



## We can finance our plan

# 22. We can finance our plan

## Introduction

We have worked with our stakeholders to build a business plan that reflects their expectations and delivers the services they want. This involves infrastructure investment which will be funded through a combination of debt and equity. In line with business plan guidance, we provide detailed analysis and evidence around the financial package in finance annex A22.01. In this chapter, we focus on:

- our sustainable approach to financing;
- the strong regulatory principles which guide our approach;
- setting out our definition of financeability to assess the proposed financial package.

### 1. Our sustainable approach to financing

#### We have a demonstrable and consistent track record in efficiently financing our activities

National Grid Gas Transmission (NGGT) forms part of the National Grid plc group, a publicly owned FTSE100 utility company. The company is owned by our equity investors, a diverse range of largely long-term investors which reflects the broader UK market, including pension funds and individual retail investors, some of whom have held shareholdings for over 20 years.

Management operate the business on behalf of our equity investors in line with the NGGT licence and supported by the regulatory model, investing in assets which will provide benefits to energy consumers over many years.

We have a long track record of funding investment in regulated energy infrastructure. Our scale and the strength of our balance sheet enables us to access a diverse range of financial markets, ensuring that investment can be funded on behalf of consumers, even in periods of macro-economic distress.

Being part of a listed group requires a very high level of transparency of ownership, governance and financial disclosures. We continue to adopt best practice in our disclosures, for example, we have included additional transparency on our economic performance throughout RIIO-1 in our statutory accounts and we are a member of the Accounting for Sustainability network which aims to integrate financial and environmental decision making.

#### NGGT financing strategy is cost efficient for consumers

Based on our business plan submission, around 25% of our annual totex will be funded by customers via in-year revenues and 75% is funded by the company, to be recovered from future customers. This transfers risk from customers to the company, spreading the cost of the long-term investments we make over multiple generations, fairly matching the cost with those that use the network over time.

To optimise the efficiency of raising debt finance, the company funds around 40% of its share of totex from equity investors and 60% from debt investors. This is consistent with management's view of the optimal capital structure to minimise the weighted average cost of capital. It is also consistent with Ofgem's RIIO-2 working assumptions.

Funding sources include:

- reinvestment of profits attributable to equity investors;
- reinvestment of scrip dividends; last year just under 40% of National Grid plc's shareholders elected to reinvest dividends totalling around £600m;
- issuance of new equity in NG plc, e.g. our £3.2bn rights issue in May 2010; and
- raising financing efficiently from debt investors.

Both debt and equity investors provide funding in anticipation of earning a return that is commensurate with the risk they are taking.

Risk arises due to the uncertainty as to whether the future cash flows generated by the company will fully refund the investment and return expected by investors. Whilst our regulatory agreements reduce this risk, its five-year timeframe is much shorter than the current holding period of many of our investors and regulatory asset life of 45 years. Therefore, investors' assessment of the attractiveness of investing in UK regulated energy networks will include a judgement about the long-term quality and stability of the UK regulatory regime and the certainty of recovery of the RAV which represents money due to investors. If investors perceive the risk is too high compared to the return, they will move their money elsewhere, making raising new equity and debt more costly and increasing costs to consumers.

#### We add value for consumers by accessing efficient sources of debt financing to fund large scale investment over the long term

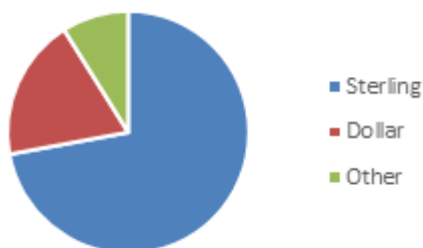
Our business plan assumes that NGGT expects to issue ~£2bn of long-term debt over the next price control period, both to fund capital expenditure and to refinance maturing debt.

Our scale enables access to the debt capital markets which tend to provide the most efficient source of debt financing. The vast majority of our debt is raised in this way and we work hard to ensure debt is issued as efficiently as possible in line with the incentives under RIIO-1. For example, we can issue debt in any one of multiple currencies, using derivatives to manage the ultimate liability into sterling, ensuring we have access to the best value funding available. We have also used a variety of debt products to find new and innovative ways to issue debt including retail price index (RPI) retail bonds.



## We can finance our plan

**Figure 22.01 £3.5bn of debt (pre-derivatives) at 31 March 2019, by currency**



We are a well-known issuer with a clear and distinctive debt investor proposition, reflecting our world-class safety and reliability performance as well as our strong credit rating and financial ratios. Efficient debt funding is incentivised by the regulatory framework and the resulting lower interest rates feed into future revenue allowances for all networks.

