ultimately deliver benefits to both investors and, through a low cost of capital, to customers.*

*(b) Second, that the allowed return needs to be set in a way that encourages the right level of new investment. If the WACC is set too low, companies will not have the incentive to identify, develop and implement new and often complex investment programmes. This was the point identified in the analytical framework supporting the UKRN report and previous studies on the approach to the WACC. However, we agree with Ofwat that there are risks if the WACC is set too high (which we consider could relate to over-investment or excess returns to shareholders), and that the challenge is getting an appropriate balance between these two risks."*<sup>9</sup>

It is also clear that decisions made now for short-term bill reductions can affect long-term investment in the network. The investment process takes time and cannot easily or efficiently be switched on or off. If adequate investment is not forthcoming as the result of a low cost of capital settlement for ED2 then future customers will feel the negative impact of shortfalls in investment, and consequent missed targets, or increased costs, for decades to come. **Shareholder (equity) returns must be set at a level**

<sup>6</sup> [https://www.ofgem.gov.uk/system/files/docs/2020/07/ed2\\_ssmc\\_overview.pdf](https://www.ofgem.gov.uk/system/files/docs/2020/07/ed2_ssmc_overview.pdf), Para 1.1

<sup>7</sup> Modelling Welfare loss Asymmetries Arising from Uncertainty in the Regulatory Cost of Finance, Dobbs, Feb 2011

<sup>8</sup> Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations: Final report, March 2021, para 9.1402

<sup>9</sup> [https://assets.publishing.service.gov.uk/media/60702370e90e076f5589bb8f/Final\\_Report\\_---\\_web\\_version\\_-\\_CMA.pdf](https://assets.publishing.service.gov.uk/media/60702370e90e076f5589bb8f/Final_Report_---_web_version_-_CMA.pdf), section 9.1388

**that incentivises the investment required, in the timeframe needed.** This will not be achieved, where the base allowed returns for equity are set too low, by international comparison, or where shareholders are having to subsidise the efficiently incurred cost of debt.

### Financeability and its importance to the long-term interests of customers

Ofgem has set the debt allowance of the Notional Company at a level which meets most of the Electricity Distribution Networks' debt costs for ED2, on average. All licensees receive the same rate, effectively the average rate for the sector. As is to be expected for companies that were privatised over 30 years ago, and which are not uniform in all their characteristics, each individual company's debt portfolio is distinct as regards factors such as the form, age, tenor, and refinancing dates of the different debt instruments that a company has issued and, hence, the resulting annual interest cost.

Debt costs vary by network, driven by the different market interest rates at the different times of issuances, etc. This is to be expected when the economy has experienced over a decade of significant interest rate declines. The sector's average cost is no longer, therefore, a proxy for efficient debt costs.

As a consequence of the average cost approach, customers of some networks will be paying more than they should over ED2 (i.e. the network will recover more than their efficiently incurred cost of debt), and others, including us, will be under-recovering their efficiently incurred debt costs. We do not believe that this outcome is in either the short-term or long-term interests of customers.

Ofgem must also consider the adequacy of returns to existing and new equity investors. It clearly follows that the greater the debt burden, the greater the risk of debt default; and if the risk of debt default has increased, then so too will the cost of servicing the debt and the greater corresponding risk to equity, the value of which may be, in the extreme, extinguished by debt default.

If underfunding of actual efficiently incurred debt costs results in equity investors subsidising debt allowances to significant levels, equity investors will not actually be able to receive the returns deemed necessary by Ofgem to ensure that the licensee is able to finance its activities.

If this underfunding results in a repricing of equity risk, it would be to the long-term detriment of consumers through a reduction in investor confidence and increased equity charges. It would also provide a major disincentive to invest in smaller licensees relative to investment returns in other regions or internationally and will lead to a redirection of investment.

Conversely, equity investors in companies that are overfunded for their debt allowances are being handed a return in excess of the level required to cover efficient costs. This, we contend, fails to look after the interests of existing customers, requiring some to pay more than is necessary.

The 'one-size fits-all' (unadjusted) approach to debt allowances, impacts different networks in different ways. The larger companies or groups will be more likely to be issuing debt on a more frequent basis. As a consequence, the larger licensee groups will be more likely to come close to the average sector debt cost, partly because of their debt issuance profile and partly because of the effect of their own debt book on the calculation of the average cost. Conversely the smaller companies are more likely to over perform (the 'Lucky') or underperform. Those companies that are benefitting from the policy are more likely to continue to benefit from this performance from one price control to the next, as investors reprice their funding, taking this performance into account. Given that those companies that benefit are not required to share the benefits with consumers, this results in significant structural outperformance for equity in some companies.

This raises an important question about how "efficiently incurred debt costs" should be identified. We agree that this should never mean that customers are asked to underwrite past mistakes. In that



context, however, the concept of ‘mistakes’ should not include those judgements that only look like mistakes when viewed with the benefit of hindsight.

Looking at the situation in 2021, it may appear to have been a ‘mistake’ to issue debt in 2009 when interest rates were higher rather than in 2019 when they were lower. However, if investment or a refinancing was required in 2009, then it cannot be considered to have been a mistake at the time the decision was taken, simply because interest rates have subsequently moved. By contrast, if a current situation is directly attributable to past management inefficiency, judged at the time of the decision rather than in hindsight, it would be reasonable to expect that shareholders meet the cost of any remedy and raise new equity capital if necessary. In our business plan, we have excluded any debt costs which we think that our shareholders should fairly bear.

As highlighted in Section 2 of this Annex, excluding those debt costs that we have determined should be met by shareholders, we estimate that we will be underfunded on the proposed debt allowance by approximately £90-95m in ED2. The underfunding is driven primarily by a mis-match between our embedded debt issuance profile, which is necessarily “lumpy”, and the smooth 17-year issuance profile methodology proposed by Ofgem. As it is proposed to align the results of this 17-year profile to broadly the sector average debt cost, in effect this underfunding is the result of us having a higher cost of debt than the sector average, rather than as a result of any inefficiency.

Ofgem states that its use of the Notional Company ensures that customers only pay the networks the “efficient” cost of debt. This ignores the fact, noted above, that, on a regional basis, some customers are paying more than they should pay, paying more than the efficient cost of debt of their operator. It also presumes that there can only ever be one “efficient” cost of debt: that debt issued in 2009 when market interest rates were higher is “inefficient” compared to debt issued in 2019 when market interest rates were lower.

We believe that it is not sufficient to simply secure that a Notional company, or the industry overall, can finance its obligations. Ofgem, in the ED1 draft determinations, stated that their RIIO handbook decision regarding funding the efficiently incurred debt costs, applied to the sector as a whole. This might have been appropriate with the available history of interest rates at the time. However, where there is evidence of a significant mismatch between the average sector costs and a licensee’s actual costs, Ofgem should interrogate that mismatch and understand the reasons for it in order to take the appropriate steps to mitigate it. This includes consideration of whether the costs were efficiently incurred based upon the circumstances at the time that money was raised, rather than with the benefit of hindsight. These actual circumstances should include factors such as market rates at the time that debt was issued and structural matters such as additional costs borne by licensees that issue debt infrequently. Crucially, this assessment must also consider whether the Notional Company adequately reflects the actual innate characteristics of the licensee, and that risks between the various licensee groups are the same.

The change in interest rates over the last decade highlights the need for Ofgem to review the unadjusted Notional company approach.

In reviewing a licensee’s financial ratios, regulators must allow sufficient headroom to allow companies to respond to plausible downside financial shocks within regulatory periods and to take into account the level of challenge on the companies (e.g. low inflation scenarios or interest rate reversion). It is not in customers’ long-term interests to see periods of significant underfunding. In that scenario, investors and potential investors would be inclined to require higher long-term returns, and, where those are not available, or uncertain, avoid investing.

We do not consider that Ofgem must provide an unqualified pass-through of all debt costs, regardless of actual (rather than presumed) efficiency. We have already excluded any debt costs from our forecast ED2 underfunding position that we believe should be borne directly by shareholders. ***We refer only to the belief that licensees of all sizes should have a reasonable and equal chance of having their efficiently incurred debt costs funded over reasonable time periods.***

## 2 Financing our business

- This section outlines our financing position and strategy, which has been designed to promote an efficient capital structure whilst also managing financial risk.

### Key points

- We have raised our debt finance efficiently over the past 26 years. In calculating our under funding, we have excluded any debt costs that should be borne by shareholders.
- As a smaller, singleton network, we access the capital markets only infrequently. As a result, the timing of our debt issuance profile is not smooth and consequently looks very different to the notional company assumption used by Ofgem when setting the debt allowance.
- To manage inflation risk, our debt portfolio includes both RPI linked debt and RPI linked derivatives. These should both be included in the assessment of debt costs.
- We estimate we are under-funded on the debt allowance by approximately £90-95m in ED2.
- We have need to raise over £1bn of new finance in ED2 to fund new network investment and refinance maturing debt.

### Financing Strategy

ENWL was incorporated in England and Wales in April 1989 and acquired by United Utilities plc in November 1995. It was then sold by United Utilities plc in December 2007 to North West Electricity Networks plc. We are not part of a larger group of licensees, being unique in the GB DNO world as having only one licence area, sometimes referred to as being a 'single licensee'. As a single licensee our financing and risk profile reflects the need to maintain predictable financial flows and support the credit ratings of the business.

The ENWL financing strategy has been put in place to achieve an appropriate investment grade rating through an efficient capital structure. We define this as one which achieves sufficient investor demand to be able to borrow at competitive rates, whilst also managing financing risks such as inflation / interest rate exposure and liquidity risk. Our financing strategy is in line with our Treasury Policy, which is reviewed and approved by the ENWL Audit Committee (on behalf of the Board) annually.

In delivering this strategy, we look to maintain access to a diversified source of funds, together with a smooth maturity profile that is appropriate to our asset portfolio.

Our RAV of £1.95bn<sup>10</sup> (growing from £0.6bn in 1995) is small compared to other groups of networks in the sector and has resulted in an issuance profile that is weighted towards infrequent, longer dated benchmark-sized bonds supported by smaller flexible facilities where these are available. This profile

<sup>10</sup> As at 31 March 2021

includes debt issued across the last 26 years. We have also taken advantage of the availability of support from the European Investment Bank (EIB), which, post Brexit, can no longer be expected.

We have targeted capital markets debt issuance across a range of tenors and diversified markets including, GBP fixed rate notes or bonds, GBP index-linked notes and GBP committed bank loans. In addition to index linked bonds, we have used derivatives to create “proxy” index linked bonds, where index linked bonds have not been available in the market to manage inflation risk. This approach sought to minimise refinancing risk and interest rate risk in the future.

We have tended to be more risk averse than other networks. This has served us well particularly in respect of the management of our pension liabilities resulting in ENWL having one of the best pension scheme positions in the sector, which is now helping to keep customer bills low.

Our position regarding risk is very noticeable regarding inflation risk. Ofgem calculates debt allowances with respect to real interest rates: in effect it pays the cost of debt above a presumed inflation rate through the annual allowance and rewards the actual inflation rate through inflation of the Regulatory Asset Value (RAV). As the “presumed” rate of inflation can vary year on year to the actual inflation rate, this policy introduces a risk to the financing of the networks. As a smaller stand-alone network, we are proportionally more exposed to this risk. We have therefore raised more debt as inflation linked debt, than other networks, either through the use of Index Linked bonds or through the use of fixed rate bonds with derivatives overlaid to achieve the same economic effect.

We believe our track record of delivery in a stable and predictable regulatory environment has played a part in achieving successful and efficient transactions.

We have a material refinancing requirement in the period to the end of ED2 of around £650 million, (with debt maturities in 2024 and in 2026) representing approximately 50% of our existing net debt. We will also be raising approximately a further £500 million to support growing investment in the network to support the move to Net Zero in our baseline plan. This figure grows to approximately £850 million in our higher spend scenario<sup>1112</sup>

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<sup>11</sup> The £850m reflects the amount of new debt finance to support the higher spend at 68% regulatory capitalisation rate and at 60% gearing (i.e. with equity investment). Our Actual model does not include equity issuance due to concerns over our ability to attract new equity under the current working assumptions, hence this figure in the Actual model is closer to £1,100m of new debt finance.

<sup>12</sup> Additional £752m totex spend compared to baseline (20/21 prices), reflecting plausible high-spend scenarios for areas covered by Uncertainty Mechanisms and the impact of the Access SCR.

## Overview of our current Capital Structure

Our funding structure has been put in place to achieve the following objectives and is aligned with our Treasury policy:

**Table 2.1: ENWL funding objectives**

Objective	Rationale
Maintain investment grade credit ratings	<p>Credit ratings agencies provide an assessment of the risk of investing in our debt, to potential investors.</p> <p>The better the investment “grade” the lower the risk and therefore, the lower the cost of debt.</p>
Operate an efficient overall capital structure	<p>There is an optimal balance between the level of debt and equity financing, at which cost of capital is minimised.</p> <p>Ofgem has determined that this should be a 65% debt: 35% equity ratio in RIIO-ED1 and is proposing to change this to a 60% debt: 40% equity ratio for ED2 and beyond.</p> <p>As we expect to be under-funded on our debt costs in ED2, operating with a higher level of debt financing than the notional level risks penalties through the tax clawback mechanism. This is explained further in section 11.</p>
Sufficient investor demand to finance the business	<p>This involves maintaining relationships with a range of debt investors and remaining active in different markets.</p> <p>This ensures access to financing when needed, particularly for smaller amounts.</p> <p>Conversely, utilising the public bond markets at above “benchmark” size (£250m and above in the UK) helps to avoid illiquidity premia and enables debt investors to trade their holdings, should they wish to. As such, the benchmark market tends to have deeper capacity and provides regular and dependable financing to UK infrastructure.</p>
Manage exposure to interest rate risk and to inflation risk	<p>We target a proportion of fixed and inflation linked debt financing to ensure predictable cashflows, that are matched to our revenues</p>
Management of Liquidity Risk	<p>Maintain cash flow availability (“liquidity”) in line with working capital and funding requirements.</p>

The structure of ENWL’s debt finance as at March 2021 was as follows:

- **£1,102m of UK public market bond debt.** There are four issuances (of which one was subsequently “tapped” three times), made between 1995-2020, with an average tenor of 21.5 years and an average time to maturity of 8.1 years. 86% is fixed nominal debt, with 14%

RPI-linked. We have issued this debt through a sister company ENW Finance plc which lends on to ENWL on a back-to-back basis.

- **£255m of European Investment Bank (EIB) debt.** This consists of three loans drawn between 2009-2014. The average tenor is 15 years and the time to maturity 5 years. 100% is RPI-linked. Following the exit of the United Kingdom from the EU, new EIB debt is not available;
- **£82m of intercompany borrowings from ENWL's parent, North West Electricity Networks plc (NWEN plc).** These loans have a combined effective interest rate of 2.53% nominal and a current maturity date of 31 March 2023. The loans will be extended until 31 March 2028, with the interest rate updated to reflect ENWL's prevailing external borrowing rate at the time of extension;
- **A series of derivatives with three counterparties.** Together these constitute a £200m RPI-linked derivative and, alongside a series of underlying nominal bonds, create a proxy 2008/2038 Index Linked Bond;
- **£100m RPI-linked derivatives.** Transacted in 2015 to improve our Adjusted Interest Cover Ratio (AICR) in order both to ensure that we remained financeable for the RIIO-ED1 price control period, and to increase the level of inflation-linked borrowing in ENWL, reducing still further our inflation risk. Matures in 2050; and
- **£50m Revolving Credit Facility.** This facility provides “overdraft” style, short term borrowing facilities that enable us to manage short term fluctuations in cashflow and short-duration borrowings prior to longer term debt issuance.

Table 2.2: Gearing overview as at 31 March 2021

	£m
UK public market bond debt	1,102
EIB debt	255
Borrowing from parent, NWEN plc	82
Revolving credit facility	-
Finance leases	5
Cash	(321)
<b>Regulatory Net Debt</b>	<b>1,123</b>
Accretion on index-linked derivatives	60
<b>Financing Net Debt</b>	<b>1,183</b>
<b>Regulatory Asset Value</b>	<b>1,948</b>
<b>Regulatory Gearing<sup>13</sup></b>	<b>57.6 %</b>
<b>Financing Gearing</b>	<b>60.8 %</b>
<b>RIIO-ED1 Notional Company Gearing (Ofgem's Notional Company level)</b>	<b>65.0%</b>
<b>RIIO-ED2 Notional Company Gearing</b>	<b>60.0%</b>

For ED1, we have continued to target our regulatory gearing levels (the ratio of net debt to the Regulatory Asset Value) at just below Ofgem's Notional company gearing level of 65%, deemed by Ofgem the most "efficient" level. This ensures that we remain compliant with our financing agreements and that we avoid triggering the ED1 tax clawback mechanism.

For ED2, while we would similarly now wish to target a reduction in our gearing levels to below Ofgem's ED2 Notional Company gearing level of 60% over the course of ED2. Given the insufficient debt allowances, this can only be achieved through either significant operational outperformance or a fresh equity injection of approximately £40m (rising to over £250m in the high spend scenario), which itself presents additional issues for our financeability.

Our ED2 Business Plan model shows an average gearing level of 61%, below the ED1 notional average of 65% but above the proposed ED2 notional average of 60%. It has been necessary to assume no dividend payments take place across the full five-year price control in order to avoid an even higher gearing position. In line with the Ofgem requirements, our model assumes no incentive or penalty charges for being above the notional gearing level (although these will apply in practice).

As shown in test 4 of our financeability assessment on the Actual Company (Section 8), debt underfunding is forecast to suppress equity returns by 1.4% over ED2. As a result, equity returns are

<sup>13</sup> Gearing is the ratio of net debt to Regulatory Asset Value

simply too low to support all of the investment required by our stakeholders, the payment of dividends and the transition to the new notional gearing level.

This is in itself another indicator that Ofgem’s proposal for cost of capital is below the required level. As set out in Annex 28C Alternate Cost of Capital, we believe that a higher cost of capital is needed.

While it has been necessary to assume no dividend payments to avoid worsening gearing in our base model, we note that an increased cost of capital and/or operational outperformance would allow a transition to the new notional gearing level and potentially allow dividends to be paid. Conversely, any net penalties would either need additional equity injection or result in an even higher gearing levels.

### Financing and Risk Management Approach

Our financing strategy is built on the following fundamental principles, much of which is set out in our Treasury Policy which is reviewed and approved by the ENWL Audit Committee (on behalf of the Board) annually. We have shared this policy with Ofgem, as we believe it important to be open about these matters. We are committed to effective financial risk management, including:

- maintaining a capital structure that supports credit metrics commensurate with a solid investment grade credit rating;
- maintaining Net Debt/Regulatory Asset Value (RAV) gearing ratio below the notional gearing level. Our regulatory gearing level is forecast at an average of approximately 61% across RIIO-ED1 compared to a ED1 notional gearing level of 65%;
- cash and committed facilities to cover a minimum of twelve months trading, debt service and debt maturities;
- to maintain between 50% and 75% inflation-linked borrowing. The RIIO framework provides variable inflation linked returns and maintaining a high level of inflation-linked borrowing matches the returns and minimises the cash flow and ratio impact of outturn inflation volatility. On an underlying basis, adjusting for the double-holding (at March 2021) associated with pre-financing of the retiring 2021 bond, approximately 60% of ENWL debt finance is RPI-linked (post derivatives)<sup>14</sup>;
- access a diversified range of funding sources to prevent over-reliance on any one market. This should support the refinancing of existing debt, as well as increasing debt in line with investment plans; and
- to limit concentration of debt maturing in any two consecutive financial years and substantial debt within a single regulatory price review.