We seek to minimise the total interest rate charges to NGGT, whilst managing liquidity risk and maintaining a balanced maturity profile of debt issued that appropriately manages refinancing risk.

### **A strong credit rating minimises our borrowing costs and ensures financial resilience to enable investment to deliver net zero**

From a debt funding perspective, we aim to retain an A3/A-credit rating for NGGT (for the actual company) as this ensures access to a wide range of debt instruments and capital markets at an efficient interest rate. This rating is supported through targeting a Baa1/BBB+ credit rating for the notional company.

We currently support the higher actual company rating through working hard across the capital markets to raise debt at lower interest rates than the regulatory benchmark and through delivering stakeholder outputs at lower totex levels to allowances. These outcomes are incentivised by the regulatory framework because the resulting lower interest rates and totex levels feed into future revenue allowances. With interest rates predicted to increase and lower incentivisation in the RIIO-2 framework, we recognise there is greater risk around achieving A3/A- under this approach in the future, but we are maintaining our target of Baa1/BBB+ for the notional company.

The purpose of targeting a Baa1/BBB+ credit rating for the notional company is both to enable access to an efficient cost of debt and ensure that we are appropriately resilient to future financial shocks, which is important given our role as owners and operators of critical national infrastructure. For example, at a Baa2/BBB rating (one notch below our target rating), a change in RPI to CPI wedge to 50bps would reduce our interest cover nearly to sub investment grade, severely restricting the ability of the notional company to efficiently raise further debt funding. An illustration of the resilience a strong credit rating brings is that during the 2008 global financial crisis, the company was able to maintain debt market access. Following the Lehmann Brothers collapse in September 2008, NGGT increased the size of an existing bond just ten weeks later.

A Baa1/BBB+ credit rating is also consistent with recognised regulatory practice: Ofwat targets Baa1, Ofgem have previously targeted Baa1. It is consistent with the cost of debt allowance (which is an average of A and BBB corporate bonds) and consistent with the vast majority of our peers, with currently only one utility entity in the UK rated BBB or lower. Reducing credit ratings for the energy network would also add additional risk at a time when networks are being asked to invest to meet the governments Net Zero targets when much of the industry is on negative outlook.

### **The lowest cost of investment comes from an equity proposition that appropriately reflects the risks of investing in transmission**

To create a framework that attracts low cost funding to deliver consumer investments it is important to understand how equity investors will assess the attractiveness of the sector, these will include analysis of:

- the risk reward balance considering a lower risk-free rate but higher political and regulatory risks when compared with RIIO-1;
- the relative attractiveness of the risk reward balance compared to similar regimes in other jurisdictions (e.g. USA, EU and Australia);
- the ability of the company to maintain an efficient capital structure over the long term, without the use of short-term financing levers; and
- the ability for the company to maintain its financeability in a range of macroeconomic and operational scenarios

**Figure 22.02 impact of misalignment of the risk-reward balance**

#### **Case Study: PR99 regulatory agreement**

PR99 was a review of water companies' price limits for the period 2000/01 to 2004/05. Ofwat imposed a significant reduction in allowed rate of return compared to the previous price control.

PR99 is remembered for precipitating a 'flight from equity'. There was a sense that the price control put off investment that would have benefited customers and the owner of one company in financial distress was forced to sell up at a discount to the regulated capital value.

The House of Commons Public Accounts Committee, Pipes and Wires, stated in 2002:

"The market valuation of companies in the water industry has fallen below that estimated by Ofwat, suggesting that it might in 1999 have set the cost of capital too low."



## We can finance our plan

We generate value for our investors through a combination of dividend yield and asset growth. However, equity investors do not place equal prominence on each element of the equity offering. In our latest equity shareholder survey, all respondents stated that our National Grid plc dividend policy “to grow the ordinary dividend per share at least in line with the rate of RPI inflation each year for the foreseeable future” was an important part of their investment decision. This demonstrates the fact that the level of dividend pay-out is closely monitored by our shareholders and the wider investment community to assess its sustainability and relative attractiveness within our peer group and relative to the wider equity market. To help achieve this plc level dividend policy we have an NGGT dividend policy to maintain gearing at 60%, transferring any additional cash up to plc level. This maintains the efficient financing position for the operating company.

The measures that are commonly used to assess the appropriateness of the dividend pay-out are the dividend yield and dividend cover.