Chart 2.1 below provides an overview of our forecast debt portfolio as at the start of ED2, by effective year of issuance (adjusting for the economic impact of the 2038 derivatives, i.e. including the proxy 2038 Index-Linked Bond). Our profile contrasts markedly with the assumption used in setting the Notional Company (in yellow). Most of our debt was taken out before Ofgem introduced the concept of a trailing debt index (for ED1 this was a 10-year period for Fast Track and a tromboning 10 to 20

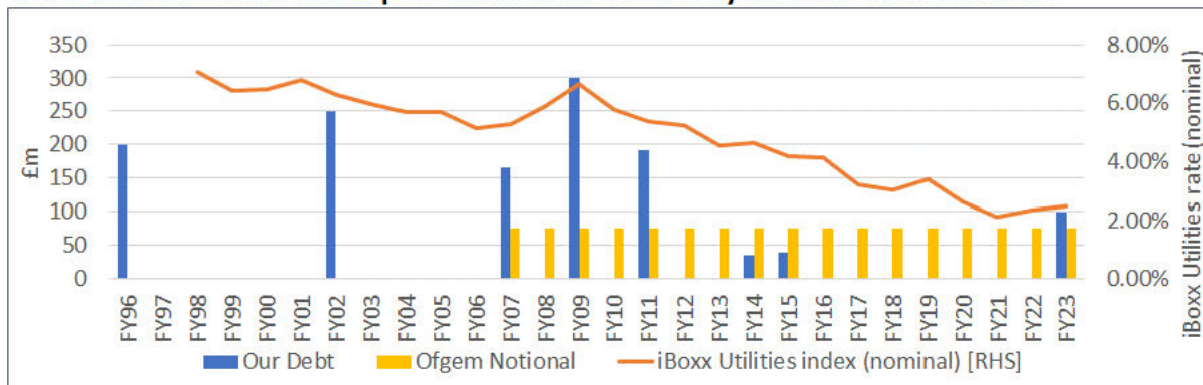
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<sup>14</sup> ENWL issued a £300m 10YR Public Bond in July 2020 and £200m of the proceeds was used to redeem a bond maturing in July 2021. This double-holding state, temporarily reduces the percentage of RPI-linked debt to 52% on a reported basis.



years period for Slow Track), and before the long-term decline in interest rates driven by quantitative easing was apparent.

**Chart 2.1: ENWL forecast debt portfolio as at start of ED2 by effective date of issuance**



### What is meant by 'effective date of issuance'?

In certain circumstances it is necessary to look beyond the simple date of issuance to understand the economics of financing:

In 2008, we anticipated a financing requirement of approximately £200m to be raised in the near term. We planned to issue an inflation-linked bond, to match the inflation-linked revenues and RAV indexation in the price control.

A 30yr issuance was targeted, reflecting the strong appetite (and therefore tighter pricing) from pension fund investors for inflation linked bonds (with monoline insurer backing) around this 30 year maturity, in 2006 and 2007.

This financing ended up taking place during what turned out to be the Global Financial Crisis of 2007-2009. Bear Stearns had filed for bankruptcy in the weeks before, in March 2008. Noting the market volatility and potential for rates to increase higher, we entered into a pre-hedge (a not uncommon part of the process) on the planned refinancing, locking in interest and inflation rates in April 2008 ahead of the 2009 issuance.

By the time of the planned issuance in 2009, the market for corporate 30yr index-linked bonds had evaporated, impacted by the collapse of the monoline insurers. To achieve the targeted financing structure and deliver gearing at around the notional level deemed by Ofgem to be most efficient, we instead issued a £200m fixed rate bond and extended the break clause on the pre-hedge (effectively it became a 30yr derivative swap).

Together the derivative and the underlying bond delivered a proxy 2008/2038 index-linked bond. The economics of this were based on inflation expectations, interest rates and credit spreads in the market in 2008-09.

The fixed rate bond issued in 2009 matured in July 2021. It was decided to issue this underlying bond for 12 years rather than 30 years as credit spreads were considered wide at the time of issuance, reflecting market appetite at the time when markets were recovering from the first COVID lockdown. The 2021 maturity was factored into the derivative structure, with the receipt leg then switched from fixed to floating from that point.

This resulting £300m bond was issued in July 2020 to refinance the maturing bond. This new bond replaces the maturing 2009 bond in the proxy 2038 index-linked bond structure.

As such, when considering the economics of our financing, it is necessary to replace the 2021 bond issuance with the effective date of issuance of the proxy bond – being a 30yr index-linked bond issued in 2008 (FY10).

Had we been able to issue the proposed Index Linked Bond in 2008, it would be factored into debt costs by Ofgem. In contrast, although the economics are the same, Ofgem does not propose to take the same approach in respect of the proxy bond. As a consequence, Ofgem miscalculates the underlying economics of network financing costs.

Historically, our debt issuance timing has been linked to the maturity of existing debt. Where our refinancing requirements were below current benchmark size, we have considered additional borrowing to fund incremental RAV growth in advance. When economically viable, this has delivered tighter pricing than below benchmark issuances, but with an additional cost of cash carry. On occasions, through either direct EIB or intercompany financing, we have been able to raise funds at below benchmark size efficiently.

Consistent with our Treasury Policy, we currently aim to spread future debt maturities across years where there are low concentrations of existing debt maturing. This ensures that the amount needing to be raised through capital markets on each financing represents a sensible proportion of our overall debt book, maximising the likelihood of a successful and efficient transaction, even during times of market dislocation.

## Market Dynamics

There are many factors that influence the structure of our current and future debt financing:

- **Issuance size:** For a bond to be included in a bond index, it needs to be above a certain issuance size. This ensures that there is sufficient liquidity in the bond and that secondary market pricing is reliable. Investor appetite for these bonds is stronger, and pricing is tighter. In the UK sterling market, the benchmark size is around £250m. Smaller bond issuances that are ineligible for inclusion in bond indices typically attract an illiquidity premium. Some investors are unable under fund rules to invest in non-benchmark sized debt. With the debt issuance from across the ED sector likely to grow very materially as investment demand grows, there is a risk that there will be fewer investors still willing to invest in sub-benchmark sized debt.

*We target bond issuances above £250m where possible. As we are a single licensee with a RAV under £2bn, this means that we have accessed the bond markets relatively infrequently. Our*

*debt financing profile therefore looks very different to the 17-year rolling issuance profile adopted by Ofgem in its debt allowance methodology. If we were to have been able to issue debt in line with Ofgem's (now) 17-year trailing period, our average annual debt issuance would have been £70m, significantly below the £250m benchmark.*

- **Tenor:** There are a number of factors that influence the tenor of issuance. Firstly, the yield curve represents the market expectation of future interest rates over varying maturities. In a normal rising curve, rates are higher for longer maturities, but if the curve is inverted it may be cheaper to borrow for longer periods. Secondly, the ability of companies to issue at certain tenors is often constrained by investor appetite at the time. This can make certain maturities more attractive (i.e. better priced) than others. Bank finance is typically shorter duration, with index-linked bond investors generally favouring longer dates. Thirdly, companies need to consider the cost of frequent issuance and the maturity concentration risk.

*We consider the market conditions at each time of issuance. We have typically favour longer-dated maturities to match the long-dated nature of our asset base and the regulatory depreciation policy. This also helps limit the 12-18 months cost of carry associated on pre-financing a maturing bond and helps avoids concentration of maturities.*

- **EIB Financing:** Loans from the European Investment Bank were available to UK Infrastructure companies in the past. This funding option is no longer available following the exit of the United Kingdom from the European Union.

*We have utilised EIB funding between 2009 and 2015 and have £255m of outstanding loans as at 31<sup>st</sup> March 2021. At the time of borrowing, credit spreads in this market were tighter than credit spreads available in public markets. Alternative funding options will be explored going forward and we will continue to try to diversify funding sources. We note that the maturity of a large proportion of our EIB debt in February 2024 means that the EIB financing represents only a small percentage of our debt over the ED2 time period.*

- **Derivatives:** The financing available through public markets and bank lending may not meet requirements. As an example, bank financing may require floating rate interest payments, exposing the company to interest rate and cash flow risk. Non-sterling borrowing may expose the company to foreign currency risk. Derivatives are an effective risk management tool to 'swap' the characteristics of the available financing into the required structure.

*We have utilised derivatives on two occasions. Firstly, £200m during the global financial market to deliver index-linked borrowing following the collapse of the monoline insurers (see Page 16-17), and secondly in 2015 to improve cash interest cover ratios in RIIO-ED1 and increase inflation hedging.*

- **Private Placement:** Non-public direct borrowing is available. This may offer improved pricing than public markets, due in part to a different approach to evaluation credit spreads,

*We currently have no direct private placement debt. The private placement market can, on occasion, offer tailored debt financing structures (tenor, delayed draw, amounts) not readily available in the public GBP capital market, however it is very much dependent on the pricing and investor appetite at the time of issuance. In 2020, for example, we attempted to raise debt investment from US Private Placement investors. However, the first COVID lockdown interrupted this fundraising and, post lockdown, the pricing in the UK Public Bond market recovered faster than in the US.*

- **The need for a diverse investor base:** Maintaining a range of active investors helps ensure that financing is available even during periods of dislocation. It also allows comparison of the relative pricing and attractiveness of markets at each issuance.

*Our current financing is sourced across UK public bond markets, bank finance and EIB loans. Private Placement debt was planned in 2020, but was aborted due to COVID, as noted above.*

Noting the above factors, we intend to maintain an efficient approach to our funding strategy. This will be achieved through continuing to focus on diversified funding sources, in addition to targeting issuance tenors that maintain the appropriate mix of financing risk and pricing. RIIO-2 has a material impact on financing and risk management exposure, and we will continue to evolve our financing and risk management strategy to appropriately manage the outcome as ED2 is finalised.

### 3 Performance summary

- This section outlines our financial performance and shareholder dividends in ED1. Figures are based upon actual financial performance in the period to March 2021 and forecast performance to the end of ED1.

#### Key points

- In Ofgem’s November 2014 slow-track decision, our ED1 business plan was assessed as the most efficient plan of all the network submissions<sup>15</sup>
- Supported by our strong focus on innovation, we expect to deliver our ED1 outputs with a further reduction in cost and therefore further savings to customers, over and above those delivered in the base ED1 plan.
- Our excellent operational performance in ED1, with upper quartile network reliability, has generated significant customer benefits. In turn, this has delivered a high level of incentive revenues, which have repaid both our investment and management focus in improving the operation and reliability of the network.
- Altogether, our savings in cost and performance incentives are forecast to deliver operational RoRE of 10.5%, amongst the highest of all networks.
- Our efficient debt costs in ED1<sup>16</sup> are now forecast to be approximately £95m higher than the debt allowance in ED1<sup>17</sup>, leading to a negative 1.7% RoRE impact on a notional gearing basis.
- Overall RoRE is forecast in ED1 to be 8.6% after the underfunding of debt costs on a notional gearing basis (7.8% on an actual gearing basis).
- Dividends in ED1 are forecast to be broadly comparable to post-financing RoRE performance.

#### ED1 Return on Regulated Equity (RoRE)

The table below sets out of our actual performance for ED1 to date and our forecast view for the whole of ED1. The figures are based upon the Return on Regulatory Equity (RoRE) and represents the real returns to equity/ shareholders<sup>18</sup>.

<sup>15</sup> Ofgem RIIO-ED1: Final determinations for the slow-track electricity distribution companies, Table 4.1

<sup>16</sup> Efficient debt costs exclude in particular any additional interest costs arising from the amortisation of the premium on issuance from re-tapping earlier bonds, which we do not believe it would ever be appropriate to ask customers to fund – in effect we have deemed this cost “inefficient”.

<sup>17</sup> After adjusting for £37m amortisation of issuance premium received on £250m re-taps in 2001/02.

<sup>18</sup> These figures reflect actual real returns, after adjusting for output delivery (“Enduring Value” Adjustment) from the start of ED1 to 31 March 2021, and the forecast for the full ED1 period. The figures follow Ofgem’s reporting rules and are stated as a percentage return on the share of the Regulatory Asset Value that is financed by equity (i.e. post debt costs).

Table 3.1: Return on Regulated Equity (RoRE)

	Cumulative to 2021	RIIO-ED1 Period
<b>Allowed Equity Return</b>	<b>6.0%</b>	<b>6.0%</b>
Totex Outperformance	1.5%	1.9%
IQI Reward	0.3%	0.3%
Output Incentives	2.2%	2.3%
Other	0.0%	0.0%
<b>RoRE – Operational Performance (notional)</b>	<b>10.0%</b>	<b>10.5%</b>
Debt Performance – at notional gearing	-1.7%	-1.7%
Tax Performance – at notional gearing	-0.2%	-0.2%
<b>RoRE – including finance and tax (notional)</b>	<b>8.0%</b>	<b>8.6%</b>
Adjustment for actual gearing	-0.5%	-0.8%
<b>RoRE – including finance and tax (actual)</b>	<b>7.5%</b>	<b>7.8%</b>

Our RoRE performance has delivered real benefits to customers both by delivering improved performance (incentivised through Output Incentives) and through the reduced bills that have resulted from the sharing of cost savings (the shareholder share categorised above as Totex Outperformance represents 58% of the total outperformance, the balance is returned to customers as bill reductions). These incentive returns are designed by Ofgem to encourage and reward delivery of benefits to customers and support additional investment required to deliver them.

Our RoRE on average for the first six years of the ED1 is 7.5%, on an actual gearing basis (8.0% notional). For the first six years, our totex outperformance contributed 1.5 percent whereas the output incentives that we have earned added 2.2 percent. This is offset by the -1.9 percent impact of financing under funding and tax performance, being important components in both shareholder returns and customer understanding of the returns that shareholders are actually making<sup>19</sup>. Returns are calculated on a notional 65% gearing level to facilitate comparability across networks, and these are then adjusted to actual gearing levels.

**Totex outperformance** relates to underspending against the totex allowances set by Ofgem at the start of ED1, adjusted to ensure delivery of outputs are in line to give a true outperformance measure. The period to date underspend is principally in load related expenditure (mainly timing) where, in general, demand increases in the early years of RIIO-ED1 did not warrant the level of reinforcement originally expected, but which are now starting to be seen.

Our **Information Quality Incentive (IQI)** reward was awarded by Ofgem as a reward for setting the challenging business plan that we submitted to Ofgem for RIIO-ED1. Income from **Output Incentives** results from performance on customer satisfaction, stakeholder engagement, and performance in

<sup>19</sup> It is on a post-financing and tax basis that we believe the RAM should be set, as this would align the mechanism to the objective of limiting returns to shareholders on legitimacy grounds. See the Annex 29 Uncertainty Mechanisms for further discussion on the RAM.

connections, but is mainly driven by network reliability in the form of Customer Interruptions (CI) and Customer Minutes Lost (CML) measures. These incentives reflect the significant improvement in customer reliability achieved over ED1.

The RoRE on average for the RIIO-ED1 period is currently forecasted to be 7.8%. This includes two years of forecast performance (FY22 and FY23). It compares to the 7.7% presented by Ofgem in the FY20 annual report.

## ED1 Dividends

**Table 3.2: ED1 dividends declared**

Nominal prices <sup>20</sup> £m	Actual in year ending March						Forecast	
	2016	2017	2018	2019	2020	2021	2022	2023
Dividend declared	48.0	75.0	79.6	47.2	21.4	46.6	81.2	76.8

The dividends are paid from the available cash in each financial year at semi-annual intervals, with reference to the forecast business needs for expenditure, the Group's treasury policy on liquidity, restrictions within our financing arrangements, the applicable law and the Company's licence obligations. The total dividends forecast for ED1 are £475.8m.

Dividends are presented on a nominal basis and are not directly comparable to the forecast RPI-real return noted above of 7.8%. RPI inflation is forecast to average 2.8% across ED1, equating to a nominal forecast return of 10.8%. By contrast, ED1 forecast declared dividends are equivalent to 9.4% of regulated equity in the period.

## Dividend Policy

Ultimately, much of the investment in UK infrastructure is from pension funds, which rely on dividend flows to pay pensions. Dividend yield is therefore an important investment criteria both for future investors and for the retention of existing investors.

Our management team and Board undertake a full and detailed assessment before any dividend is approved. This includes consideration of the following items:

- Sufficiency of cash and liquidity over the next 12 months, to cover required network investment, overheads and repay any maturing debt;
- Adequacy of cash buffers and committed facilities to absorb fluctuations in working capital and variations in collected revenue;

<sup>20</sup> Nominal prices indicate the prices or currency value of the year of payment, rather than in real prices, such as 2012/13 or 2020/21 prices, which deflate prices to a constant price base for comparison.

- Acceptable headroom against financial covenants, including gearing and interest cover; and
- Compliance with laws and regulations, now including the Pension Scheme Act 2021;

If this assessment concludes that sufficient cash is available for equity distribution, a dividend will be declared. The dividend will be set to achieve the target gearing (taking into account the required headroom) and subject to meeting the other conditions noted above.

### Equity issuance policy and strategy

We do not have a formal Board policy with respect to equity issuance per se. Our current Treasury Policy dictates that we maintain our gearing at, or below, (currently) the ED1 Notional company level of 65%. To date, this has not required additional equity to be raised, but has governed the level of dividends declared. In the future event that additional equity was required, the policy would be to request this of ultimate shareholders within an appropriate timeframe (governed by the liquidity section of the Treasury policy to maintain 12 months cashflow headroom).

There is of course a direct interplay between dividend policy and equity issuance, with dividend curtailment being an option available to the Board in order to reduce the need for subsequent issuance requirements. We highlight, however, that our Actual model does not include any forecast dividend payments in ED2.

Any decision to invest additional equity would, of course, be the decision of shareholders, rather than the Board, and would be governed by, inter alia, the attractiveness of the investment opportunity, relative to other investment opportunities that ultimate shareholders would have at the time. We believe that under the current working assumptions for the cost of capital, the equity returns forecast to be received by our shareholders in ED2 are too low and this increases the risk that we may not be able to raise equity finance at the appropriate time. If this were to be the case the requirement to maintain the gearing at or below the notional level would then govern the timing of expenditures.

As discussed in sections 8 and 9, we have not assumed any forecast equity issuance in our Actual model nor do we consider equity issuance to be an appropriate mitigating action for the financeability challenges outlined in this submission.



## 4 Credit ratings

- This section explains what credit ratings are, how they are assessed and why they are important, as well as setting out the key factors in determining a target credit rating.

### Key points

- Credit ratings provide an independent assessment of the ability of networks to service and repay debt.
- They are widely used and relied upon by debt investors.
- Credit ratios are a key determinant of credit ratings, but whilst these are a starting point, the ratings agencies also consider qualitative aspects in arriving at their rating.
- A downgrade in the stability and predictability of the whole regulatory regime could increase the ratio levels needed for each threshold, leading to sector downgrades. Therefore, the confidence of investors in the regulation of the sector remains very important.
- We are currently rated Baa1/BBB+ by the three main rating agencies. This represents two “notches” above the minimum “Investment Grade” level which we are obliged to maintain as part of our licence conditions. We consider BBB+ to be the minimum rating target for network companies, as this base level has to provide headroom against, for example, “stress circumstances”.
- Other sectors, e.g. GD&T and water, are rated at, or above, Baa1/BBB+ (for those companies which target gearing close to that of the respective notional company). A downgrade of the sector below this level could impact on the desire (and cost) of investors to invest in the sector, at the point when net zero investment demands are set to require more funding.

### What is a credit rating?

A credit rating is an independent, external assessment of a company’s ability to service and repay its financial debts when they fall due.

Credit ratings determine not just whether, or not, a company can raise debt, but also the interest rate associated with the debt. As some debt investors only lend to companies with certain minimum credit ratings, they also determine indirectly the number of lenders that would consider lending to a particular company. This is, in itself, an important criteria given the amount that new investment growth will drive debt financing demand, for the sector, over ED2 and beyond.

Credit ratings are widely used by debt investors to understand the credit risk of an issuer and to compare different issuers when making investment decisions.

## How are they assessed?

Companies are assessed by credit rating agencies, such as Moody's, Fitch Ratings or S&P Global. Rating agencies use letter rating scales to indicate ratings. For example, Moody's has a scale ranging from Aaa to C, while Fitch Ratings and S&P Global have scales ranging from AAA to D.

ENWL is rated annually by each of the three main rating agencies listed above, following the provision of forecasts and business performance and review meetings. Each agency formally reports on their respective ratings annually following these meetings. The credit rating is determined by both quantitative and qualitative measures. From a quantitative perspective, the key ratios upon which we are assessed are:

### Moody's:

- **Net debt to closing RAV** (in effect the "gearing" of the business)
- **Adjusted Interest Cover Ratio (AICR)** (in simple terms, the ratio of adjusted net income to interest costs)

### Fitch Ratings:

- **Net debt to closing RAV**
- **Cash Post Maintenance Interest Cover Ratio** (Cash PMICR, similar to AICR above)
- **Nominal Post Maintenance Interest Cover Ratio** (Nominal PMICR). Nominal PMICR includes RAV indexation in the numerator and debt indexation and derivative accretion in the denominator. It is intended as a companion metric to cash PMICR, designed to allow comparison of networks with differing levels of index-linked debt.

### S&P Global:

- **Funds From Operations (FFO) to Net Debt** (in simple terms how cashflow from the business relates to the overall net debt levels)
- **Net Debt to EBITDA**. Net Debt expressed as a percentage of Earnings Before Interest Taxation Depreciation and Amortisation (EBITDA)

The calculations, and the additional credit metrics considered by the rating agencies, can be found in table 5.3.

Alongside the credit metrics, all credit rating agencies also consider qualitative factors when determining a company's credit rating. Although each look at slightly different measures and give different weightings, all three agencies see the importance of the stability, predictability and supportiveness of the regulatory framework. This is clearly illustrated by the weighting given to them by Ofgem in the ratings calculator. By further way of example, Moody's give 60% weighting to qualitative factors for energy networks, with 40% given to Leverage and Coverage (i.e. the financial ratios) as shown below.

**Table 4.1: Moody's Rating Methodology**

Factors	Weighting
<b>Regulatory Environment and Asset Ownership Model</b>	<b>40%</b>
<i>Stability and Predictability of Regulatory Regime</i>	15%
<i>Asset Ownership Model</i>	5%
<i>Cost and Investment Recovery (Ability and Timeliness)</i>	15%
<i>Revenue Risk</i>	5%
<b>Scale and Complexity of Capital Program</b>	<b>10%</b>
<b>Financial Policy</b>	<b>10%</b>
<b>Leverage and Coverage (i.e. the financial ratios)</b>	<b>40%</b>

Source: Moody's Regulated Electric and Gas Networks, Rating Methodology, 16/03/2017, page 4.

As part of the Business Plan Financial Model (BPFM), Ofgem has included a 'Rating Simulator'. The Rating Simulator estimates the likely credit rating associated with the Business Plan, including scenarios where applicable. The Rating Simulator is based on 10 credit metrics, 6 of which are broadly based on Moody's qualitative measures. Of these six qualitative measures, five are fixed for all networks and scenarios, with the credit rating values assigned by Ofgem:

- stability and predictability of regulatory regime (Aaa);
- asset ownership model (Aa);
- cost and investment recovery (A);
- revenue risk (Aa); and
- financial policy (Baa)

Although we agree that some of these rating metrics can be fixed for the purposes of the RIIO-ED2 financeability assessment, we believe others, such as the stability and predictability of regulatory regime, should not necessarily be fixed, pending the results of the determination, particularly with regard to cost of capital matters.

Moody's recently noted that the regulatory regime for UK regulated electricity and gas networks is "not as stable and predictable as it once was"<sup>21</sup>. Therefore, we believe it may be appropriate to include changes to qualitative measures in stress scenarios.

There are several elements of RIIO-2 that the rating agencies see as credit negative. When discussing the inclusion of Ofgem's outperformance wedge in 2020, Moody's stated "The change represents a departure from established regulatory practice, adherence to which has supported widespread confidence in the stability and predictability of the regime. As such, it is credit negative"<sup>3</sup>.

There is also a general weakening of the perception of the regulatory regime in the UK. For example, in 2018, Moody's downgraded the score awarded to the stability and predictability of the UK Water

<sup>21</sup> Moody's: Regulator's proposals for RIIO-2 will weaken credit quality, 9 Sept 2020, Page 2

Sector’s regulatory framework from Aaa to Aa<sup>22</sup>. Such downgrades to qualitative measures have an impact on the benchmark requirements for financial metrics, which then require more headroom to offset the downgrading of qualitative measures.

All of the above suggests that there is a real possibility that these qualitative credit measures may be downgraded over time for the energy sector, adding further pressure to rating assessments, particularly where these are marginal. If this risk materialises, post determination or at other times, we will be required to meet higher financial ratio thresholds to be able to meet the same investment grade ratings.

### Why are credit ratings important?

Credit ratings impact:

- **how much it costs to borrow** – a better credit rating means borrowers are at lower risk of default, and lenders are willing to accept a lower interest rate
- **who can invest in your debt** – many funds are mandated only to invest in bonds in a band of certain credit grades.
- **how easy it is to borrow / how many investors are willing to lend and at what level of investment per lender** – generally investors prefer lower risk, but some will accept higher risk if the returns are higher. Other investors will either not accept this risk or will only be prepared to invest less (or not at all) with any individual company, as this limits their exposure.

### Our credit ratings

As we have noted, ENWL is rated by three major credit rating agencies, Moody’s, Fitch Ratings and S&P Global. Under our Licence from Ofgem, we are required to maintain an “Investment Grade” (IG) Credit Rating (Baa3/BBB- or above). This licence obligation means that we have to target to maintain an IG rating, even in stress situations.

Table 4.2: Current credit ratings

Current	Moody’s Investors Service	Fitch Ratings	S&P Global
<b>Our Long Term Credit Ratings</b>	• Baa1 <sup>23</sup> / Stable	• BBB+ / Negative Outlook	• BBB+ / Stable
<b>Our Key Credit Metrics (based on 2020 actual results)</b>	• AICR 2.0x • Net Debt / RAV 64.1%	• Cash PMICR 2.0x • Nominal PMICR 2.2x • Net Debt / RAV 62.1%	• FFO/Net Debt 10.9%* • Net Debt/EBITDA 5.5x*

<sup>22</sup> [https://www.moody.com/research/Moodys-changes-outlook-to-negative-on-ratings-of-4-UK--PR\\_383966](https://www.moody.com/research/Moodys-changes-outlook-to-negative-on-ratings-of-4-UK--PR_383966)

<sup>23</sup> Equivalent to BBB+ from the other agencies

\* based on NWEN(J) consolidated figures

Currently, all three of our ratings are aligned at Baa1/BBB+, although Fitch placed us on Negative Outlook in November 2021, reflecting *“likely pressure on the cash flows and nominal PMICR during ED2<sup>24</sup>”*. A rating at Baa1/BBB+ provides a suitable margin of comfort above the minimum Investment Grade level of Baa3/BBB-, which should be sufficient to manage stress situations.

### Recent rating commentary and action

In general, the ratings agencies have not changed our rating levels during ED1. However, in September 2018 Moody’s placed us on negative outlook due to the *“expected decline in ENWL’s allowed returns and the likely reduction in earnings from operational outperformance from the start of the next regulatory period”*. This negative outlook was removed in April 2021. Moody’s noted the ED1 incentive revenue support for FY24 and FY25, due to the two-year lag in collecting revenues. This will support ENWL’s financial profile and ratios for the first two years of ED2. However, this is only a matter of timing and, without improvement in the base settlement and/or operational outperformance, our Baa1 rating is likely to remain under pressure.

The ratings agencies generally focus on the following 3-5 years, and this movement reflects the confidence that Moody’s can have on our cash earnings based upon the current ED1 regime. In its Rating Action on 1<sup>st</sup> April 2021, Moody’s stated that *“[Moody’s] AICR will weaken in the final three years of RIIO-ED2 when earned ODI income from RIIO-ED1 ceases to be received”<sup>25</sup>* and we consider a future rating action remains very possible. Moody’s noted in September 2020 that *“If regulatory determination for RIIO-ED2 is as tough as the draft determination for the GDNs and TOs, AICRs will come under pressure from April 2025”<sup>26</sup>*.

Fitch downgraded the outlook for ENWL to negative from stable in November 2021 reflecting *“likely pressure on the cash flows and nominal PMICR during ED2...”<sup>27</sup>*

### Minimum target rating considerations

In considering appropriate target credit ratings, it is important to find the right balance between a low cost of debt with easy access to debt markets and ensuring that the price customers pay in the short term is not inflated to support ratings unnecessarily. Of course, in the long term, a lower cost of debt will correlate with lower customer bills in future years.

We consider the key considerations in assessing the correct ratings level to be targeted include:

- Ofgem implicitly assumes the Notional company can raise debt at a rating of at least Baa1/BBB+ rating by using the iBoxx Utilities index for indexation of the debt allowance. If the Notional company cannot achieve a Baa1/BBB+ rating, the regulator has under-estimated the

<sup>24</sup> Fitch Downgrades Electricity North West Outlook to Negative, 8th November 2021

<sup>25</sup> [https://www.moody.com/research/Moodys-changes-outlook-on-Electricity-North-West-to-stable-affirms--PR\\_443601](https://www.moody.com/research/Moodys-changes-outlook-on-Electricity-North-West-to-stable-affirms--PR_443601)

<sup>26</sup> Moody’s: Regulator’s proposals for RIIO-2 will weaken credit quality, 9 Sept 2020, Page 12

<sup>27</sup> Fitch Downgrades Electricity North West Outlook to Negative, 8th November 2021

cost of new debt. This will result in structural underfunding of the sector that would weigh on credit ratings and risk higher overall financing costs passed on to customers in the future.

- Long term investors have historically preferred a credit rating of Baa1/BBB+ or above in regulated utilities.
- We require a strong rating to continue to access debt markets at competitive rates, both to meet the minimum refinancing levels and to raise a significant amount of new debt to fund our plan in a manner that ensures we remain on a path to meet the Net Zero demands of our customers.
- We require sufficient headroom to manage risk and particularly to be able to cope in practice with a plausible range of downside shocks or financial risks. We experienced such a shock in 2020 with the fall in demand arising from the COVID lockdown directing impacting on our revenues.

The consideration of what constitutes an appropriate credit rating level is particularly important to us. As the only DNO covering just one licence area, we raise debt less frequently than other DNO groups. As such, were we to be downgraded ahead of a planned refinancing, the rating can have an immediate, material and long-standing impact on our overall and long-term cost of financing, in a way that is somewhat disproportionate to other regular issuers in the sector. Therefore, the on-going maintenance of an appropriate credit rating is very important to us.

As such, operating as a single licensee DNO leads to an increased need to maintain a strong credit rating compared to other DNOs. We should not be disadvantaged due to being a single licensee group.

An appropriate credit rating should have regard to the investment and funding demands of the company both through ED2 and beyond. As stakeholder and customer engagement has shown a strong desire for an ambitious Totex plan which works towards our target of net-zero by 2038, an appropriate credit rating is needed to ensure appropriately priced debt can be secured to fund this plan, over the long term.

The UK regulated utilities sector has been seen as particularly resilient due to the predictability of cash flows and stability of the regulatory framework, which belief lends itself to strong credit ratings. With the national commitment of Net Zero carbon emissions by 2050, and stronger targets of the late 2030's across the North West, the political environment brings increasing demands for DNOs to deliver key infrastructure upgrades over the long term – which ENWL is excited to be a part of – but strong credit metrics are necessary to raise debt at efficient prices to deliver on the long term ambitions of the Region while protecting customer bills in the long term. This is against a background where the sector as a whole will be seeking increased levels of debt finance to support increased investment.

In the table below we outline the main factors to consider in assessing the appropriate target credit rating:

**Table 4.3: Main considerations when assessing the appropriate target credit rating:**

Factor	Baa1 / BBB+	Baa2/ BBB or below
<b>Ability to raise debt</b>	<p>Most UK water and energy networks are rated by Moody's as Baa1 or A3. Therefore, most debt investors will expect DNO debt to have a minimum rating of Baa1.</p> <p>Below this level there will be reduced investor appetite / liquidity. This will be of increasing concern if the sector's investment requirements results in more debt being needed in the future.</p>	<p>Only a minority of UK water and energy debt is issued at Baa2 (BBB), suggesting less investor demand for this debt. In turn being rated at this level would impact our ability to remain liquid / attract new investors.</p>
<b>Cost of debt raised</b>	<p>Debt raised at BBB+ or higher achieves a typically lower spread<sup>28</sup>. This allows for a lower overall cost of debt, with the spread being based on perceived risk. This risk should always be low for regulated DNOs supported by a strong regulatory framework.</p> <p>The key interest cover ratios (such as AICR and PMICR) are sensitive to interest expense, and therefore to the cost of debt. Maintenance of a BBB+ rating in the short term keeps interest costs down and therefore aids longer term ratings.</p>	<p>At BBB or below, debt becomes more expensive, meaning money which could be spent on network upgrades will instead be spent servicing more expensive debt.</p> <p>Over time, these increased costs will get factored into the sector average cost and therefore into customer charges in future periods.</p>

<sup>28</sup> The spread, or credit spread, is the additional cost of borrowing above the benchmark UK Government Bond or "Gilt"

Factor	Baa1 / BBB+	Baa2/ BBB or below
<p><b>Achieving debt costs that are covered by the debt allowance</b></p>	<p>The cost of debt allowance provided by Ofgem in the Sector Specific Methodology Decision (SSMD) document is calculated based on a 17-year trailing average iBoxx 10+ utilities index. This is then aligned to the sector average cost of debt.</p> <p>To achieve debt costs at levels commensurate with the allowance, a BBB+ rating is likely to be needed, given, as noted above, the majority of UK water and energy networks are rated BBB+ or above<sup>29</sup>.</p>	<p>A rating BBB or below will increase the cost of future debt issuance and further exacerbate the issue of our efficiently incurred debt not being properly funded by Ofgem’s debt allowance methodology.</p>
<p><b>Managing economic downturn and unforeseen events</b></p>	<p>Having two “notches” above investment grade provides a reasonable degree of headroom, sufficient to ensure that a downgrade does not result in the debt becoming sub-investment grade.</p>	<p>Having a rating only one “notch” above Investment Grade provides little headroom above the minimum. An unforeseeable economic downturn or shock could result in a downgrade below investment grade, involving a breach of the Licence. For this reason, Ofgem require us to stress test the rating</p>

<sup>29</sup> For those companies that target gearing levels at or close to the respective notional company level



Factor	Baa1 / BBB+	Baa2/ BBB or below
<p><b>Meeting customer expectations on service delivery</b></p>	<p>We have engaged in extensive stakeholder engagement with our customers. The clear message from our customers is in support of an ambitious Totex plan during ED2, with customers keen to see extensive network upgrades and work to improve reliability and support the move to Net Zero.</p> <p>A BBB+ rating or above will make it more likely that we can finance the ambitious Totex plan that customers want.</p>	<p>Customers indicated their willingness to accept increased bills to fund an ambitious Totex plan.</p> <p>It would be unfair to customers if a BBB or lower rating were given leading to either us being unable to finance the plan (and/or have to carry out a reduced plan) or for increased resources to be applied to service expensive debt instead of the network upgrades customers need. If shareholders are required to further subsidise the efficiently incurred cost of debt, then they will become unwilling to invest.</p>

## 5 How we assess financeability

- This section explains the methodology used in our financeability assessment.

### Key points

- Financeability needs to be assessed separately for each of debt finance and equity finance. We define four tests that we have used in our assessment for these purposes covering a base case and a stressed case for each of debt and equity.
- Regarding debt finance, the independent ratings agencies, upon which debt investors place trust, will make their assessments based upon our actual circumstances.
- Therefore, we do not believe it is appropriate to assess financeability solely based on the notional company model. Basing an assessment on the notional company, particularly in circumstances where the characteristics of the notional company are neither the same nor similar to the actual licensee, would be disregarded by the ratings agencies as it does not reflect our ‘real-world’ position.
- To assess the likely credit rating action in the base case and stressed scenarios, we have adopted a modified approach to that used in Ofgem’s Ratings Simulator thereby reflecting as closely as possible the ratio calculations and weightings applied separately by each agency.

### Introduction

We are required to submit a robust financial plan which has been stress tested and proven financeable under a set of specified scenarios over the RIIO-2 period. Ofgem requires we submit a financeability assessment using its working assumptions for cost of capital as outlined in the SSMD.

### Use of the “Notional Company” compared to the real-world assessments of the ratings agencies

Ofgem requires that the financeability assessment is conducted on both a Notional company basis (“Ofgem Notional model”) and on an actual capital structure basis (“Ofgem Actual Capital Structure model”).

We include both assessments in this annex. However, we consider that any reliable assessment of financeability must closely match the assumptions and ratio calculations adopted by market participants, particularly including rating agencies. To this effect, we have also incorporated additional credit metrics in our analysis, calculated in accordance with the agency methodology. To assess whether real world investors will invest in us, and how they will price this investment, we feel that the ratings agencies approaches must be followed as closely as possible and therefore reflect the actual circumstances of the company.

### Ofgem assessment tools and our necessary amendments

Ofgem has provided tools to assist us with the financeability assessment, including the Business Plan Financial Model (BPFM). We have also chosen not to focus on the outputs of the ‘ratings simulator’ included in the BPFM for our assessment, but we include the outputs in Annex 28B Ofgem Required

Modelling for completeness. The testing is summarised below, with the rationale and details behind these decisions is set out later in this section.

Finally, we believe that any assessment of financeability needs to consider both debt investors and equity investors separately. We define four tests later in this section, which are summarised in Table 5.1 below, that we believe need to be met in order to conclude the business plan is financeable:

**Table 5.1: Financeability test overview**

Financeability Test		Description
Test 1	Debt	The company should be expected to maintain a credit rating of at least Baa1/BBB+ in the unstressed base case to provide an acceptable buffer to enable it to deal with unexpected market or other shocks.
Test 2	Debt	The company should be expected to maintain an investment grade rating in a realistic stress scenario.
Test 3	Equity	The price control should provide an allowed equity return that is sufficient to attract new equity investment.
Test 4	Equity	Equity investors should be reasonably likely to receive the agreed notional allowed return, and the value, or otherwise, of any incentivised performance. Ideally, to maintain confidence equity investors should not, in the ordinary course, be required to subsidise <i>efficiently</i> incurred past or future debt costs.

#### Adjustments to Ofgem's approach to assessing financeability

To comply with Business Plan guidance, we are required to submit a financeability assessment based on the Notional company. This includes an assumption that networks will generate 25bps of outperformance. We are also required to undertake analysis on certain plausible stress scenarios, including high/low on inflation, interest rates, totex performance and general RoRE out/under performance scenarios.

Ofgem includes a rating simulator in the Business Plan Financial Model and networks are encouraged to use this simulator to assess likely credit ratings. We have reservations over the rating simulator and these are explained below.