Over the last decade, listed utilities in the UK have averaged a 5.3% dividend yield with the FTSE above 4%. Changes to the regulatory model that increase cash generation at the expense of asset growth, such as the move from RPI to CPIH inflation, lead to investors expecting a higher dividend yield in the next regulatory review.

The prominence of the dividend policy in regulated utilities is explained by the long asset lives relative to other UK listed peers, as well as the regulatory price controls that set their revenues. A consistent dividend policy, both in terms of yield and cover, therefore, provides confidence to investors of the regulatory commitment to allow equity investors to recover their initial investment and earn a stable return over the long term.

Any significant change in the level of yield would cause equity investors to question the place of National Grid as a yield stock within their portfolio and reallocate capital elsewhere in the FTSE or to regulated utilities in other jurisdictions and may lead to a ‘flight from equity’ such as that experienced after the PR99 regulatory agreement in the water sector.

Investors will also be aware of the wider political environment in the UK, for example since the vote to leave the European Union in June 2016 there have been net outflows from UK equities of around 10%, this move from UK equities has been reflected within the regulated energy sector with a reduction in share prices of National Grid (9%), Centrica (65%), and SSE (17%) over the same period.

Shareholders also earn a return through asset growth. For example, we expect to deliver asset growth of 3% per annum on average during RIIO-2 based on the baseline plan. The value that investors place on asset growth is dependent on the future dividend capacity attributable to the asset growth. Our asset growth can also be compared to the higher asset growth of the FTSE100 of 8%, further underlining the prominence of the dividend within our

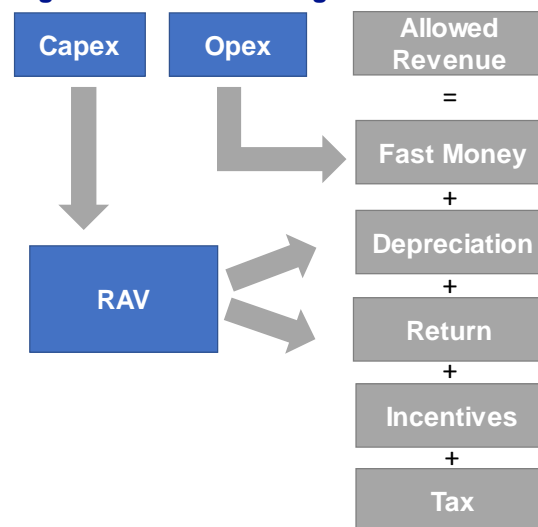
investor proposition and the importance of differentiating the level of dividend yield at 5% within our plans, compared to that of the FTSE100.

We therefore target a 5% dividend yield, consistent with historic precedent.

## 2. Regulatory principles

An appropriately balanced financial framework is key to current and future consumers being fairly charged for the networks they use and the services they receive. This is because we pay for investment as we incur it but we recover the cost of that investment for as long as it provides a consumer benefit, which is currently over many decades. This timing creates a cash flow gap which we bridge through debt and equity investment.

Figure 22.03 the building blocks model of regulation



The RIIO framework is based on the ‘building blocks’ model of regulation. In this model, allowed revenue should be sufficient to recover the efficient costs the network incurs in providing its services. Those costs being:

- fast money: the operating expenses associated with the day to day running of the business
- depreciation: the annual expense that is based on spreading the cost of investment over its economic life
- return on RAV: the cost of financing investment, i.e. paying a fair return to debt and equity investors.

As part of the regulatory framework we are allowed to recover the efficient costs of paying interest and dividends to investors. In this context, efficient means we need to balance lower consumer bills now with a funding platform which will help us to keep financing costs sustainably low by maintaining credit ratings and equity investor returns. Without this return, we would not be able to fund investments over a long time period and current consumers would bear all the cost of investments undertaken even though they would not receive all the benefit. An out of balance risk and return mix would not keep financing costs sustainably low, creating a much bigger consumer bill increase in the future when the balance is returned.



## We can finance our plan

A balance between current and future consumer bills is achieved by using a regulatory framework which:

**Table 22.04 required attributes of the regulatory framework**

|          |  |
|----------|--|
| <b>1</b> | <p><b>Balances risk and reward:</b> by ensuring risks best managed by network are not passed on to consumers</p> <p>A key attribute of the regulatory framework must be a transparent and fair balance of risk and reward between consumers and networks. Removing risks for networks can reduce the cost of capital, and therefore short-term consumer bills. However, the risks removed will still exist only now they will sit with consumers. This creates little incentive or financial capacity for the networks to control costs because of the limited opportunity to be retained from any reductions. This will ultimately drive higher and more variable long-term consumer bills.</p>   |
| <b>2</b> | <p><b>Demonstrates regulatory commitment and a stable regime:</b> to keep financing costs low for consumers</p> <p>Our costs of borrowing will depend on how our credit rating is assessed. If our credit rating deteriorates, then borrowing costs will go up. Furthermore, it is reasonable for equity investors to expect returns which are broadly stable over time so that returns which were considered appropriate at the time of investment would still be considered appropriate now and in the future. Unpredictability increases risk perception placing upward pressure on the cost of capital. Only by maintaining a consistent approach will the financial framework allow network companies to attract the required investment and keep bills as low as possible for consumers.</p> |
| <b>3</b> | <p><b>Takes a long-term sustainable approach:</b> to ensure investment is recovered fairly from both current and future consumers</p> <p>Financeability is not just a consideration of short-term liquidity ratios but considers the long-term sustainability of the company's financial position which is important in safeguarding future investment. We consider trends across several price controls. This helps us to avoid short-term fixes to address immediate cashflow issues that might create financeability problems in the future.</p>  |
| <b>4</b> | <p><b>Provides strong incentives:</b> so the networks demonstrably strive to deliver benefits for consumers</p> <p>An effective incentive framework ensures delivery of services at the price and levels consumers are willing to pay by aligning their interests with those of investors. Networks are encouraged to seek out lower costs, through the potential to share benefits, whilst still being held to account for delivering the outcomes they have committed to with clear consequences of non-delivery. Outcomes should be measured and monitored against targets set at the start of the price control providing the transparency which is important for maintaining consumer confidence.</p>   |

### 3. Financeability

#### 3.1 Approach to the financeability assessment

The majority of our investment is added to the RAV with the regulatory framework allowing recovery through depreciation and a return on investment. The cost to consumers is spread over the life of the asset and requires us to finance investment from debt or equity investors. Ofgem have a duty to have regard to our financeability by allowing us to recover revenues that are sufficient to pay interest and dividends to our finance providers. We also have a financeability duty by ensuring that we can maintain an investment grade credit rating.

It is in consumers' interests that we fulfil our financing duties efficiently, so the return and interest costs funded by consumers are as low as reasonably possible. Maintaining a strong credit rating and providing confidence to investors that their investment is secure minimises financing costs. We also need to retain sufficient financial capacity and flexibility to continue operations and investment programmes in the event of economic downturn and outturn of downside risk. At its very basic level, the financeability assessment is a review of the projected levels of a package of financial ratios, which test this financial capacity against target levels. Our network is financeable if we can meet the expectations of both our debt and equity investors. Within this context, we have adopted the following approach to assess financeability:

**Table 22.05 our approach to assessing financeability**

|          |  |   |
|----------|--|---|
| <b>1</b> | <p><b>Focus first on the notional company</b></p>                                | Assess financeability for a notionally efficient company with a capital structure consistent with that used to determine the weighted average cost of capital. This ensures companies and their shareholders bear the risk of their capital structure and financing, not customers.                         |
| <b>2</b> | <p><b>Target a strong credit rating</b></p>                                      | Use a target rating of Baa1/BBB+ to ensure financial resilience and consistency with the index used to set cost of debt allowances.   |
| <b>3</b> | <p><b>Consider a range of financial ratios for debt and equity investors</b></p> | Follow methodologies and focus on key metrics used by credit ratings agencies to aid transparency and consistency. For equity metrics, we target a dividend policy consistent with investor expectations and review trends for dividends and earnings profiles. Table 22.05 summarises the ratios targeted. |
| <b>4</b> | <p><b>Assess resilience within and beyond the RIIO-2 period</b></p>              | Consider trends across several price controls to assess the long-term sustainability of the financial package, stress test financial resilience through the application of a range of sensitivities and alternative scenarios. This helps us to avoid short-term fixes which would increase overall costs.  |



## We can finance our plan

**Table 22.06 target thresholds for key financial ratios**

| Ratio   | Threshold | Rationale   |
|---|-----------|---|
| <b>Adjusted interest cover ratio (AICR)</b><br>measures how many times a company can cover its interest payments using available cash | 1.5       | Based on Moody's methodology  |
| <b>Net debt/RAV</b><br>ensures we maintain an efficient financing structure   | 60%       | AICR – mid-point of Moody's range<br>Gearing – notional gearing assumption                    |
| <b>FFO/Net debt</b><br>measures the ability of a company to pay off its debt using available cash                                     | 10%       | Based on S&P's methodology<br>Mid-point of 9-11% range  |
| <b>Dividend yield</b><br>enables investors to measure how much they could earn in dividends by investing in stock                     | 5%        | Consistent with RIIO-1 and supports a dividend in real terms in line with other UK utilities. |

We use the scorecard methodology adopted by Moody's (Moody's Grid) and core metrics applied by Moody's and Standard and Poor's (S&P) as our primary tools to assess financeability from a debt investor's perspective.