We believe Ofgem's approach to the assessment of financeability has certain limitations. These limitations may not impact other networks, particularly those receiving debt allowances in excess of their actual debt costs. However, ENWL's position is far more balanced and therefore we need to make some more granular calculations and ensure that we form a judgment based upon the approach to this assessment that will be taken by the ratings agencies. Therefore, we have made the following adjustments to the Ofgem approach when assessing financeability:

1. We have added certain additional credit metrics added to the core assessment, used by particular agencies in forming their judgments, notably Nominal PMICR (Fitch) and Debt / EBITDA (S&P), as these are critical rating determinants for these agencies.

Table 5.2: Summary of key credit ratios and definitions

Ratio	Agency focus	Definition
<b>Core Ratios</b>		
Moody's AICR	Moody's	Funds from Operations (FFO) (pre-interest and net of excess fast money) - RAV depreciation (i.e. the regulatory return of capital invested in previous years / cash interest plus accretion on swaps with 5 or 7 year "pay-as-you-go" (PAYG) legs
Cash PMICR	Fitch	FFO (pre-interest and net of excess fast money (i.e. the allowances received in year in excess of normal operating costs)) – RAV depreciation/ cash interest plus 50% of accretion on swaps with 5 year PAYG legs
Nominal PMICR	Fitch	FFO (pre-interest and net of excess fast money) - RAV depreciation + RAV accretion (the increase in the Regulatory Asset Value applied as a result of inflation) / nominal interest
FFO/Net debt	Ofgem, S&P	FFO (net of excess fast money) / closing net debt
Net Debt/EBITDA	S&P	Closing net debt / Earnings Before Interest Taxation Depreciation and Amortisation (EBITDA)
Net Debt/Closing RAV	Fitch, Moody's, Ofgem	Closing net debt / closing RAV
<b>Supplementary Ratios</b>		
FFO interest cover	S&P	FFO / Cash interest
FFO interest cover (including accretion)	S&P	FFO / cash interest + accretion
EBIDTA/cash interest	S&P	EBITDA / cash interest
RCF/Net Debt	Ofgem, S&P	RCF + principal inflation accretion / closing net debt
Gross Capex/RAV	Moody's, Ofgem	Capital spend / opening RAV
Ofgem AICR	Ofgem	FFO (pre-interest) - RAV depreciation / cash interest
Return on Regulated Equity (RoRE)		EBIT - tax - (cost of debt * debt RAV) / equity RAV
Dividend cover		Profit after tax / dividends declared
Dividend/regulated equity		Dividends declared / equity RAV

2. We have assessed the likely credit rating impact by considering the likely rating action of each individual agency, based on our previous experience and the agencies' published reports.
3. We do not believe that the rating simulator included in the Business Plan Financial Model (BPFM) provides an accurate or reliable estimate of expected rating action(s). We have,

therefore, attached no weight to its outputs in our financeability assessment. It is, however, included to meet Ofgem’s requirements. The key issues with the rating simulator are:

- 3.1. It excludes certain core ratio metrics that are important to particular agencies, most notably, the nominal AICR (Fitch) and Net Debt / EBITDA (S&P) ratios.
- 3.2. It is very insensitive to material adverse positions. For example, an outturn AICR at 1.05x, meaning that cashflows from the business only just cover interest costs, still results in a Baa1/BBB+ rating from the ratings simulator. In practice this set of circumstances would result in a lower ratings assessment, possibly even below investment grade.

### Our tests for debt financeability

Notwithstanding these adjustments, at a high level, we are in broad agreement with Ofgem as to how debt financeability should be assessed – using the assessments of the independent ratings agencies. Credit ratings provided by three highly respected, global credit agencies, Moody’s, S&P and Fitch, provide an independent and trusted view of a company’s credit risk, as viewed from the perspective of a debt investor.

The table below sets out the indicative core ratio outcomes that would result in the ratings being set at each of Baa1/BBB+ and Baa3/BBB- levels.

**Table 5.4: Minimum rating thresholds – core ratios**

	Moody’s Investors Service	Fitch Ratings	S&P Global
<b>Baa1/BBB+/BBB+</b>  ENWL’s current level, two “notches” above Investment Grade	<ul style="list-style-type: none"> <li>• AICR &gt; 1.4x</li> <li>• Net Debt / RAV &lt; 75%</li> </ul>	<ul style="list-style-type: none"> <li>• Cash PMICR &gt;1.6x</li> <li>• Nominal PMICR &gt;2.0x</li> <li>• Net Debt / RAV &lt;70%</li> </ul>	<ul style="list-style-type: none"> <li>• FFO/Net Debt &gt;9%</li> <li>• Net Debt/EBITDA &lt;5x</li> </ul>
<b>Baa3/BBB-/BBB-</b>  Minimum Investment Grade	<ul style="list-style-type: none"> <li>• AICR &gt; 1.05x</li> <li>• Net Debt / RAV &lt;87%</li> </ul>	<ul style="list-style-type: none"> <li>• Cash PMICR &gt;1.3x</li> <li>• Nominal PMICR &gt;1.7x</li> <li>• Net Debt / RAV &lt;82%</li> </ul>	<ul style="list-style-type: none"> <li>• FFO/Net Debt &gt;6%</li> <li>• Net Debt/EBITDA &lt;6x</li> </ul>

Credit ratings are an independent and public measure of a company’s credit quality. They also act as a reliable predictor of both financing costs and market access in times of market disturbance. As such, we agree that any assessment of debt financeability should be grounded in expected credit ratings, as this is how debt investors will see it, in real life.

In practice, when issuing debt to debt investors, we also agree to certain financial covenants. These can be aligned to aspects of the regulatory price control, such as notional gearing levels, or based on rating metrics. These covenants represent ‘hard’ thresholds with respect to performance and require strict compliance. Historically, they have served as an additional ‘safety check’ that we are financed in a prudent manner. However, if the regulatory settlement removes headroom against these covenants, we will be forced to take restorative action, such as investment profiling and delay, in the event of

comparatively small changes to cash flows, such as collected revenue from changes in demand compared to the demand forecast used in price setting some 15+ months prior. We will also have very limited scope to respond to new developments without sufficient ex-ante financing. Any uncertainty mechanisms need to be carefully constructed if they are to deliver the desired action by networks.

We propose that debt financeability should be assessed with respect to two tests:

***Debt financeability test 1: The company should be expected to maintain a credit rating of at least Baa1/BBB+ in the unstressed base case.***

A credit rating of Baa1/BBB+ (the actual classification changes between ratings agencies) is implicitly linked to our licence requirements and represents to us, a “sensible” investment grade rating. This rating is an “investment grade” rating with two “notches” to spare, providing us with headroom to absorb future economic shocks, access to lower borrowing costs (but note below) and maintaining the flexibility to manage the risks of ED2.

No specific guidance has been given by Ofgem, but this proposed minimum credit rating conforms closely with the index chosen by Ofgem for setting the debt allowance. In RIIO-ED1, the debt allowance is based on a trailing average of A and BBB rated debt. For RIIO-ED2, Ofgem has proposed that the allowance is instead based on the iBoxx Utilities index, which has an average rating between A- and BBB+. This alignment might suggest that the ratings should be targeted slightly higher than BBB+, but we have not taken this approach, whilst recognising that aligning the financeability assessment with the assumptions made for Ofgem’s cost of debt allowance is important to avoid inconsistencies in the price control. If financeability were assessed on a weaker credit rating than used for debt allowances, this would likely result in higher debt costs and risks setting unachievable benchmarks regarding cost performance, particularly in future price controls.

In addition, Ofgem’s decision that a financial resilience report is required from networks whose credit issuer rating falls to Baa2/BBB, or below, indicates that a rating below our proposal of Baa1/BBB+ would be below Ofgem’s expectations of a financially sensibly resilient network.

As set out in section 4, the qualitative assessment accounts for a material proportion of the overall credit rating agency assessment. As such, our overall credit rating will be very sensitive to movements in qualitative assessments. This reinforces the need to be targeting above the minimum investment grade rating for the quantitative measures.

We also note that a target of Baa1/BBB+ is consistent with the majority of transmission and gas distribution company business plans submitted in 2019, and also the majority of water company submissions to Ofwat in PR19. This implies that Baa1/BBB+ is seen as an efficient rating for regulated utilities by a number of Regulators. As a sector, we will be competing with other sectors to attract funding from debt investors.

***Debt financeability test 2: The company should be expected to maintain an investment grade rating in a realistic stress scenario.***

A credit rating of Baa3/BBB- is commensurate with the minimum position to maintain our Licence obligation of an investment grade credit rating. Failing to meet this rating under a range of plausible stress tests would represent a significant credit risk to debt investors, creating uncertainty over the ability of companies to access finance when most needed.

*To conclude that we are financeable from a debt perspective would require both of these tests to be met.*

**Table 5.5: Debt Financeability Tests**

Financeability Test		Description
Test 1	Debt	The company should be expected to maintain a credit rating of at least Baa1/BBB+ in the unstressed base case to provide an acceptable buffer to enable it to deal with unexpected market or other shocks.
Test 2	Debt	The company should be expected to maintain an investment grade rating in a realistic stress scenario.

### Our approach for assessing equity financeability

Ofgem carry out a detailed assessment of the equity returns that are required to attract investment to the sector. The approach that Ofgem employ for RII02-ED2 is similar to the approach that Ofgem used for RII0-GD&T2.

In setting returns, due regard is required to the risks that equity shareholders bear and should, we believe, be built on the following principles:

- **Target level of base returns.** The allowed return to shareholders through any price control should be consistent with corporate finance theory and long-term market data.
- **A fair and balanced approach.** In applying corporate finance theory, the selection and interpretation of market data should be fair and balanced.
- **Due consideration of risk.** There is an established and clear relationship between the risks faced by equity shareholders and the return required on their investment. Any material changes to the risk profile of networks, or material differences between the risk profile of networks and that of the market sample, should be considered and reflected in the allowed return.
- **Long term implications.** Aiming up within a cost of equity range should be considered and applied where appropriate. The negative consequences of setting equity returns too low are significant, particularly considering the investment requirements for Net Zero, and this needs to be weighed against the incremental cost impact of aiming up. We are therefore of the view that aiming up is appropriate in certain circumstances. In effect, the assessment to financeability needs to be made against the detriment to customers of the failure to attract finance to fund investment. The impact of Quantitative Easing around the world since 2008 has lowered interest rates and created historically low expectations for equity returns, not just against the market interest rates but also in terms of the pricing of risk into investment decisions. The Regulator, in considering equity returns, needs to balance up the interests of customers in having low short-term bill savings and the long-term confidence of equity investors in assessing very long-term investment decisions.
- **Expected returns.** The actual return that shareholders are expected to receive in the price control should be fair, with deviation from the target return being down to performance and items under the control of the company, or in respect of risks that it is appropriate for shareholders to bear. In particular, equity should be able to invest in the knowledge that,

provided that it is efficient in its execution, it will not be required to unpredictably subsidise, or able to unfairly gain from, the impact of subsequent interest rate movements on debt costs.

- **Confidence in the long-term fairness of Regulatory price control settlements.** To attract and retain equity investment for the long term, equity investors must be confident that the Regulator will be fair in setting the price controls. Crucially, equity investors will not be confident of investing in us if they are concerned that the future efficiently incurred costs of the business are not going to be broadly met over a price control. Where there is evidence that past efficiently incurred costs are not being met this will be a legitimate cause for significant concern.

Based on the principles above, we have assessed equity financeability with respect to two tests:

**Table 5.6: Equity Financeability Tests**

Financeability Test		Description
Test 3	Equity	The price control should provide an allowed equity return that is sufficient to attract new equity investment
Test 4	Equity	Equity investors should be reasonably likely to receive the agreed notional allowed return, and the value, or otherwise, of any incentivised performance. Ideally, to maintain confidence equity investors should not, in the ordinary course, be required to subsidise <i>efficiently</i> incurred past or future debt costs.

The required equity return is set by the regulator with reference to market experience at the time of the assessment. In our Annex 28C Alternate Cost of Capital Section 3, we evaluate in detail the methodology and assumptions used by Ofgem in arriving at its equity return range and its working assumption of 4.40%.

*The majority of the analysis contained in that appraisal was prepared in advance of 1st November 2021, when the CMA published its detailed final determination on the GD&T2 appeal. As we have not been a formal party to the CMA's proceedings, we had not been able to see any of the detail of the CMA's thinking, or its exposition of the views expressed by Ofgem or the other parties before November. The timing of the publication of the CMA's decision, and the date for submission of our final business plan, means that we have not yet had the opportunity to fully consider and reflect the detail of the CMA's findings.*

We will continue to consider and analyse the detail of the CMA determination over the coming months and look forward to continuing to engage with Ofgem in this regard.

As a consequence of the timing of the CMA publication, we have chosen not to propose a target equity return in this business plan submission. As such, for the purposes of Test 3, we have elected to compare Ofgem's working assumption for the Allowed Equity return (4.40%) against a range of key benchmarks and reference points, including the results of the recent CMA appeal on GD&T2. These reference points are summarised below, and set out in more detail in Annex 28C Alternate Cost of Capital:



Equity Return	Rate	Reference and rationale
<b>Reference point 1</b>  Oxera Report for the ENA	5.81 %	In its report for the ENA, Oxera estimated an equity range of 5.81% - 6.87%.  The 5.81% represents the bottom of this range.
<b>Reference point 2</b>  75 <sup>th</sup> percentile of the Ofgem SSMD calculated range	4.99 %	This point estimate would be consistent with the CMA findings on GD&T2, but with an additional 'aiming up' in the range to reflect the relative risk of the sector versus GD&T2, plus both the likelihood of fresh equity requirements being required in ED2 and the potential of the detriment to customers if financeability is not delivered by the cost of capital determined by Ofgem.
<b>Reference point 3</b>  Minimum equity return level required for the Notional company to attain a BBB+ rating under the base scenario	4.79%	This is the <u>minimum</u> level of equity return that results in the Notional company with the <u>baseline</u> level of investment attaining a 1.4x AICR (assuming no outperformance).  1.4x AICR is the <u>minimum</u> needed for a BBB+ rating under the Moody's methodology. Whilst we would be concerned about the impact on the attractiveness of the sector with calibration based upon the use of a minimum level, and without factoring in the impact of higher investment requirements than baseline, this rate provides a useful reference point.
<b>Reference point 4</b>  Ofgem SSMD calculated range	4.65 %	The mid-point of the Ofgem calculated range.  This point estimate does not aim-up, but it does exclude the 25bps outperformance wedge adjustment in-line with the CMA findings on GD&T2.

## 6 ENWL Stochastic Modelling Assessment

- Ofgem have prescribed discrete stress test scenarios to understand the financeability risk associated with potential downside impacts of operational and macroeconomic uncertainty.
- Using stochastic modelling, this section takes Ofgem’s analysis one step further by examining the risk around operational and macroeconomic assumptions within the BPFM.
- The analysis in this section is informed by risk analysis that KPMG has conducted for us for each risk scenario to develop plausible ranges and combinations that help inform and develop ENWL’s stress test scenarios.

### Key points

- Stochastic modelling of totex and output incentives concludes with P10 and P20 outcomes for Operational RoRE in ED2.
- The P10 and P20 operational performance scenarios would deliver an average operational RoRE outcome at 2.56% and 1.68%, respectively, below the allowed return. This compares to 1.75% under the Ofgem pre-defined ‘Low RoRE’ scenario. We can therefore conclude that the Ofgem pre-defined test is a plausible and robust downside scenario for operational performance.
- We also derive two plausible downside macroeconomic scenarios. The first is a ‘long term high interest rate environment’ reflecting successful monetary policy actions to control rising inflationary pressures. The second is a ‘long term low inflation and low interest rate environment’ caused by further lockdowns and steep decrease in consumer demands.
- We then bring this analysis together and construct two ‘Company Stress Scenarios’, combining both operational and macroeconomic outcomes. These scenarios will be included in our later financeability tests.
- As a final step, we have considered additional risk factors associated with our debt under-funding position that are not captured in the stress scenarios. The evaluation of any financeability assessment using the stress scenario will need to be cognisant of such unmodeled risks.

### Introduction

Stress testing in the Business Plan Financial Model (BPFM) enables us to evaluate whether there are plausible downside scenarios within the notional or the actual company modelling that lead to circumstances under which further financeability problems might occur in ED2.

Ofgem requires networks to run a series of pre-defined stress tests as part of the Business Plan submissions. We have conducted these tests in-line with Ofgem requirements and the results are included in the financeability testing in Sections 7 and 8.

Ofgem’s stress tests enable the user to test specific individual assumptions in a discrete way and this is a useful starting point in testing financeability, but we consider that it has three key limitations:

## 6 ENWL Stochastic Modelling Assessment

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- The analysis in this section is informed by risk analysis that KPMG has conducted for us for each risk scenario to develop plausible ranges and combinations that help inform and develop ENWL’s stress test scenarios.

### Key points

- Stochastic modelling of totex and output incentives concludes with P10 and P20 outcomes for Operational RoRE in ED2.
- The P10 and P20 operational performance scenarios would deliver an average operational RoRE outcome at 2.56% and 1.68%, respectively, below the allowed return. This compares to 1.75% under the Ofgem pre-defined ‘Low RoRE’ scenario. We can therefore conclude that the Ofgem pre-defined test is a plausible and robust downside scenario for operational performance.
- We also derive two plausible downside macroeconomic scenarios. The first is a ‘long term high interest rate environment’ reflecting successful monetary policy actions to control rising inflationary pressures. The second is a ‘long term low inflation and low interest rate environment’ caused by further lockdowns and steep decrease in consumer demands.
- We then bring this analysis together and construct two ‘Company Stress Scenarios’, combining both operational and macroeconomic outcomes. These scenarios will be included in our later financeability tests.
- As a final step, we have considered additional risk factors associated with our debt under-funding position that are not captured in the stress scenarios. The evaluation of any financeability assessment using the stress scenario will need to be cognisant of such unmodeled risks.

### Introduction

Stress testing in the Business Plan Financial Model (BPFM) enables us to evaluate whether there are plausible downside scenarios within the notional or the actual company modelling that lead to circumstances under which further financeability problems might occur in ED2.

Ofgem requires networks to run a series of pre-defined stress tests as part of the Business Plan submissions. We have conducted these tests in-line with Ofgem requirements and the results are included in the financeability testing in Sections 7 and 8.

Ofgem’s stress tests enable the user to test specific individual assumptions in a discrete way and this is a useful starting point in testing financeability, but we consider that it has three key limitations:

- Each risk scenario<sup>30</sup> is specific - it has a fixed value.
- Each stress test scenario<sup>31</sup> is discrete - each risk scenario is considered independently with no consideration of combination effects.
- The specified test scenarios do not cover the full range of potentially material risk issues.

As a consequence, and as noted in our draft business plan, we committed to developing our own BPFM stress tests ahead of the final plan submission.

This section outlines our approach in defining these stress test scenarios, building on analysis and recommendations prepared by KPMG<sup>32</sup>.

Our approach to scenario development considered three important aspects:

- An assessment of the risks faced by the business and how they impact key assumptions within the financial model. These are distilled into operational and macroeconomic effects to allow for financeability analysis within the BPFM.
- Once risks have been identified the subsequent analysis provides for a quantitative and qualitative assessment of the impact of each risk in terms of likelihood of occurrence.
- This analysis delivers an understanding of central outcomes, and distributions around these central outcomes, from which we choose plausible stress scenarios for financeability testing within the BPFM.

In doing so, it addresses the issues identified in the Ofgem pre-defined tests by:

- considering stochastic risk analysis around each parameter to provide a distribution of potential outcomes.
- developing economically justifiable combinations of risk scenario outcomes to deliver a series of plausible company stress tests.

In selecting appropriate stress test scenarios for modelling the financeability impact, we consider downside scenarios only. Further detail on KPMG's rationale, methodology and commentary is included in its report.

## The two-stage approach

### Stage 1 – Analysis of operational performance risk scenarios

Our two-stage process begins with an ENWL-specific and sector wide retrospective assessment of the business risk that we faced over ED1. This assessment is used as a foundation to then consider potential exogenous, macro-economic shocks that could compound financeability issues further over ED2.

<sup>30</sup> A risk scenario refers to the potential outcomes for each underlying input assumption e.g. totex, inflation, interest rates.

<sup>31</sup> A stress test scenario is either a single risk scenario or multiple risk scenarios combined as a single financeability test in the BPFM.

<sup>32</sup> *Assessment of ENWL risk exposure at ED2*, KPMG, November 2021

The risk impact is modelled by looking at key components of operational performance:

- 1.1. Totex downside performance
- 1.2. Incentive penalties/payments

Each scenario generates a distribution of outcomes which has been expressed as  $\pm$  % of RoRE. The estimation of the downsides in RoRE terms is done for modelling simplicity when using the BPFM and for comparison to Ofgem's pre-defined RoRE scenarios.

We recognise that there may be different cash flow impacts depending on the composition of the operational performance (e.g. opex vs. capex vs. incentive performance). However, this methodology is used to simply capture the overall impact on financeability.

This is used in combination with the analysis of macroeconomic parameters in Stage 2 to develop plausible, overall stress tests.

### **Stage 2 – Analysis of macroeconomic risk scenarios**

The components considered at this stage are exogenous, economy-wide risks and are considered to have an independent and potentially compounding effect on the Stage 1 operational risk scenarios.

This stage includes risk analysis of four key macroeconomic assumptions within the BPFM:

- 1.1. Risk free rate
- 1.2. Spread – iBoxx Utilities
- 1.3. CPIH
- 1.4. RPI-CPIH wedge

Similar to Stage 1, a distribution of outcomes for each parameter above was developed and used to derive corresponding values for macroeconomic assumptions and cost of capital calculations in the BPFM.

Synthesising the outcomes from Stages 1 and 2, a combination of operational and macroeconomic scenarios, are constructed to provide us with alternative downside stress tests to Ofgem's prescribed scenarios. These are presented at the end of this section.

We also consider risks associated with the design of the cost of debt allowance and the resulting impact on cost of debt performance.

The results of the financeability assessment using these stress tests can be found in Sections 7 and 8.

We consider each of the operational and macroeconomic parameters in more detail below.

### **Scenario risk analysis**

The observed variances in our performance, and for the sector, across ED1 have been used as a starting point to evaluate the key risks we face in ED2. This provides a relevant input for estimation of risk exposure in the future, assuming constant exposure and variation.

Further consideration is then given to uncertainty at ED2 arising from different pathways to Net Zero with potentially different scales of totex allowances, as well as the evolution of underlying risk exposure across ED2.

The information below sets out an overview of the key regulatory risk categories, alongside the corresponding methodology adopted for each risk simulation and the results of each.

**Stage one – operational risk scenarios**

**Totex performance**

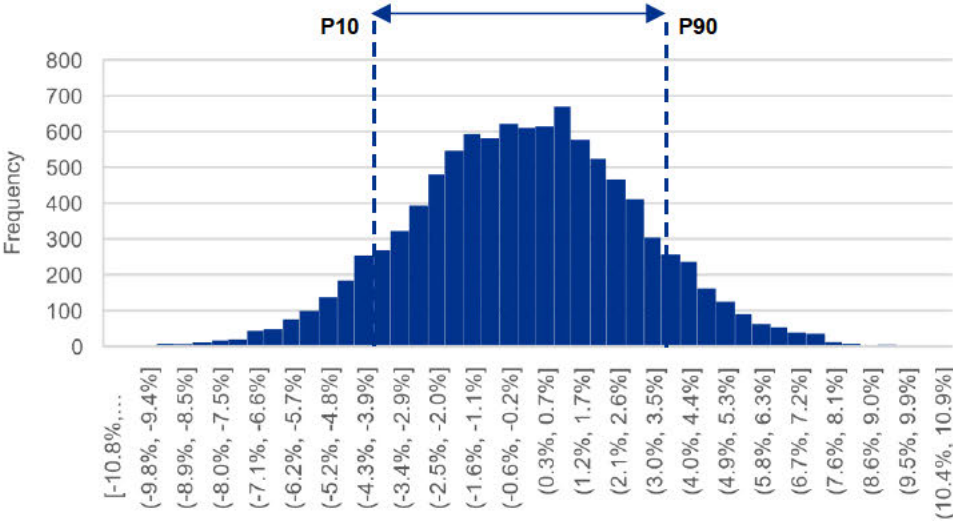
We believe there are two primary drivers of risk relating to totex at ED2. Firstly, the uncertainty regarding the level of performance relative to totex allowances received from Ofgem. Secondly, the scale of totex investment. This impacts the allowance we receive, but the complexities involved may have implications for both the calibration of those allowances and the company’s management of the investment programme.

**Totex Risk Scenario forecast values**

Two simulations have been adopted to derive forecast levels of performance that consider ED1 performance from (1) our company specific data and (2) sector data as a whole, to derive a range of possible outcomes. It is assumed in each simulation that the average of all outcomes is zero i.e. no out or under performance.

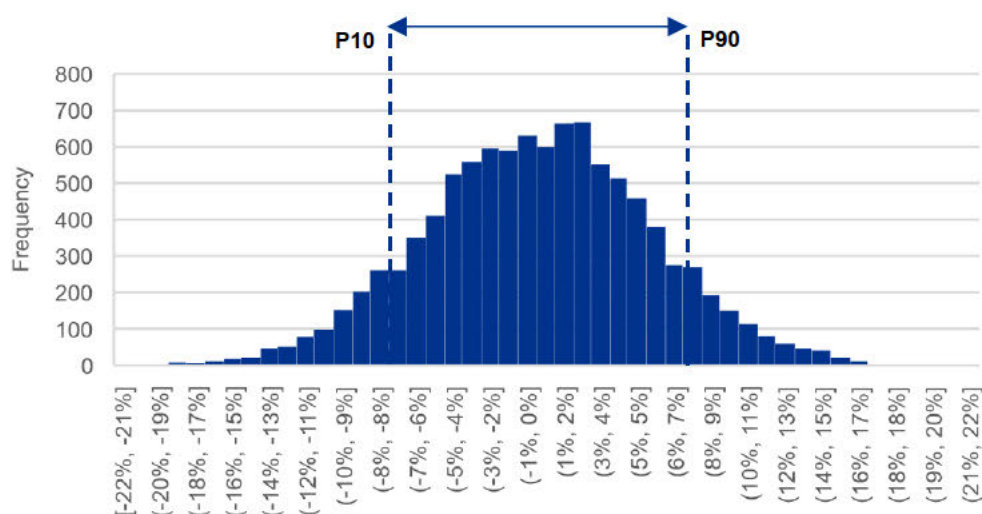
Within each simulation most possible point outcomes for totex are assumed to cluster around the average with an equal number of occurrences higher and lower. As you get further from the average (both high and low) there are a diminishing number of occurrences, with the difference to the average derived from historic volatility of ED1 totex performance. The simulations results are presented as follows:

**Chart 6.1 - Totex performance (% of allowance) distribution using our company specific data**



**Table 6.1 – Totex performance impact on RoRE using our company specific data**

% RoRE	FY24	FY25	FY26	FY27	FY28
P10	-1.05%	-1.02%	-0.99%	-0.89%	-0.85%
P20	-0.69%	-0.67%	-0.65%	-0.58%	-0.56%
Mean	0.00%	0.00%	0.00%	0.00%	0.00%
P80	0.69%	0.67%	0.65%	0.58%	0.56%
P90	1.05%	1.02%	0.99%	0.89%	0.85%

**Chart 6.2 - Totex performance (% of allowance) distribution using sector data****Table 6.2 – Totex performance impact on RoRE using sector data**

% RoRE	FY24	FY25	FY26	FY27	FY28
P10	-1.63%	-1.58%	-1.54%	-1.38%	-1.31%
P20	-1.07%	-1.04%	-1.01%	-0.90%	-0.86%
Mean	0.00%	0.00%	0.00%	0.00%	0.00%
P80	1.07%	1.04%	1.01%	0.90%	0.86%
P90	1.63%	1.58%	1.54%	1.38%	1.31%

The outcomes presented above are shown post the impact of the Totex Incentive Mechanism, where we have assumed a sharing factor of 50%.

In addition, to considering the observed performance over ED1, we also consider how risk may evolve over ED2 given changes in the regulatory and operational environment.

Our business plan highlights the importance of the electricity distribution companies to achieving Net Zero as both an enabler and an innovator. The Net Zero challenge is unprecedented both in terms of scale and uncertainty, but what is clear is that investment will have to rise significantly from ED1 levels if it is to be achieved.

At a totex level this means we face a wide variety of new and increasing risks, which include:

- (1) **Uncertainty surrounding updating existing network assets to respond to low carbon and environmental challenges.** We consider there to be a material level of uncertainty associated with Net Zero related demand and the corresponding investment. For example, the risks could be around the magnitude and timing of the uptake of EVs and heat pumps, which does not appear to exist to the same extent in the other utilities sectors, with electricity networks sitting at the nexus of the sectors. We have to plan for some of the greatest changes on the path to Net Zero, including power, transport, and heating.
- (2) **Future advancements of the process for demand prediction and investment uncertainties would also change,** because of rapid developments in green technology and implementation of active network management systems related to solar and heat pumps connections.
- (3) **Managing resource constraints due to responding to individual stakeholder low carbon priorities and the desire to achieve Net Zero at lowest cost.** These factors could potentially create an imperative for a greater degree of investment ahead of need, and neither Ofgem nor us would wish to be perceived as being a blocker to the achievement of Net Zero. The extent to which this will result in a higher level of risk sitting with the company will depend on the makeup of the RIIO-ED2 arrangements for funding Net Zero related investment ahead of need.

### **Output Incentives**

Output incentives are the second key operational risk area that we think is important to look at in the context of RoRE performance. Ofgem's signals to date on the RIIO-2 incentive rewards/penalties structure indicate that levels may be more constrained at an individual mechanism level. In addition, the new Return Adjustment Mechanism (RAM) will be used to moderate overall operational earnings above a defined threshold.

Under its existing proposals, Ofgem plans to assess the RAM at the Operational RoRE level, i.e. before financing and tax performance. We note that the legitimacy of incorporating a RAM in the price control is based upon the notion that equity should not be allowed to generate exceptional levels of outperformance. To make this assessment before debt performance appears illogical as it does not reflect the actual return levels generated by shareholders.

Setting the RAM at operational level exposes us to additional risks in ED2. For ED1, any underfunding of the cost of debt has been offset to a degree by operational incentive performance. The current RAM proposal could curtail ED2 operational incentive earnings without appropriately recognising our legacy exposure to financing strategy risk and the potential for new exposure impacting on future control periods. We continue to stress that, if the purpose of the RAM is to improve the legitimacy of returns to equity, then it should be based upon the returns to equity from the business.

At this stage, we have little visibility of how specific mechanisms will be calibrated so the risk of little or no reward, and greater penalties remain high.

### **Output Incentive Risk Scenario forecast values**

For incentives a simulation has been derived based on the variability of the sector performance on incentives over ED1. Again, it is assumed that the average, in each simulation, of all outcomes is zero i.e. no reward or penalty.



**Table 6.3 – Output incentive impact on RoRE using sector data**

% RoRE	FY24	FY25	FY26	FY27	FY28
P10	-1.07%	-1.07%	-1.07%	-1.07%	-1.07%
P20	-0.70%	-0.70%	-0.70%	-0.70%	-0.70%
Mean	0.00%	0.00%	0.00%	0.00%	0.00%
P80	0.70%	0.70%	0.70%	0.70%	0.70%
P90	1.07%	1.07%	1.07%	1.07%	1.07%

### Stress Tests

The final step is to bring together the analysis on totex and output incentives into plausible combination stress tests. We include below two combined downside scenarios, described as “operational” for this purpose:

- **P10 operational performance.** This includes combined Totex and Incentives performance at the 10<sup>th</sup> percentile of the distributions of outcomes, as this represents a plausible downside where the company is expected to perform below this level 10% of the time during ED2 based on our risk simulation (table 6.4).
- **P20 operational performance.** This includes combined Totex and Incentives performance at the 20<sup>th</sup> percentile of the distributions of outcomes. The overall exposure for Totex (at P20) and Incentive (at P20) is expected to have a smaller impact comparing to a more severe high interest scenario above (table 6.5).

**Table 6.4 – P10 operational performance scenarios impact on RoRE**

P10 (RoRE %)	FY24	FY25	FY26	FY27	FY28	ED2 ave.
Totex (P10)	-1.63%	-1.58%	-1.54%	-1.38%	-1.31%	-1.49%
Incentive payment (P10)	-1.07%	-1.07%	-1.07%	-1.07%	-1.07%	-1.07%
<b>Total performance</b>	<b>-2.70%</b>	<b>-2.65%</b>	<b>-2.61%</b>	<b>-2.45%</b>	<b>-2.38%</b>	<b>-2.56%</b>

**Table 6.5 – P20 operational performance scenarios impact on RoRE**

P20 (RoRE %)	FY24	FY25	FY26	FY27	FY28	ED2 ave.
Totex (P20)	-1.07%	-1.04%	-1.01%	-0.90%	-0.86%	-0.98%
Incentive payment (P20)	-0.70%	-0.70%	-0.70%	-0.70%	-0.70%	-0.70%
<b>Total performance</b>	<b>-1.77%</b>	<b>-1.74%</b>	<b>-1.71%</b>	<b>-1.61%</b>	<b>-1.56%</b>	<b>-1.68%</b>

### ***Comparison with Ofgem pre-defined stress tests***

Ofgem includes a 'Low RoRE' scenario as part of its pre-defined stress scenarios. This requires networks to model operational performance at 2 ppts below the base scenario. Given the 25bps outperformance assumption in the base scenario, this effectively results in an operational RoRE at 1.75%<sup>33</sup> below the allowed return.

This is broadly equivalent to the P20 operational performance scenario above which would deliver an average operational RoRE at 1.68% below the allowed return (as per table 6.5, the average over the five years of ED2).

In contrast, the P10 operation performance scenario would result in an average RoRE at 2.56% below the allowed return (as per table 6.4, the average over the five years of ED2). This scenario would be a significantly worse outcome than specified in the Ofgem required test.

We can therefore conclude that the Ofgem pre-defined test is a plausible and robust downside scenario for operational performance, whilst not being an absolute worst case.

### **Stage two – macro economic scenarios**

An examination of company-specific operational risks only provides part of the answer in considering the total risk environment that we will face over ED2. Understanding and modelling exogenous, economy-wide factors such as interest rates and inflation is essential in developing the full financeability assessment. These are key assumptions underpinning the allowed returns for equity and debt, and thereby critically influence our ability to attract finance in a world of Net Zero and high network investment needs. As such we agree with Ofgem that the selection of inflation and interest rate risk scenarios are key to considering financeability stress testing. Our risk analysis specifically examines:

- Nominal 10YR forward Risk Free Rate (RFR)
- iBoxx Utilities spread over RFR
- CPIH
- RPI- CPIH wedge

Our first step is to consider each of these four areas separately (broadly categorised into the two areas of financing costs and inflation) to generate a range of outcomes. The next step is then to acknowledge that each macroeconomic risk cannot be considered in isolation and that there is, to some extent, a degree of dependency between them. This is demonstrated by Government monetary policy where the Bank of England is held to account for CPI inflation climbing above a 2% threshold. The BoE's primary lever to control inflation is the movement of interest rates.

### ***Financing costs***

The cost of borrowing and how it is likely to change is a key risk to financeability as it affects not only the debt servicing costs in companies, but also the indexed equity return and debt allowance.

<sup>33</sup> Ofgem requires networks to include 25 bps incentive outperformance in the base scenario reflecting the allowed versus expected return adjustment (also referred to as the 'outperformance wedge').

For ED2, Ofgem proposes to index equity returns for movements in the risk-free interest rate (which Ofgem considers for these purposes to be the cost of Government gilts) - any changes to interest rates will have a direct impact on the return on equity.

Financing costs are also impacted by changes to the risk-free interest rate. The return required by debt investors to provide capital to the company will be related to the risk-free rate plus a premium (also referred to as 'the spread'). Ofgem has proposed that the debt allowance for ED2 is based on the 17-year average of the iBoxx Utilities index, which will reflect prevailing financing costs for Utilities companies.

Although the indexation of the debt allowance is designed to neutralise interest rate risks for the Notional company under idealised circumstances, a number of risks emerge when circumstances are not as idealised (e.g. unstable inflation, lumpy financing, and refinancing).

Forecasts for future financing costs can be constructed based on two components (1) the risk-free rate; and (2) the iBoxx Utilities spread.

Each component is simulated in a similar manner to the way totex and incentives were simulated earlier in this section - each assume that the arrangement of outcomes cluster around a central point (average) with a similar number of highs and lows either side of this central point generating a range.

**Risk free rate:** The mean profile for the risk-free rate is aligned with Ofgem's forecast. The amount by which the outcomes deviate from the central point is calculated using the historic volatility of the same BoE spot rates in nominal terms.

**iBoxx Utilities spread:** The average, and deviation from the average, are calculated as the difference between the iBoxx Utilities index and the BoE 10Y real spot curve.

**Table 6.6 – Risk-free rate outcome distribution**

RFR	FY24	FY25	FY26	FY27	FY28
P10	-0.48%	-0.43%	-0.51%	-0.49%	-0.63%
Mean	1.33%	1.44%	1.52%	1.59%	1.63%
P90	3.14%	3.31%	3.56%	3.66%	3.89%

**Table 6.7 – iBoxx spread outcome distribution**

iBoxx Spread	FY24	FY25	FY26	FY27	FY28
P10	0.91%	0.91%	0.91%	0.91%	0.91%
Mean	1.62%	1.62%	1.62%	1.62%	1.62%
P90	2.33%	2.33%	2.33%	2.33%	2.33%

## Inflation

The rate of inflation will impact almost every aspect of the price control – revenues, totex spend, the equity return and debt allowance, financing costs (affected by the level of inflation hedging), the Regulatory Asset Value (RAV) and on the level of debt financing required.

For ED2, Ofgem is proposing to change the primary inflation index from RPI to CPIH. Allowed Revenue and Totex are therefore both modelled to increase in-line with CPIH from the start of ED2.

As noted above, the ED2 equity return will be indexed to movements in the risk-free rate. The estimate of risk-free rate is derived from Government RPI linked gilts. To calculate a CPIH equivalent for the risk-free rate, Ofgem is proposing to apply an adjustment to the RPI derived RFR. This adjustment is known as the RPI-CPIH ‘wedge’. As such, any movement in the wedge will impact the value of the equity return and any uncertainty in the wedge’s derivation will increase risk to the overall equity return.

The change in the primary inflation index to CPIH also results in additional financing risk for networks, like us, with RPI linked debt. This ‘basis-risk’ relates to the fact that there will be a disjoint between the indexation of allowances and the Regulatory Asset Value (CPIH) and that applied to RPI linked debt (RPI), reducing the effectiveness of existing inflation hedging and increasing the risk associated with gearing covenants and tax clawback mechanisms. Within the GD&T RIIO-2 FD, Ofgem included an allowance for the additional cost of managing this risk and borrowing new CPI or CPIH debt<sup>34</sup>.

As with the operational risk analysis, the simulations each assume that the arrangement of outcomes cluster around a central point (average) with a similar number of highs and lows either side of this central point generating a range.