We have applied the Moody's approach in line with how Moody's themselves apply the methodology for the overall Grid rating. This involves putting an additional focus on the core metrics: AICR and net debt/RAV.

We have also focussed on FFO/net debt as the core ratio used by S&P in their rating assessment. Engagement with S&P, review of their rating methodology and consideration of peers' ratings leads to the interpretation of 9%-11% BBB+ threshold range.

Our assessment considers credit metrics as being achieved when the mid-point of the relevant thresholds is met. This is for two reasons.

Firstly, it is in line with credit rating agencies practice, where it is expected that metrics will have a buffer above the threshold for the relevant rating to apply. If we were to achieve only minimum thresholds throughout the period, the potential for downside risks would result in a network with weak financial resilience, increasing the likelihood of downgrade or being placed on negative watch. This should not be the case for a "notionally efficient" company which we are modelling.

Secondly, Moody's has the majority of UK water companies on negative outlook, reflecting concerns over Ofwat's PR19 determinations. Given the rise in the perception of regulatory intervention through items such as the performance wedge it is credible that this could be applied to energy networks.

Recently, both Moody's and Fitch assessed that the water sector has become riskier and therefore increased the ratio headroom required for AICR by 10bps. We have assumed that the thresholds applied to energy networks do not change from where they are today with this risk partially reflected in our targeting the mid-point of the thresholds ranges for key ratios.

For the context of this chapter, we concentrate on key financial ratios in line with the rating agency methodologies and include a wider range of metrics, including those set out by Ofgem's guidance, in finance annex A22.01.

Given energy transition and the uncertainty inherent in proposed investment for the RIIO-2 period, the network needs to be financeable at different funded levels of totex and we stress test the financial package using Ofgem's proposed scenarios. The impact of downside risk is assessed through:

- interest rate scenario based on -1% compared to forward implied rates as per the base case in each year
- inflation rate scenario based on +1% in each year
- RPI – CPI divergence scenario based on -0.5% movement from assumed wedge
- 10% totex overspend
- proportion of index linked debt issued -5% lower than assumed in the base case.

### 3.2. Financeability assessment of Ofgem's working assumptions

We test the financeability of the notional company in the first instance for our baseline totex plan using the following assumptions set by Ofgem.

**Table 22.07 Ofgem's working assumptions including incentives performance**

| Parameter                     | Ofgem assumptions  |
|-------------------------------|--|
| <b>Allowed equity return</b>  | 4.3% post-application of the 0.5% outperformance wedge                         |
| <b>Incentives performance</b> | 0.5% equivalent = £14m p.a.  |
| <b>Dividend yield</b>         | 3%   |
| <b>Gearing</b>                | 60%, set at beginning of RIIO-2 and maintained throughout the period           |
| <b>Allowed debt funding</b>   | Full indexation, 11-15 year trombone   |
| <b>Debt profile</b>           | 25% inflation linked debt throughout the period with RPI debt switched to CPIH |
| <b>Inflation indexation</b>   | Immediate transition to CPIH, CPIH assumed to be 2% per annum                  |
| <b>Depreciation</b>           | 45 years, straight line  |
| <b>Capitalisation rate</b>    | Natural rate   |



## We can finance our plan

Our baseline plan totex totals £2.9bn across the five-year price control, when real price effects are included.

Before setting out the detailed financeability assessment, it is worth outlining why our conclusions from this work are that we do not believe our plan is financeable on a notional basis using Ofgem’s working assumptions and a higher equity return is required to keep consumer costs lower over the longer term:

- Key debt metrics, particularly FFO/net debt, fall short of those required for a Baa1 investment grade, reducing the financial capacity to carry the risk of capex uncertainty and bringing a more risk averse approach to investment and innovation;
- Dividend yield and allowed equity return will not attract required investment, particularly to the levels required to deliver net zero targets;
- Ofgem’s framework sets out that we must assume incentive performance of c£14m per annum in the credit metrics. This revenue would be disregarded by rating agencies so should not be included in the

assessment. Once this is done the cashflows fall further below Baa1 thresholds and close to Baa3;

- Financial resilience of the network to absorb downside risk is severely limited. There is risk of sector downgrade at these levels, as the network’s cost of borrowing will increase above that assumed for a notionally efficient company;
- CPIH transition is being used as a way of supporting short-term financeability and a reduction in allowed equity returns. This is a short-term fix which will require compensating adjustments to the price control in future periods;
- Economic and totex sensitivities show cashflows reducing to sub investment grade e.g. if the CPI to RPI wedge was 0.5% rather than 1% and totex was overspent by 10%

These points are explained in more detail through the following sections. We also show the results of analysis using our proposed assumptions.