**CPIH:** The average is based on latest market expectations of CPIH and the deviation around the mean derived from historic CPIH volatility.

**RPI-CPIH wedge:** The average and deviation from the average are calculated from the historical volatility of the RPI-CPIH wedge timeseries.

**Table 6.8 – CPIH outcome distribution**

CPIH	FY24	FY25	FY26	FY27	FY28
P10	1.03%	0.97%	0.97%	0.97%	0.97%
Mean	2.06%	2.00%	2.00%	2.00%	2.00%
P90	3.09%	3.03%	3.03%	3.03%	3.03%

**Table 6.9 – RPI-CPIH outcome distribution**

RPI-CPIH	FY24	FY25	FY26	FY27	FY28
P10	-0.45%	-0.42%	-0.35%	-0.40%	-0.40%
Mean	0.76%	0.79%	0.86%	0.80%	0.80%
P90	1.96%	1.99%	2.06%	2.01%	2.01%

<sup>34</sup> Further comment on the appropriateness of Ofgem’s proposals in respect of basis point risk and CPIH issuance are contained within Annex 28C Alternate Cost of Capital.

### Stress Tests

As with operational performance, the final step is to bring together the analysis on macroeconomic factors into plausible combination stress tests. We include below two downside macroeconomic scenarios:

- **Long term high interest rate environment.** The Bank of England has monetary policy in place to target stable inflation, CPIH, of 2.0%, over the longer term. However, there are not similar controls in place to control rises in interest rates. Therefore we believe it is important to consider a scenario where both (i) BoE monetary policy keeps inflation at target levels; and (ii) interest rates rise over the longer term.
- **Long term low inflation and low interest rate environment** caused by further lockdowns and steep decrease in consumer demands.

**Table 6.10 – Long term high interest rate scenario: variance from base case forecasts**

Variance from base	FY24	FY25	FY26	FY27	FY28	ED2 ave.
Risk free rate (CPIH real)	2.28%	2.35%	2.56%	2.61%	2.84%	2.53%
CPIH	-	-	-	-	-	-
RPI-CPIH wedge	-	-	-	-	-	--

**Table 6.11 – Long term low inflation, low interest rate scenario: variance from base case forecasts**

Variance from base	FY24	FY25	FY26	FY27	FY28	ED2 ave.
Risk free rate (CPIH real)	-1.77%	-1.83%	-2.00%	-2.04%	-2.21%	-1.97%
CPIH	-1.03%	-1.03%	-1.03%	-1.03%	-1.03%	-1.03%
RPI-CPIH wedge	-	-	-	-	-	-

### Combination stress tests

Volatility in the macroeconomic environment could happen under any circumstances, it is therefore reasonable to consider a combined position of macroeconomic and operational performance to proxy our holistic risk exposure.

As a result, we have proposed two combined stress tests, which are derived from the subcategory section above and KPMG's analysis, to capture an outturn of severe underperformance on cost and incentives during plausible macroeconomic conditions.

- **Company Stress Scenario 1 - Long term high interest rates with P10 operational performance:** This stress test considers an environment in which there are pressures on the company to implement Net Zero projects in the absence of sufficient totex allowances and relatively small overall incentive penalties. This is considered in combination with a high interest rate environment where we consider a scenario where (1) BoE monetary policy keeps inflation at target levels; and (2) interest rates risk over the longer term..

- Company Stress Scenario 2 - Long term low inflation and low interest rate with P20 operational performance:** This stress test considers an environment in which there are pressures on the company to implement Net Zero projects in the absence of sufficient totex allowances and relatively small overall incentive penalties, set against a low inflation environment due to resurgence of Covid. The specification of the test is presented as follows

The first scenario is considered to be a plausible downside because of current level of high inflation combining with supply chain disruptions on core components including fuel, industrial raw materials and freight caused by Covid. Although the current view is that inflation will return to target levels in due course, there is a risk of higher inflation being more persistent. The Bank of England would be expected to respond with interest rate increases.

The second scenario represents a state of the world where the economy struggles to recover from Covid, which could potentially because of further lockdowns and steep decrease in consumer demands, caused by sustained additional waves of infections, compounding with possibilities of new variants that can be resistant to current vaccines and waning vaccine immunity. Whilst this may seem a bleak outlook in light of the current position in UK, it is important to recognise that the UK economy may be affected by the handling of the pandemic in other countries or could face other downside scenarios with a similar impact.

We also recognise dangers for the company in high inflation but with BoE interest rate constraint. This could lead to a combination of negative cash flow implications where there are high levels of refinanced debt at the same time as reduced cash flows from Cost of Equity allowances.

**Table 6.12 – Company Stress Scenario 1 – BPFM inputs**

BPFM inputs	FY24	FY25	FY26	FY27	FY28	ED2 ave.
Operational RoRE (P10)	-2.70%	-2.65%	-2.61%	-2.45%	-2.38%	-2.56%
Risk free rate (CPIH real) <sup>^</sup>	2.28%	2.35%	2.56%	2.61%	2.84%	2.53%

<sup>^</sup>Variance from base case forecast

**Table 6.13 – Company Stress Scenario 2 – BPFM inputs**

BPFM inputs	FY24	FY25	FY26	FY27	FY28	ED2 ave.
Operational RoRE (P20)	-1.77%	-1.74%	-1.71%	-1.61%	-1.56%	-1.68%
Risk free rate (CPIH real) <sup>^</sup>	-1.77%	-1.83%	-2.00%	-2.04%	-2.21%	-1.97%
CPIH <sup>^</sup>	-1.03%	-1.03%	-1.03%	-1.03%	-1.03%	-1.03%

<sup>^</sup>Variance from base case forecast

### Debt under-funding risk

Our base case estimated shortfall between the proposed debt allowance and our efficiently incurred debt costs across ED2 is expected to be approximately £90-95m. As such, it is the key driver of our financeability challenges and we now consider how the analysis included in this section may directly influence of debt underfunding position in ED2.

The allowance is based on an index, but the index design focuses on only one dimension of risk, real interest rates. While the risk from short term uncertainties in real interest rates are relevant, other risks are liable to become more important in an environment of heightened macro-economic uncertainty and diversity in company financing strategies.

These risks include<sup>35</sup>:

- 1) **Cost of embedded debt risk:** Ofgem proposes to use a 17-year trailing average of the iBoxx utilities index to calculate the cost of debt allowance, calibrated to forecast sector average costs. This leads to two separate aspects of embedded debt risk. The first is that the approach based on a sector average naturally forms winners and losers across the sector as individual network debt profiles vary from the sector average. This is the ex-post manifestation of the financing strategy risk discussed below. In addition, there are risks arising from the simple design of the index in an environment of macro-economic uncertainty. For example, the index design does not accommodate heightened uncertainty in future inflation as we emerge from a pandemic, except for the limited hypothetical case of a company with 100% index-linked debt. It also does not accommodate companies' portfolios of financial derivatives. There are therefore risks that both any individual company and the sector as a whole will experience debt costs that diverge from the trailing average.
- 2) **Cost of new debt risk:** In line with allowances for RIIO-T2/GD2, the cost of new debt would be built into the cost of debt index, with reference to the iBoxx Utilities 10+ index deflated by OBR-forecast CPI inflation. Even in the short term, inflation outturns may diverge from OBR forecasts. At the same time, any sharp gradient in the yield curve could prompt debt issuance that diverges from the average yield implied by the trailing average. Finally, any company with a debt issuance profile that departs from that assumed in the index would find itself further exposed.
- 3) **Debt issuance strategy risk:** Ofgem's underlying approach to recalibrating the cost of debt index to the sector average at each price control review builds in a risk dynamic that could prompt herding behaviours rather than any rational corporate or customer-led issuance strategy. Particularly in the current environment of macroeconomic uncertainty, the approach could encourage suboptimal risk management, in particular for consumers. Any company that departs from the sector average pattern of issuance will be potentially exposed for the longer term through the periodic recalibration to that sector average. The risk for such a company, and potentially for consumers more widely, is that the sector average is driven by short term yield curve advantage rather than rational risk management. Rational risk management may be particularly valuable in the current environment.

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<sup>35</sup> See 'Assessment of ENWL risk exposure at ED2' KPMG, November 2021 for further detail







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## 8 Ofgem Actual Company model financeability assessment

- This section outlines the results of our financeability assessment on the Ofgem Actual capital structure model.

**Key points**

- Based upon the assumptions that we have been asked to model, we expect to fail all four financeability tests.
- We therefore conclude that the Actual Business Plan does not appear to be financeable under the current Ofgem proposals for cost of capital.

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Based on these forecast ratios, we have assessed the likely credit rating impact as follows:

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## 9 Making ENWL Financeable

- This section considers the mitigating actions available to deliver a financeable plan.

### Key points

- We concluded in Section 7 that the business plan is not financeable based upon Ofgem’s current proposed working assumptions for the cost of capital.
- In this section, we consider a range of mitigating actions available to address our financeability challenges.
- We recommend two changes to the regulatory framework:
  - **Decrease regulatory capitalisation rate to 65% from 68%.** This is approximately 3ppt below our forecast statutory capitalisation rate; and
  - **Maintain notional company gearing at 65%.** This keeps the proportion of equity and debt financing of the business at ED1 levels.
- These changes would improve our ED2 cash flows and provide some modest capacity for us to respond to a faster decarbonisation path without needing to attract new equity investment, in effect reducing the impact of the financeability problem.
- However, whilst the cash and equity funding benefits of these changes are helpful, these framework changes do little to alleviate the underlying financeability issue – being the risk that we could fail to attract equity investment and raise debt finance when needed.
- We have also considered whether it is appropriate for existing shareholders to inject cash into the business to restructure our debt financing and reduce the projected under-funding over ED2 and beyond. Noting that our Business Plan already includes no dividend payments to shareholders in ED2, we have decided it is not appropriate to propose a shareholder injection as a remedy.
- In conclusion, to address our financeability challenges and the risk posed to net zero delivery, we believe that, together with the recommended framework changes, it is necessary for Ofgem to set a cost of capital allowance in ED2 that is higher than its working assumptions. This is discussed further in Annex 28C Alternate Cost of Capital.

### Addressing the financeability gap

As detailed in sections 7 and 8, we believe that both the Notional Company and the Actual Company would be downgraded to Baa2/BBB in RIIO-ED2 under Ofgem’s working assumptions for Cost of Capital.

We also believe that under certain stress scenarios, it is likely that the Actual Company would be downgraded to sub-investment grade.

In this section, we consider a range of mitigating actions that may be available to address the financeability challenges identified, focussing on the Actual company.

Initially we consider changes to the regulatory framework assumptions.

### Framework remedies

Under Ofgem's SSMD proposals, Ofgem have suggested a number of mitigating options that companies should consider in light of financeability concerns. We have first looked at alternate scenarios considering changes to the following regulatory framework assumptions:

**Table 9.1: Mitigating action – reducing the regulatory capitalisation rate**

<b>Actions</b>	Improving ED2 cash flows by reducing the regulatory capitalisation rate from 68% to 65%
<b>Base position</b>	The base ED2 capitalisation rate of 68% is consistent with RIIO-ED1 and in-line with our forecast statutory capitalisation rate
<b>Considerations and implications</b>	<p>Reducing the regulatory capitalisation rate below the statutory rate, will improve operational cash flows and assist us in de-gearing the company to the ED2 notional level of 60% (from 65% in ED1).</p> <p>A change of 3ppt would lead to an average bill increase of £2.44 for domestic customers over ED2.</p> <p>It could be implemented by Ofgem on a company-specific basis, without requiring changes elsewhere in the sector.</p> <p>We note that while these changes would improve cash flows in ED2, all rating agencies currently view these actions as 'time-shifting' only, with no resulting benefit to underlying credit risk scores.</p>
<b>Proposal and impact</b>	<p>We recommend that Ofgem reduces our regulatory capitalisation rate for ED2 by 3ppt to 65%.</p> <p>These changes would improve our ED2 cash flows and reduce the equity investment needed to de-gear to the lower notional gearing level of 60% (notional gearing is considered as a separate mitigating action).</p>

**Table 9.2: Mitigating action – reducing Asset Lives**

<b>Actions</b>	Improving ED2 cash flows by reducing the regulatory asset lives assumption from 45 years to 20 years.
<b>Base position</b>	Our business plan has been prepared on the Ofgem required assumption of 45-year asset lives.
<b>Considerations and implications</b>	<p>Reducing asset lives has the effect of increasing the return of capital and improving operational cash flows.</p> <p>The move from 45 years to 20 years would lead to an average bill increase of £3.33 for domestic customers over ED2.</p> <p>The change would have no impact on interest cover ratios used by rating agencies, but would provide a small benefit to the Funds from Operations/Net Debt (FFO/net debt) measure, used by S&amp;P.</p> <p>However, as evidenced in our financeability tests, the S&amp;P credit metrics are not under the same pressure in ED2 as those for Moody's and Fitch.</p> <p>It would represent a reversion in policy (Ofgem transitioned from 20 years to 45 years during ED1) and is potentially more difficult to implement on an individual licensee basis.</p>
<b>Proposal and impact</b>	<p>On balance, we do not propose any change in asset lives in ED2.</p> <p>Noting the limited impact on credit ratings of either changing asset lives and regulatory capitalisation rates, we cannot justify both changes and consider that a change to regulatory capitalisation rate is a simpler and more effective way to improve cash flows in ED2, and reduce equity raising.</p>

**Table 9.3: Mitigating action - changing the notional gearing level**

<b>Action</b>	<p>A change to 60% gearing is proposed by Ofgem for ED2.</p> <p>Notional gearing could be maintained at 65% for ED2, reducing the need to de-gear and the risk associated with triggering the tax clawback (and the associated impact on equity returns).</p>
<b>Base position</b>	<p>The Actual Plan model assumes 60% notional gearing.</p> <p>No dividend payments are forecast across ED2. Despite this assumption, gearing remains above the 60% level and closes at FY28 at 61.5%</p>
<b>Considerations and implications</b>	<p>Reducing the gearing to 60% places additional stress on the company, at a time when investment requirements are growing.</p> <p>Our business plan requires significant support from equity investment. Together with reducing regulatory capitalisation rates to 65%, operational outperformance and/or equity injection would be required to bring the gearing position in-line with the 60% proposal.</p> <p>Maintaining gearing at 65% would potentially have minimal impact on domestic bills, but further calibration of the equity return range using the Capital Asset Pricing Model (CAPM) would be required.</p> <p>Any failure to transition to the new 60% notional gearing level risks tax clawback by the end of ED2, further compounding the financeability challenges.</p>
<b>Proposal and impact</b>	<p>We recommend that notional gearing remains at 65% in ED2.</p>

In conclusion, we recommend the implementation of two framework changes:

- **Decrease regulatory capitalisation rate to 65% from 68%.** This is approximately 3ppt below our forecast statutory capitalisation rate; and
- **Maintain Notional company gearing at 65%.** This keeps the proportion of equity and debt financing of the business at ED1 levels.

These changes would improve our ED2 cash flows and provide some modest capacity for us to respond to a faster decarbonisation path without needing to attract new equity investment, if that uncertainty comes to pass. Noting the importance of Net Zero delivery to our stakeholders and our concerns over the ability of Ofgem’s proposed equity return to secure equity investment, we believe these proposed framework changes would provide significant benefits and recommend them to Ofgem for inclusion in our ED2 settlement.

Our recommendation that these framework changes be adopted by Ofgem is aligned with customer preferences outlined during our stakeholder engagement on finance<sup>42</sup>. Specifically, they support the

<sup>42</sup> See main business plan document, Section 7

delivery of company outputs and planned network investment, minimise the risk of higher bills in the longer term and strike a fairer balance between the financial health of the company and bills today. They also reduce the amount of long-term RAV financing required, pushing less of the burden onto future generations.

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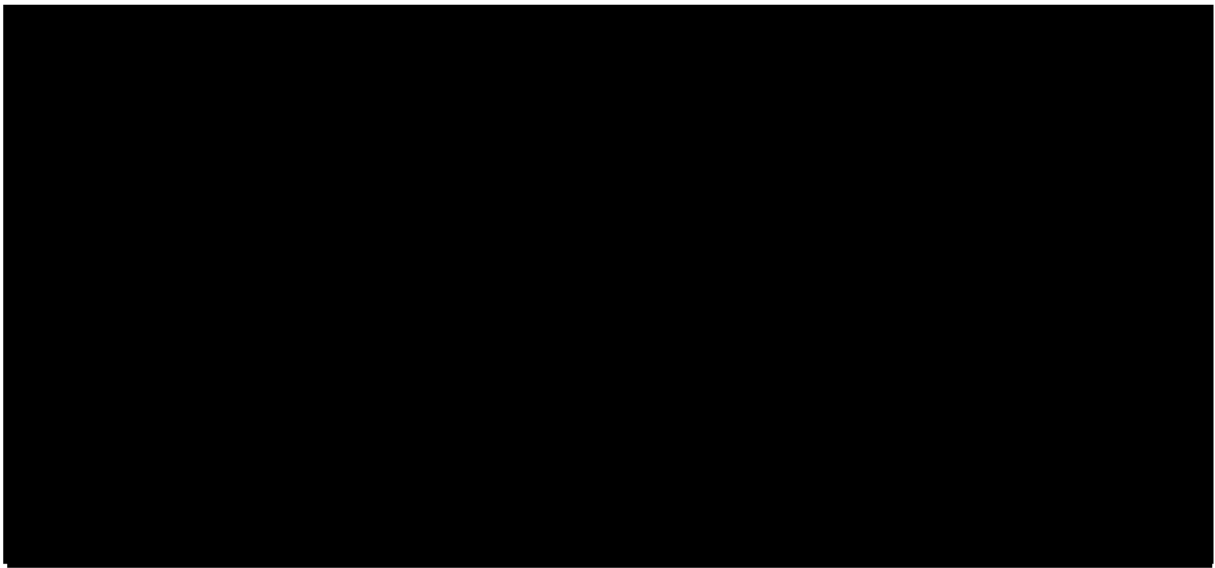
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## Making the plan financeable – making adjustments to WACC

To bridge the remaining financeability gap, we consider that a change to the cost of capital is also required to address the financeability challenges highlighted in this Annex and to ensure that equity returns (post financing and tax) are sufficient to attract the equity investment required.

**Table 9.14: Mitigating action - increasing the regulatory WACC settlement.**

<b>Action</b>	Changes to Ofgem’s working assumptions for equity return and debt allowances in ED2 would result in a direct improvement in credit ratios and support the financeability assessment.
<b>Base position</b>	The Actual Plan model includes Ofgem’s working assumptions only.
<b>Considerations and implications</b>	We expect to be under-funded on the debt allowance by approximately £90-95mm in ED2. This is a direct consequence of Ofgem adopting an unadjusted Notional company approach. While this may be an appropriate starting point for companies with average debt costs, where the methodology leads to financeability issues, we believe Ofgem should consider adopting a more bespoke methodology and/or adjustment mechanism(s).
<b>Proposal and impact</b>	We have included Annex 28C Alternate Cost of Capital that discusses in the detail the issues we perceive with the current cost of capital allowance and the options available to Ofgem to alleviate our financeability challenges.

### Managing in uncertainty

Absent these mitigations, the business will need to be run on a short-term basis, with a focus on cashflow. This is because the business would need to ensure that, in practice, it maintained sufficient headroom against the various ratios tracked by the ratings agencies.

In respect of the Interest Cover Ratios this would involve managing the level of operating expenditure to match, reasonably within any given financial year, the actual revenues being received. As the actual revenues levels vary according to demand over the network (such as happened in 2020), and operating costs, being mostly support costs, tend to be more fixed, this would mean that external variable costs that can be controlled quickly, would have to be disproportionately impacted. An individual year’s results would tend to be less important than the trend, but this constraint will nevertheless have an impact on the business.

Regarding gearing levels, the Actual model assumes no dividends to shareholders. Dividends would normally be able to be flexed where cashflow is constrained by gearing levels. The particular concern



during ED2 is that rising investment demand is in part driven by load growth (to support the move to Net Zero) and this growth could materialise sooner than we have planned. With no dividends forecast, the normal ability to flex equity levels is not available and our ability to respond to a more rapid Net Zero scenario is contingent on us being able to attract new equity investment.

As noted elsewhere in our submission (Annex 29, Uncertainty Mechanisms), our investment capacity is critically dependent on the design of the Uncertainty Mechanisms (UM) that we have proposed. These have to ensure the provision of debt and customer funding at the same time that payment for investment is required. If the UM design is inadequate (for example, by mirroring the ED1 load mechanism), then this capacity would be reduced by almost 80%, putting further strain on the financeability of the company.

Both of these issues have to be considered in the light of the requirement to fix prices 15 months in advance, based upon a demand forecast that will be very difficult to forecast up to 27 months in advance, at a time when electricity usage is likely to be less predictable than it has been recently (ignoring the impact on demand of COVID in 2020) as a result of changes due to Net Zero challenges.

As a consequence of this potential impact, we will need to re-run our financeability tests once the design and operations of the Uncertainty Mechanisms are set by Ofgem.

## 10 Allowed Revenue and Customer Bill Impact

- This section considers the allowed revenue and customer bill impact arising on our ED2 plan, using Ofgem’s working assumptions for the cost of capital.

### Key points

- Using Ofgem’s working assumptions, our ED2 bill is forecast at £77.26, being a 14% reduction on the ED1 average.
- We consider an upper range for the potential bill impact associated with addressing our financeability challenges as £7.54<sup>1</sup>. Consequently, even at this point in the range, our customers would still see a significant saving of £4.95 per year (5.5%) over ED1.

The RIIO-ED2 process sets our allowed revenue for the period 1st April 2023 to 31st March 2028. This revenue can be broken down into:

- (1) RAV Revenue: this is revenue associated with capital investment which determines the level of our RAV (regulated asset value) for which we receive revenues;
  - a. depreciation, to share the cost of the asset across customers during the asset’s lifetime
  - b. allowed return for the investment made, both in terms of shareholder investment (equity) and the cost of borrowing
- (2) Operational Revenue: this is revenue related to day to day running of the network and pays for a wide variety of items including network operation and maintenance, business rates and corporation tax

### Allowed Revenue Under Ofgem's Working Assumptions

Below is an annual breakdown of our projected allowed revenues for ED2, based on the base case assumptions. This analysis uses forecast actual, rather than notional, revenues, i.e. takes account all the building blocks of allowed revenue and thus represents the revenue that will be used to calculate customer bills.

**Table 10.1: Allowed revenue summary for Actual model**

£m (20/21 prices)	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Av. Last 3 Years ED1	ED2 Av.	% Change
Fast pot expenditure	85.4	90.8	86.5	113.1	115.1	117.0	109.3	108.3	87.6	112.6	28.5%
Non-controllable opex	54.4	56.6	61.0	55.6	50.4	50.2	49.1	49.1	57.3	50.9	-11.2%
RAV depreciation	160.7	158.2	156.2	152.7	149.0	145.8	141.2	139.9	158.3	145.7	-8.0%
Return	61.3	60.3	59.0	63.9	65.2	66.2	66.6	66.6	60.2	65.7	9.1%
Equity issuance cost	-	-	-	4.8	-	-	-	-	-	1.0	-
Base revenue DARTs	18.4	14.6	13.6	-	-	-	-	-	15.6	-	-
Tax allowance	20.7	20.8	16.9	27.2	22.4	19.7	13.7	11.7	19.5	18.9	-0.0%
ED2 Outperformance (0.25bps) and other revenue allowance	-	-	-	9.0	8.2	7.1	7.1	7.1	-	7.7	-
BPI and IQI Additional income	1.7	1.8	1.7	-	-	-	-	-	1.8	-	-
											100.0%
<b>Recalculated base revenue</b>	<b>402.7</b>	<b>402.9</b>	<b>395.0</b>	<b>426.2</b>	<b>410.3</b>	<b>406.0</b>	<b>386.8</b>	<b>382.7</b>	<b>400.2</b>	<b>402.4</b>	<b>0.0%</b>
Forecast updates due to timing of price setting process	29.1	25.4	25.7	-	-	-	-	-	26.7	-	-
ED1 MOD term and true-ups	-11.8	-16.5	-30.9	-8.7	-16.4	-	-	-	-19.7	-5.0	-74.6%
ED1 Incentives	24.6	25.4	24.6	22.8	23.3	-	-	-	24.9	9.2	-63.1%
Correction factor	-9.3	-18.2	29.4	0.9	-13.2	-	-	-	0.7	2.5	257.1%
Revenue raised outside CDCM	-18.5	-16.3	-17.0	-16.7	-16.1	-15.9	-15.1	-15.0	-17.3	-15.7	0.1%
<b>Total forecast revenue for charging</b>	<b>416.9</b>	<b>402.7</b>	<b>426.8</b>	<b>424.5</b>	<b>387.9</b>	<b>390.1</b>	<b>371.7</b>	<b>367.7</b>	<b>415.5</b>	<b>388.4</b>	<b>-6.5%</b>

### The average domestic bill impact of our ED2 plan

The bill impact presented below follows Ofgem's financial model approach to estimating the ED2 bill calculation. To forecast ED2 domestic bills, the actual 2023 ED1 'revenue to typical domestic bill ratio' is calculated using actual information from the model (CDCM) used in the bill setting process. The FY23 ratio is then applied to ED2 forecast allowed revenues to forecast equivalent domestic bills.

The average annual bill for our domestic customers in ED1 is forecast at £89.75 (2020/21 prices).

Based on Ofgem’s working assumptions for the debt allowance and equity return, and ignoring any tax clawback, the forecast average bill for our domestic customers in ED2 would be £77.26 (2020/21 prices), a decrease of £12.49 (13.9%).

As highlighted above, we believe that we face significant financeability challenges under these working assumptions. While lower returns and allowances may provide a short-term benefit in bills, we do not believe the reduction in investor returns proposed by Ofgem is in the long-term interests of our customers and it risks being offset by larger bill rises in ED3 and ED4.

We consider an upper range for the potential bill impact associated with addressing our financeability challenges as £7.54<sup>46</sup>. Consequently, even at this point in the range, our customers would still see a significant saving of £4.95 per year (5.5%) over ED1.

**Table 10.2: Customer bill summary**

2020/21 prices	Domestic Customer Bill (£)
ED1 average per annum	89.75
ED2 average (before framework remedies) per annum	77.26
ED2 vs ED1 reduction	(12.49)
Percentage reduction (%)	(13.9)%
Impact of moving to 65% regulatory capitalisation rate	2.44
Impact of maintain notional gearing at 65% <sup>47</sup>	(0.09)
ED2 average (after framework remedies) per annum	79.60
ED2 vs ED1 reduction	(10.15)
Percentage reduction (%)	(11.3)%

Our business plan reflects a significant change in investment. Including our proposal for framework changes, we are able to deliver this for a bill of £79.60, still £10.15 below/over our average bills in ED1.

We believe this represents excellent value for our customers, while also providing the financial security and returns needed to attract this critical investment.

<sup>46</sup> The two framework changes recommended would cost £2.35, with the upper range in respect of cost of capital options (as discussed in Annex 28C Alternate Cost of Capital) would cost £5.19

<sup>47</sup> Bill impact has been modelled assuming no change in WACC. If our proposal to maintain gearing at 65% is accepted, Ofgem would need to calibrate appropriate debt allowance and equity return values on this basis, which may lead to a different bill impact

## 11 Pensions

- This section summarises the pensions assumptions included in our ED2 plan.

### Key points

- In conjunction with the Trustees, we have adopted the same conservative approach to risk management of the Scheme's assets and liabilities as we have taken with our own financing.
- As a consequence, investment outperformance has been used to reduce scheme risk.
- The Scheme is approximately 95% hedged to interest rate risk and approximately 90% hedged to inflation. Around 50% of the Scheme's liabilities have been subject to a buy-in removing all risk from this element, including longevity.
- The current deficit repair contributions are one of the lowest in the sector
- We expect that the defined benefit scheme deficit will be minimal by the end of ED1, at a low level of unhedged risk, and therefore are forecasting nil payments and allowances across ED2
- There will be approximately 1,950 active members in our Pension Scheme at the start of ED2.
- This includes some 450 defined benefit members, with the employer contributions towards future benefit accrual averaging 47 % across ED2.

All Company employees are offered membership of the Electricity Supply Pension Scheme (ESPS), a pension scheme originally set up before privatisation, although newer members are on defined contribution arrangements within the ESPS. Inevitably, due to privatisation, changes to the business and general UK trends, our scheme now has a number of different sections, notably those for electricity protected persons, former employees of United Utilities, and a defined contribution section for newer joiners. The ESPS itself has a governing employer and trustee body, with each employer member sponsoring its own ring fenced "group". All the pension groups are written under UK trust law, and have trustees separate to those in the central trustee body. The employers therefore have the same obligations, with the trustees, to operate their group as would trustees of other occupational trust-based pension schemes.

As with many UK employers, we closed access to the defined benefit pension sections, in our case in 2006. Since then, new joiners to the business, other than protected persons who can move between industry defined benefit schemes, have been offered a competitive defined contribution arrangement.

The Company has always sought to work collaboratively with the pension trustees. Whilst the Company and trustees are regulated by different bodies, we believe this collaborative approach is most likely to give the best outcome for all our stakeholders.

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## Pension Deficit

In conjunction with the Pension Trustees, we have adopted the same risk averse approach to the Pension Scheme investment and funding position. We have taken the opportunity of any outperformance in, for example, investment returns, to reduce risk in the Scheme. As a consequence, we are approximately 95% interest rate hedged and approximately 90% inflation hedged, and have completed a pensions buy-in with a major insurance company for around 50% of the Scheme's liabilities, including mortality (longevity) risk.

The Scheme is valued for funding purposes every three years, the last such valuation being as of 31 March 2019. At this point, the Scheme had assets of £1,409 million, and the actuary calculated "technical provisions" (the actuary's prudent estimate of liabilities) of £1,478 million, making an expected deficit of £69 million. Overall, on a "technical provisions" basis this represented a funding level of 95%, one of the highest in the sector. We currently pay approximately £19 million per annum in deficit repair contributions.

Our deficit repair costs are one of the lowest in the sector, representing around £3.30 per annum of the domestic customer bill<sup>48</sup>.

The latest estimate for the Scheme as at 31 March 2021 indicated a funding level still at 95%, some £30 million behind plan. This movement was caused by market movements, particularly lower interest rates and higher inflation forecasts, which impacted despite the high level of hedging in place.

Ofgem have committed to the customer funding of defined benefit pension scheme deficits, with the RIIO price control including funding allowances for Pension Scheme Established Deficits (PSEDs) which are the deficits relating to pre-2010 employee service. Based on the latest triennial valuation (March 2019), we expect that we will have paid off the defined benefits established deficit by the end of ED1 (the "Incremental" element for post 2010 services had a small surplus). Therefore, we are forecasting nil PSED payments and allowances across ED2. However, we will continue to monitor this position, notably at the next triennial valuation which will be as of March 2022.

### Key pensions assumptions

The forecast ongoing pensions costs contained in our plan assume that, at the start of RIIO-ED2, there will be approximately 1,950 active members in our pension scheme, including approximately 450 with defined benefit membership.

We forecast that employer contributions towards future benefit accrual for the defined benefit members will be 45% at the start of FY24, rising to 49% by the end of ED2. We highlight that current market conditions indicate that employer contributions will need to rise further to 60% by the end of ED3, although the cost will be offset by reducing numbers of active members.

Our provisional estimates of pension costs rolling forward in ED2 are also based on the latest actuarial assumptions, manpower projections, and the application of the Pensions Deficit Allocation Methodology (PDAM).

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<sup>48</sup> Calculated in accordance with Ofgem BPFM bill methodology

## 12 Taxation

- This section summarises the tax assumptions included in our ED2 plan.

### Key points

- ENWL was awarded the Fair Tax Mark in July 2020.
- We are engaged with Ofgem to reconsider the application of the tax clawback in RIIO-ED2. We do not believe that creating penalties to force a reduction in gearing ratios, at the same time as increased equity is required to invest in the network, and where equity returns are insufficient to fund this reduction from cashflows, is in the interests of investor confidence, and therefore it is not in customers' interests.
- Our Actual Business Plan includes adjustments to the opening ED2 tax pool balances in relation to 2021 Budget announcements, including first year allowances and super deductions adopting a common approach agreed with Ofgem. We have also modelled ED2 tax clawback for our ratio analysis.

For our business plan, the modelling of the tax allowance reflects Ofgem's decision to continue with the notional allowance with added protections.

The methodology regarding calculating the notional allowance remains the same as ED1, with the exception of the introduction of variable values for tax pool allocations, capital allowances rates and corporation tax rates. Ofgem has confirmed that the ED1 closing tax pool balances will be rolled forward (with an adjustment being made to incorporate the impact of the Type B events in ED1 as a result of the super-deductions and first year allowances) as opposed to resetting the opening pool balance based on the statutory tax computations.

Ofgem stated in the GD&T final determinations that the following additional protections will be in place for RIIO-GD&T2:

- **Tax trigger for Type B events:** the mechanism from ED1 will be retained for Type B events (changes to legislation, the setting of legal precedents through case law, changes to HMRC interpretation of legislation and changes in accounting standards)
- **Tax clawback:** Ofgem proposed that the mechanism from ED1 is retained. In line with the methodology proposed for the gas distribution companies, we anticipate a gradual decrease in the notional gearing level used in the gearing level test from 65% to 60% to allow time for companies to adjust to the lower level of gearing for tax clawback purposes.

*We note the Actual model shows rising gearing levels in ED2, even without any dividend payments being made. The model also highlights an approximate £90-95m underfunding position on our debt costs. As such, despite operating comfortably below notional gearing in ED1, we are now faced with the real prospect of triggering the tax clawback in ED2 and suffering financial penalties, if we cannot attract an equity injection or deliver significant levels of operational outperformance. We do not feel it is appropriate effectively to force companies to comply with changes to the Notional company structure in this way, adding further financeability challenges to networks. We would encourage Ofgem to reconsider the application of the tax clawback in RIIO-ED2, for example limiting its operation such that it is not triggered if networks do not pay dividends in the price control period.*

- **Tax reconciliation:** requirement to submit an annual tax reconciliation between the notional allowance and actual tax liability per the latest Corporation Tax returns
- **Board assurance statement:** requirement to submit a board assurance statement alongside the tax reconciliation, providing assurance over the appropriateness of the values in the reconciliation
- **Tax review:** this mechanism will enable Ofgem to formally review and, if necessary, adjust the company's tax allowances during the course of ED2.

We welcome the decision to move to variable values for tax pool allocations, capital allowances and corporation tax rates. The introduction of variable rates will make the tax allowance calculation more consistent with the statutory tax calculation and will simplify the annual tax reconciliation required to be submitted as part of the additional protections.

Although there will be a difference in the tax pool opening balances between the PCFM and the statutory tax computations, we agree with the approach of rolling forward capital allowances balances from ED1, as this will ensure consistency with the treatment of capital allowances in previous price controls. The difference will be reflected in the annual tax reconciliation.

Following the introduction of first year allowances and super-deductions for FY22 and FY23, we now have an approach to model the carried forward tax pool balances at the end of ED1 following ENA discussions with Ofgem. The first-year allowances and super-deductions will be a Type B tax trigger event in ED1. Initial calculations have been made to forecast the impact on FY22 and FY23 and the adjustment required to the carried forward tax pool balances at the end of ED1. We also note that the tax trigger events will need to be recalculated once the statutory tax computations have been finalised for FY22 and FY23, which will also have a potential impact on the tax pool opening balances for ED2.

We are in support of additional transparency and will provide Ofgem with statutory tax returns as appropriate, alongside the proposed annual tax reconciliation. We await the draft reconciliation template and look forward to working with Ofgem on its development.

We do have concerns over the discretionary basis on which Ofgem can open a tax review, but we note Ofgem's reassurance that it will only be triggered if there are unexplained material differences in the tax reconciliation that are left unexplained after the preliminary assessment.

In July 2020, we attained the Fair Tax Mark. This demonstrates that ENWL pays the right amount of tax, at the right time and in the right place. We support the wider adoption of the Fair Tax Mark to provide additional comfort to Ofgem and other stakeholders, although we note that Ofgem is minded to not to require the Fair Tax Mark certification for all networks in ED2.



## 13 Key assumptions

- This section summarises the key finance assumptions included in our ED2 plan.

### **Key points**

- We have included an additional 25bps cost on new debt financing costs for Actual company debt costs, over the iBoxx Utilities forward rate, to reflect Ofgem’s working assumption for additional financing costs and avoid any systematic modelled outperformance on new debt costs.
- We have included the 25bps output incentive assumption in our financeability assessment although we consider there to be significant uncertainty over its delivery. We note that rating agencies may not include this outperformance in their assessments.
- Capitalisation rates are set at our “natural” rate of 68% in our Actual model. We include a recommendation to reduce this to 65%, being 3 ppts below our natural rate, in ED2, which is reflected in our FW Remedy model. Together with maintaining notional gearing at 65%, this will help alleviate the requirement for new equity issuance in ED2.
- We propose no change to the regulatory depreciation policy of 45 years.

This section sets out the key financial assumptions underlying our financeability assessment of both the Ofgem Notional Company and the Ofgem Actual Company. In Ofgem’s business plan guidance, assumptions have been prescribed for the majority of parameters in modelling the base cases, of which we have complied with. Full details of Ofgem’s working assumptions and requirements for financeability testing can be found in appendix A.

Table 13.1: Key assumption summary

Parameters	Ofgem Notional Company Model Working Assumptions	Ofgem Actual Model Working Assumptions
Debt Allowance (methodology)	17 year rolling average of the iBoxx Utilities index + 25bps additional costs of borrowing	
Debt Allowance (real, CPIH)	2.09%	
Expected Equity Return (real, CPIH)	4.65%	
Allowed versus Expected adjustment (real, CPIH)	(0.25%)	
Allowed Equity Return (real, CPIH)	4.40%	
WACC (real, CPIH)	3.01%	
Notional gearing	60%	
Debt costs	Equal to debt allowances	Actual Embedded Debt Costs + modelled new debt costs (at nominal iBoxx Utilities + 25bps)
Proportion of inflation linked debt	25%	Approximately 60% at start of ED2
Output Delivery Incentives	25bps	25bps
Indexation	Immediate transition to CPIH	
Totex Allowances	Equal to totex spend forecasts for ED2	
Capitalisation Rates	68% (natural rate)	
Depreciation Rates	45 years, straight line	
Dividend Yield	3%	0%
Equity issuance costs	5%	n/a
Tax allowances	Equal to Notional company tax costs, adjusted for tax clawback (where triggered)	

### Cost of Capital

The cost of capital is the rate of return that investors receive for their investment and which is charged to customers for use of the distribution network. For our Actual model we have remained consistent with Ofgem's RIIO-ED2 working assumptions and assessed financeability against returns to equity of 4.40% (real, CPIH) and a debt allowance of 2.09% (real, CPIH).