**Table 22.08 key metrics based on Ofgem’s working assumptions including incentive performance**

| Quantitative Metrics               | T1 Final Proposals |       | T2    |       |       |       |
|------------------------------------|--------------------|-------|-------|-------|-------|-------|
|                                    | Dividend Yield     | 5.00% | 2.96% | 2.99% | 3.03% | 3.04% |
| Dividend Cover                     | 2.11               | 1.80  | 1.27  | 1.24  | 1.31  | 1.32  |
| Indicated rating from Moody's Grid | A3                 | Baa 1 | Baa 1 | Baa 1 | Baa 1 | Baa 1 |
| <b>Core Metrics</b>                |                    |       |       |       |       |       |
| AICR                               | 2.08               | 1.63  | 1.48  | 1.47  | 1.47  | 1.48  |
| Net Debt / RAV                     | 63%                | 59.4% | 59.9% | 60.3% | 60.5% | 60.4% |
| S&P : FFO / net debt               | 11.48%             | 8.46% | 7.76% | 7.62% | 7.63% | 7.70% |

**Consumer implications**

This package leads to higher consumer bills by risking equity investment which will ultimately **increase overall financing costs**

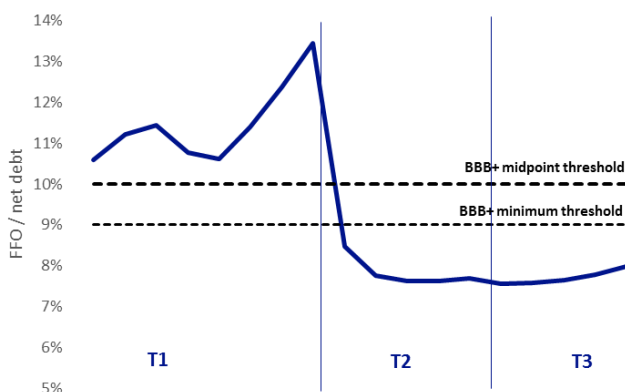
Limiting investment funds now will **risk our ability to support energy transition**

A rating      Target investment grade      Below target investment grade

### FFO/net debt is consistently and significantly below the target rating from the first year of the RIIO-2 period

The FFO/net debt ratio measures the ability of a company to pay off its debt from net operating income. The lower the ratio, the more likely it is that additional funding is required to finance operations or that investment programmes are put at risk.

**Figure 22.09 FFO/net debt ratio under Ofgem’s proposed financial package**



The deterioration into RIIO-2 is significant and can be attributed to the drop in the cost of equity and re-setting the gearing levels to align to 60% at the start of the price control. The ratios then become stable, but there is no recovery above the BBB+ minimum threshold in RIIO-2 or RIIO-3.

Covering debt expenses at these levels would result in an investment review where we only spend if we have funding security. This will impact our ability to respond to the challenges of energy transition and deliver stakeholder-led outcomes efficiently, increasing costs in the longer term.

### Dividend yield and allowed equity return will not attract required investment

Ofgem’s working assumption is a 3% yield but this does not align with our investor expectation of stable dividend growth, and is less than the 4% average of the FTSE100 and 5% of our utility peers.

It is not appropriate to resolve debt financeability constraints, caused by a base return which is set too low, through assuming lower dividends. Given that energy networks hold greater risk than water companies, investors



## We can finance our plan

could see this as an opportunity to invest in an alternative sector where they can earn higher dividends for lower risk. The implication is that Ofgem’s package does not balance risk and reward appropriately or adequately reflect the risks inherent in running a transmission network.

We are competing for funds globally which, when combined with the significant level of investment required in UK infrastructure, means returns must be sufficiently attractive to equity investors. A sustainable and predictably growing dividend is key to the investor offering. Ultimately, if it is not high enough, many investors will cease to hold the stock as they see dividends placed at risk through lower revenues and structures which have little headroom to absorb any financial shocks. This impacts our ability to attract and retain equity investment, which has implications for raising further financing efficiently. New equity investment will be more expensive to raise and if equity is replaced with higher levels of debt, the risk to debt investors will increase borrowing costs.