Ofgem has applied a -0.25% 'Allowed versus Expected' adjustment to its CAPM derived cost of equity of 4.65%. This results in an allowed equity return of 4.40%. We do not agree with the outperformance wedge (which has been successfully challenged by the GD&T licensees in the CMA appeals) and have set out our view on cost of equity in Annex 28C Alternate Cost of Capital.

Ofgem have confirmed that full indexation will be used for ED2, with decisions on the choice of index, how it is calibrated, and additional borrowing costs being made at draft & final determination stages. Ofgem's working assumption for cost of debt allowances is based on a 17-year trailing average of iBoxx GBP Utilities 10yr+ index yields plus 25bps allowance for additional costs of borrowing. This results in an average real allowance of 2.09% across ED2.

This working assumption has been used in the Actual Business Plan model and results in a debt-underfunding of £90-95m across ED2 (excluding £18m of issuance premium amortisation).

The ENWL remedy framework model includes a -3ppts adjustment to the capitalisation rate and a +5ppts increase to gearing and the rationale and impact of these assumption changes is set out in Annex 28C Alternate Cost of Capital.

### Gearing

Notional gearing has reduced from 65% in ED1 to 60% in ED2 per Ofgem's working assumptions. We have commented on the potential implications of this with regard to the tax clawback mechanism in Section 12.

We have also proposed in our remedy framework model a 65% ED2 gearing level in line with ED1.

### Inflation linked debt

The overall debt portfolio of the Ofgem Notional Company Model includes 25% of index linked bonds, as prescribed by Ofgem. By comparison, the Actual Model includes our actual embedded debt portfolio, which includes approximately 60% of index linked debt, post-derivatives, at the start of ED2.

We highlight that, with close to 60% RPI-linked debt, we are significantly more exposed to basis risk associated with the switch to CPIH, than the sector average. We believe an uplift is required to our cost of debt allowance to reflect the cost of managing this risk and we believe it should be awarded to companies based on the actual level of RPI linked debt at the start of ED2. This is discussed further in Annex 28C Alternate Cost of Capital.

### Depreciation and Asset Lives

In RIIO-ED1, asset lives transitioned from a 20-year life to a 45-year life by the end of the period, with depreciation calculated on a straight-line basis. Ofgem have not prescribed a set approach to depreciation for ED2, but require that any proposed changes to current are appropriate and justified. Consistent with guidance, we have modelled regulatory depreciation on the ED1 approach of straight-line depreciation with 45-year asset lives as our base assumption, as we do not have evidence to support a change to this approach.

We are not proposing to adjust asset lives as a means to improve financeability. This will maintain the intended economic principle of intergenerational fairness. In addition, as previously discussed in section 9, reductions to the regulatory depreciation rate will not benefit the AICR in the view of the credit rating agencies and may cause sustainability issues with long-term cash flows and are, therefore, not a viable financeability solution.

## Capitalisation Rates

We meet our day-to-day operating costs through the proportion of our expenditure which is funded from revenue (cash) each year. The capitalisation rate is the proportion of expenditure that is funded over the long term (i.e. capital expenditure).

As a single license DNO, our operating costs comprise a larger proportion of our total cost base and therefore drive a comparatively lower capitalisation rate than that of multi-license groups, where operating costs are diluted by proportionately higher capital expenditures.

As a starting position, we would agree with Ofgem that the regulatory capitalisation rate should be broadly reflective of the profile of the underlying spend. Disparity between the regulatory and statutory capitalisation rates can be distortive to ratios, and we note that Moody's and other agencies will specifically adjust the AICR ratio to eliminate any "excess fast money" being any misalignment between the regulatory and statutory capitalisation rates. Moody's state that "the adjusted ICR seeks to normalize for different regulatory approaches to the capitalization and depreciation of networks' expenditure, which affects the timing of their cash flow."<sup>49</sup> Therefore, there is minimal benefit to credit ratios to moving the regulatory capitalisation rate away from the statutory rate.

Our Actual model assumes a regulatory capitalisation rate of 68%, consistent with ED1. This is in line with our estimated statutory capitalisation rate for ED2.

Given the financeability challenges arising from Ofgem's cost of capital proposals, any increase in the regulatory capitalisation rate above 68% would result in us suffering rapidly increasing gearing levels over ED2, even without payment of any dividends in this period. Therefore, we do not consider an increase in our regulatory capitalisation rate to be appropriate.

However, as part of our remedy framework model we have proposed a reduction in regulatory capitalisation rate to 65%, being 3 ppt below our natural rate. This is proposed in combination with the maintenance of the gearing level at the ED1 level of 65%. Further details of the analysis and justification can be found under Section 9 above as well as the Annex 28C Alternate Cost of Capital.

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<sup>49</sup> Moody's Rating Methodology: Regulated Electric and Gas Networks, March 2017

### Dividend Yield

Our Actual Model assumes no dividend payments in ED2 and as such the dividend yield is nil per cent.

We have very strong concerns over a price control that does not facilitate dividend payments to equity without either creating rising gearing levels, or cutting back on the level of investment required by our stakeholders.

A nil dividend yield is, in itself, a challenge to attracting future patient equity investment.

### Equity Issuance

The Actual model does not assume an equity injection in ED2. Equity issuance will be considered again based on the final settlement and operational outperformance levels in the period.

## Appendix A - Ofgem Modelling Requirements & Working Assumptions

**Table A1: Ofgem’s working assumptions as set out in the Sector Specific Methodology Decision:**

Price Base	Component	Year-end 31 <sup>st</sup> March					Average
		2024	2025	2026	2027	2028	'24-'28
CPIH	Allowed return on debt	2.424%	2.277%	2.108%	1.910%	1.715%	2.087%
	Cost of equity	4.612%	4.634%	4.651%	4.669%	4.686%	4.650%
	Expected Outperformance	0.250%	0.250%	0.250%	0.250%	0.250%	0.250%
	Allowed return on equity	4.362%	4.384%	4.401%	4.419%	4.436%	4.400%
	Notional gearing	60%					60%
	Allowed return on capital	3.199%	3.120%	3.025%	2.913%	2.803%	3.012%

**Table A2: Ofgem’s Notional company working assumptions as set out in the Business Plan Guidance document**

Parameter	Working Assumption Level
Notional company proportion of inflation linked debt	25%
Notional company assumed equity issuance cost (as a percentage of modelled equity issued)	5%
Notional company assumed dividend (as a percentage of equity RAV)	3%

**Table A3: Ofgem’s guidance for modelling the Notional company as set out in the Business Plan Guidance document**

Company Financeability Assessments – Ofgem Requirements	
Notional company	
1)	Allowed return (WACC) as set out in the RIIO-ED2 Sector-Specific Methodology Consultation working assumptions
2)	Additional expected return of 0.25% of equity portion of RAV representing an earned amount for the Notional company in each year of RIIO-ED2.
3)	Totex allowances are assumed to equal licensee totex cost forecast for RIIO-ED2.
4)	Net debt is reset to the working assumption notional gearing level (60% net debt to RAV) at the start of RIIO-ED2, with any opening de-gearing assumed to be achieved by an equity injection or re-gearing assumed to be achieved by debt issuance.
5)	Debt costs are assumed to equal the working assumption for allowances set out in the RIIO-ED2 Sector-Specific Methodology Consultation.
6)	25% of the licensee’s debt is assumed to be CPIH linked (with a scenario test showing an alternative of 25% RPI-linked debt).
7)	Tax allowances are equal to tax costs, as calculated using the BPFM.
8)	Immediate transition to CPIH from 1st April 2023 for WACC allowance and RAV calculations.
9)	Opening RAV to be based on totex forecasts for RIIO-ED1 as provided in BPDT submission, and inclusive of any known logged-up adjustments (for example, the effect of site disposals).
10)	Lagged revenue impacts arising from RIIO-ED1 are excluded (e.g. inflation true-up, cost pass-through adjustments, output incentive revenue and over / under collection of revenue).
11)	Depreciation rates to be proposed by the licensee based on useful economic lives and/or evidenced justification.
12)	Capitalisation rates to be proposed by the licensee based on operational practice to date, consideration of expected levels of opex and capex, balance of affordability, financeability and customer support.

13)	Dividend yield working assumption for modelling purposes of 3%.
14)	Equity issuance transaction costs working assumption of 5% of any amount forecast to be issued.

**Table A4: Ofgem’s guidance for modelling the Actual Capital structure company as set out in the Business Plan Guidance document**

Company Financeability Assessments – Ofgem Requirements	
Actual Capital Structure company	
1)	Allowed return (WACC) as set out in the RIIO-ED2 Sector-Specific Methodology Consultation working assumptions
2)	Additional expected return of 0.25% of equity portion of RAV representing an earned amount for the actual company in each year of RIIO-ED2.
3)	Totex allowances are assumed to equal licensee totex cost forecast for RIIO-ED2.
4)	Net debt to reflect actual company forecast net debt position for each year, as completed in the finance tables of the BPDTs.
5)	Debt costs to reflect actual company forecast for debt costs, as set out in the finance tables of BPDTs.
6)	Proportion of inflation linked debt and proportion of interest expense that is principal inflation accretion in each year to reflect actual company forecast, as set out in the finance tables of BPDTs.
7)	Tax allowances are equal to Notional company tax allowances.
8)	Modelled forecast actual tax costs, incorporating forecasted financial information as per the BPDTs.
9)	Immediate transition to CPIH from 1st April 2023 for WACC allowance and RAV calculations.
10)	Opening RAV to be based on totex forecasts for RIIO-ED1 as provided in BPDT submission, and inclusive of any known logged-up adjustments (for example, the effect of site disposals).
11)	Lagged revenue impacts arising from RIIO-ED1, where these are expected, should be



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	included if relevant (e.g. such as MOD from related RIIO-ED1 revenues, legacy revenue adjustments, forecasts on other non-base revenue items).
12)	Depreciation rates to be proposed by the licensee based on useful economic lives and/or evidenced justification.
13)	Capitalisation rates to be proposed by the licensee based on operational practice to date, consideration of expected levels of opex and capex, balance of affordability, financeability and customer support.
14)	Dividend and equity issuance to reflect actual company dividend policy and forecast equity issuance, as set out in finance tables of the BPDTs.
15)	Equity issuance transaction costs as forecast by licensee for forecast equity issuance.

## Appendix B – Glossary

**Table B1: Glossary**

AICR	Adjusted Interest Cover Ratio
BPDT	Business Plan Data Template
BPFM	Business Plan Financial Model
Capex	Capital Expenditure
CAPM	Capital Asset Pricing Model
CMA	Competitions and Markets Authority
DNO	Distribution Network Operator
EIB	European Investment Bank
ENA	Energy Networks Association
ENWL	Electricity North West Limited
ESPS	Electricity Supply Pension Scheme
FD	Final Determination
FFO	Funds From Operations
GD&T	Gas Distribution & Transmission
Opex	Operating Expenditure
PCFM	Price Control Financial Model
PMICR	Post Maintenance Interest Cover Ratio
PR19	Price Review 2019
PSED	Pension Scheme Established Deficit
RAM	Return Adjustment Mechanism
RAV	Regulatory Asset Value
RCF	Retained Cash Flow
RoRE	Return on Regulated Equity
SSMC	Sector Specific Methodology Consultation
SSMD	Sector Specific Methodology Decision
Totex	Total Expenditure
WACC	Weighted Average Cost of Capital

## 9 Making ENWL Financeable

- This section considers the mitigating actions available to deliver a financeable plan.

### Key points

- We concluded in Section 7 that the business plan is not financeable based upon Ofgem’s current proposed working assumptions for the cost of capital.
- In this section, we consider a range of mitigating actions available to address our financeability challenges.
- We recommend two changes to the regulatory framework:
  - **Decrease regulatory capitalisation rate to 65% from 68%.** This is approximately 3ppt below our forecast statutory capitalisation rate; and
  - **Maintain notional company gearing at 65%.** This keeps the proportion of equity and debt financing of the business at ED1 levels.
- These changes would improve our ED2 cash flows and provide some modest capacity for us to respond to a faster decarbonisation path without needing to attract new equity investment, in effect reducing the impact of the financeability problem.
- However, whilst the cash and equity funding benefits of these changes are helpful, these framework changes do little to alleviate the underlying financeability issue – being the risk that we could fail to attract equity investment and raise debt finance when needed.
- We have also considered whether it is appropriate for existing shareholders to inject cash into the business to restructure our debt financing and reduce the projected under-funding over ED2 and beyond. Noting that our Business Plan already includes no dividend payments to shareholders in ED2, we have decided it is not appropriate to propose a shareholder injection as a remedy.
- In conclusion, to address our financeability challenges and the risk posed to net zero delivery, we believe that, together with the recommended framework changes, it is necessary for Ofgem to set a cost of capital allowance in ED2 that is higher than its working assumptions. This is discussed further in Annex 28C Alternate Cost of Capital.

### Addressing the financeability gap

As detailed in sections 7 and 8, we believe that both the Notional Company and the Actual Company would be downgraded to Baa2/BBB in RIIO-ED2 under Ofgem’s working assumptions for Cost of Capital.

We also believe that under certain stress scenarios, it is likely that the Actual Company would be downgraded to sub-investment grade.

## 10 Allowed Revenue and Customer Bill Impact

- This section considers the allowed revenue and customer bill impact arising on our ED2 plan, using Ofgem’s working assumptions for the cost of capital.

### Key points

- Using Ofgem’s working assumptions, our ED2 bill is forecast at £77.26, being a 14% reduction on the ED1 average.
- We consider an upper range for the potential bill impact associated with addressing our financeability challenges as £7.54<sup>1</sup>. Consequently, even at this point in the range, our customers would still see a significant saving of £4.95 per year (5.5%) over ED1.

The RIIO-ED2 process sets our allowed revenue for the period 1st April 2023 to 31st March 2028. This revenue can be broken down into:

- (1) RAV Revenue: this is revenue associated with capital investment which determines the level of our RAV (regulated asset value) for which we receive revenues;
  - a. depreciation, to share the cost of the asset across customers during the asset’s lifetime
  - b. allowed return for the investment made, both in terms of shareholder investment (equity) and the cost of borrowing
- (2) Operational Revenue: this is revenue related to day to day running of the network and pays for a wide variety of items including network operation and maintenance, business rates and corporation tax

## 11 Pensions

- This section summarises the pensions assumptions included in our ED2 plan.

### **Key points**

- In conjunction with the Trustees, we have adopted the same conservative approach to risk management of the Scheme's assets and liabilities as we have taken with our own financing.
- As a consequence, investment outperformance has been used to reduce scheme risk.
- The Scheme is approximately 95% hedged to interest rate risk and approximately 90% hedged to inflation. Around 50% of the Scheme's liabilities have been subject to a buy-in removing all risk from this element, including longevity.
- The current deficit repair contributions are one of the lowest in the sector
- We expect that the defined benefit scheme deficit will be minimal by the end of ED1, at a low level of unhedged risk, and therefore are forecasting nil payments and allowances across ED2
- There will be approximately 1,950 active members in our Pension Scheme at the start of ED2.
- This includes some 450 defined benefit members, with the employer contributions towards future benefit accrual averaging 47 % across ED2.

All Company employees are offered membership of the Electricity Supply Pension Scheme (ESPS), a pension scheme originally set up before privatisation, although newer members are on defined contribution arrangements within the ESPS. Inevitably, due to privatisation, changes to the business and general UK trends, our scheme now has a number of different sections, notably those for electricity protected persons, former employees of United Utilities, and a defined contribution section for newer joiners. The ESPS itself has a governing employer and trustee body, with each employer member sponsoring its own ring fenced "group". All the pension groups are written under UK trust law, and have trustees separate to those in the central trustee body. The employers therefore have the same obligations, with the trustees, to operate their group as would trustees of other occupational trust-based pension schemes.

As with many UK employers, we closed access to the defined benefit pension sections, in our case in 2006. Since then, new joiners to the business, other than protected persons who can move between industry defined benefit schemes, have been offered a competitive defined contribution arrangement.

The Company has always sought to work collaboratively with the pension trustees. Whilst the Company and trustees are regulated by different bodies, we believe this collaborative approach is most likely to give the best outcome for all our stakeholders.

## 12 Taxation

- This section summarises the tax assumptions included in our ED2 plan.

### Key points

- ENWL was awarded the Fair Tax Mark in July 2020.
- We are engaged with Ofgem to reconsider the application of the tax clawback in RIIO-ED2. We do not believe that creating penalties to force a reduction in gearing ratios, at the same time as increased equity is required to invest in the network, and where equity returns are insufficient to fund this reduction from cashflows, is in the interests of investor confidence, and therefore it is not in customers' interests.
- Our Actual Business Plan includes adjustments to the opening ED2 tax pool balances in relation to 2021 Budget announcements, including first year allowances and super deductions adopting a common approach agreed with Ofgem. We have also modelled ED2 tax clawback for our ratio analysis.

For our business plan, the modelling of the tax allowance reflects Ofgem's decision to continue with the notional allowance with added protections.

The methodology regarding calculating the notional allowance remains the same as ED1, with the exception of the introduction of variable values for tax pool allocations, capital allowances rates and corporation tax rates. Ofgem has confirmed that the ED1 closing tax pool balances will be rolled forward (with an adjustment being made to incorporate the impact of the Type B events in ED1 as a result of the super-deductions and first year allowances) as opposed to resetting the opening pool balance based on the statutory tax computations.

Ofgem stated in the GD&T final determinations that the following additional protections will be in place for RIIO-GD&T2:

- **Tax trigger for Type B events:** the mechanism from ED1 will be retained for Type B events (changes to legislation, the setting of legal precedents through case law, changes to HMRC interpretation of legislation and changes in accounting standards)
- **Tax clawback:** Ofgem proposed that the mechanism from ED1 is retained. In line with the methodology proposed for the gas distribution companies, we anticipate a gradual decrease in the notional gearing level used in the gearing level test from 65% to 60% to allow time for companies to adjust to the lower level of gearing for tax clawback purposes.

*We note the Actual model shows rising gearing levels in ED2, even without any dividend payments being made. The model also highlights an approximate £90-95m underfunding position on our debt costs. As such, despite operating comfortably below notional gearing in ED1, we are now faced with the real prospect of triggering the tax clawback in ED2 and suffering financial penalties, if we cannot attract an equity injection or deliver significant levels of operational outperformance. We do not feel it is appropriate effectively to force companies to comply with changes to the Notional company structure in this way, adding further financeability challenges to networks. We would encourage Ofgem to reconsider the application of the tax clawback in RIIO-ED2, for example limiting its operation such that it is not triggered if networks do not pay dividends in the price control period.*

## 13 Key assumptions

- This section summarises the key finance assumptions included in our ED2 plan.

### **Key points**

- We have included an additional 25bps cost on new debt financing costs for Actual company debt costs, over the iBoxx Utilities forward rate, to reflect Ofgem’s working assumption for additional financing costs and avoid any systematic modelled outperformance on new debt costs.
- We have included the 25bps output incentive assumption in our financeability assessment although we consider there to be significant uncertainty over its delivery. We note that rating agencies may not include this outperformance in their assessments.
- Capitalisation rates are set at our “natural” rate of 68% in our Actual model. We include a recommendation to reduce this to 65%, being 3 ppts below our natural rate, in ED2, which is reflected in our FW Remedy model. Together with maintaining notional gearing at 65%, this will help alleviate the requirement for new equity issuance in ED2.
- We propose no change to the regulatory depreciation policy of 45 years.

This section sets out the key financial assumptions underlying our financeability assessment of both the Ofgem Notional Company and the Ofgem Actual Company. In Ofgem’s business plan guidance, assumptions have been prescribed for the majority of parameters in modelling the base cases, of which we have complied with. Full details of Ofgem’s working assumptions and requirements for financeability testing can be found in appendix A.