### Assumed incentives performance is not credible

An assumed 0.5% incentive performance adds c£14m per year to revenues. The incentives package has not been finalised but Ofgem’s push for upper quartile performance targets with a downside skew on penalties means this is unlikely to be a credible assumption.

The notional company should be financeable without the need to rely on assumed outperformance, which is in line with how credit rating agencies will undertake their assessment. Moody’s have referred to the scope of outperformance being limited by low-powered incentives in transmission and likely challenging cost allowances, meaning they will not include any outperformance in their modelling until a track record has been established.

In line with this approach, the table 22.10 shows the results of our financeability assessment, excluding the outperformance wedge.

**Table 22.10 key metrics based on Ofgem’s working assumptions excluding incentive performance**

| Quantitative Metrics               | T1 Final Proposals |       | T2    |       |       |       |
|------------------------------------|--------------------|-------|-------|-------|-------|-------|
|                                    |                    |       |       |       |       |       |
| Dividend Yield                     | 5.00%              | 2.97% | 3.02% | 3.07% | 3.10% | 3.11% |
| Dividend Cover                     | 2.11               | 1.64  | 1.10  | 1.06  | 1.13  | 1.13  |
| Indicated rating from Moody’s Grid | A3                 | Baa 1 | Baa 2 | Baa 2 | Baa 2 | Baa 2 |
| <b>Core Metrics</b>                |                    |       |       |       |       |       |
| AICR                               | 2.08               | 1.53  | 1.38  | 1.37  | 1.36  | 1.36  |
| Net Debt / RAV                     | 63%                | 59.6% | 60.3% | 60.9% | 61.3% | 61.4% |
| S&P : FFO / net debt               | 11.48%             | 8.10% | 7.36% | 7.19% | 7.17% | 7.20% |

#### Consumer implications

As credit quality deteriorates the **costs of borrowing increase** to reflect increased risk of lending

Financial resilience of the network to downside cost shocks is limited

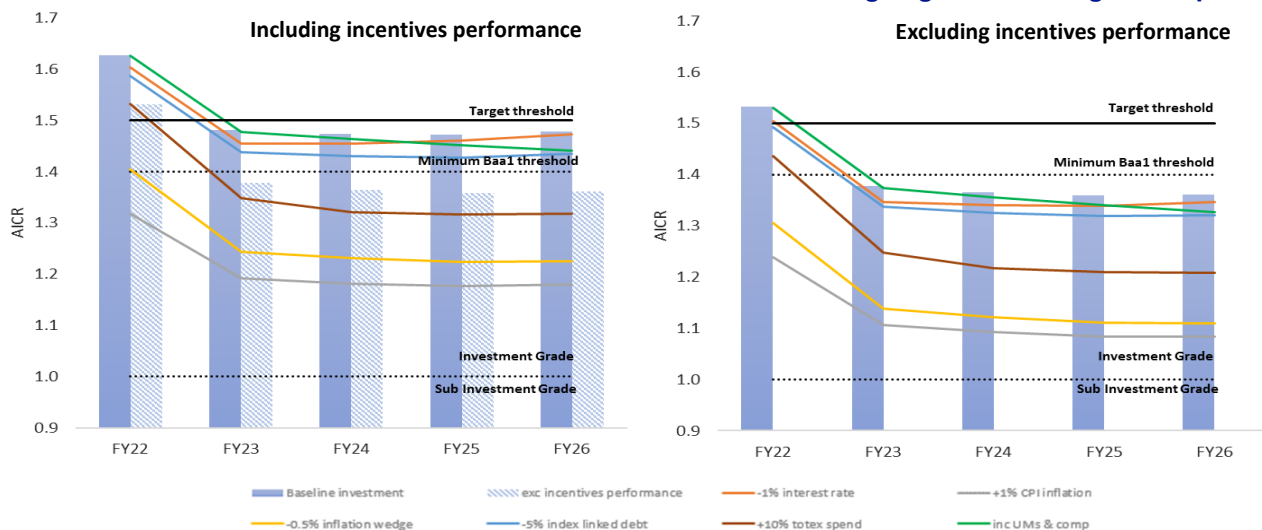
### Limited financial resilience of the network

We have already shown that FFO/net debt is significantly below target threshold even before considering downside risks; a position which deteriorates further when excluding incentives performance.

Without the outperformance wedge, Moody’s Grid rating falls to Baa2 throughout the majority of the RIIO-2 period,

providing only one notch of headroom to achieve an investment grade credit rating. The notional company has significantly less headroom to absorb downside risks with limited financial resilience for the network, particularly when considered in the context of our proposed levels of investment and the substantial uncertainties related to the political and economic environment.

**Figure 22.11 sensitivity analysis to assess implications for AICR using Ofgem’s working assumptions**



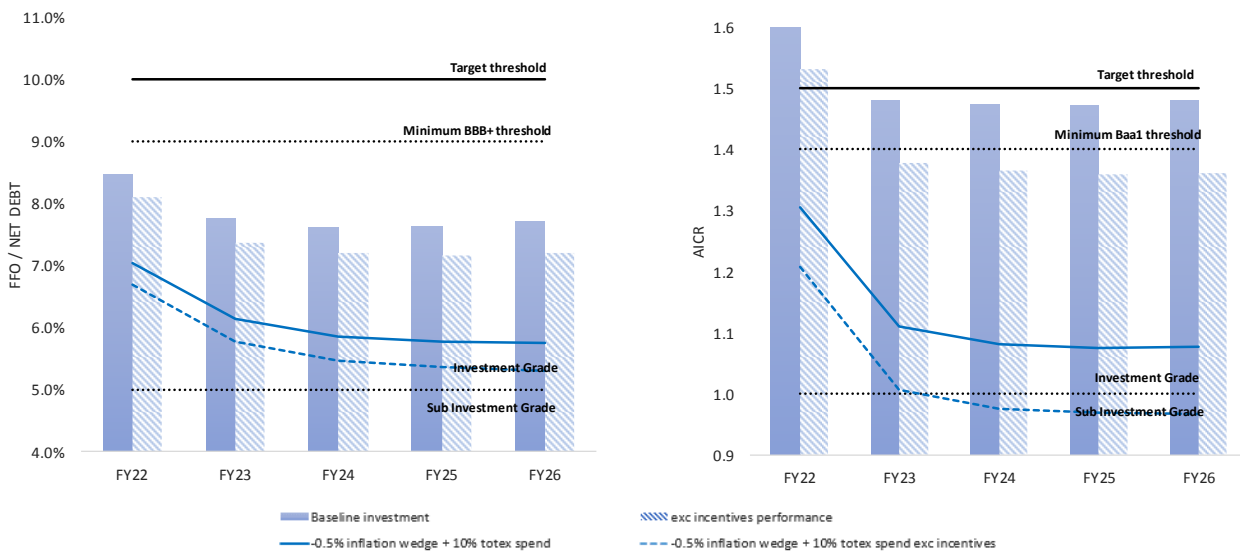


## We can finance our plan

The financial package is particularly sensitive to the movement in the macroeconomic environment, where only a 0.5% change in the inflation wedge would mean that AICR deteriorates significantly. Whilst at these levels the network may still be considered investment grade, the AICR shortfall against the threshold is likely to increase the risk of a credit downgrade. Core metrics can dominate Moody's committee decisions, particularly when outcomes are below Grid outcomes. When combined with a 10% totex overspend, as shown in figure 22.12, we see credit ratings depressed even further, indicating a significant increase in the risk of lending to the

company. Excluding incentives performance sees AICR fall below sub-investment grade. Whilst this combination is modelled based on scenarios set out by Ofgem, we have tested their credibility by assessing further scenarios based on the principal risks identified by our own risk management processes. Through this we have a clear understanding of the events that could impact the delivery of the plan with our analysis supporting a change in inflation wedge with a 10% totex overspend as a severe but plausible scenario. The details of the additional scenarios we have considered in addition to Ofgem's are set out in annex A22.01.

**Figure 22.12 combined totex and macro-economic sensitivity analysis to assess implications for FFO/net debt and AICR using Ofgem's working assumptions**



If the company is not considered to be financially resilient, it will cost more to raise debt to fund our investment programme. As credit quality deteriorates, a narrowing pool of debt investors combined with increasing costs will ultimately drive higher bills for consumers. Consistent financial ratios are used by equity investors as a proxy for dividend affordability, so any additional risk faced by the shareholder is also likely to place upward pressure on the cost of equity. Both of these impacts will lead to higher bills, illustrating why limiting the financial resilience of the network is not in consumers' long-term interests.

### CPIH transition is being used to alleviate short term financeability concerns

The transition to CPIH should not be used as a lever to address financeability issues that may be caused by setting returns at a level which is too low. We would therefore expect financeability assessments on both a RPI and CPI basis to be able to test value neutrality.

**Figure 22.13 AICR using Ofgem's working assumptions for 100% CPIH transition and RPI counterfactual**

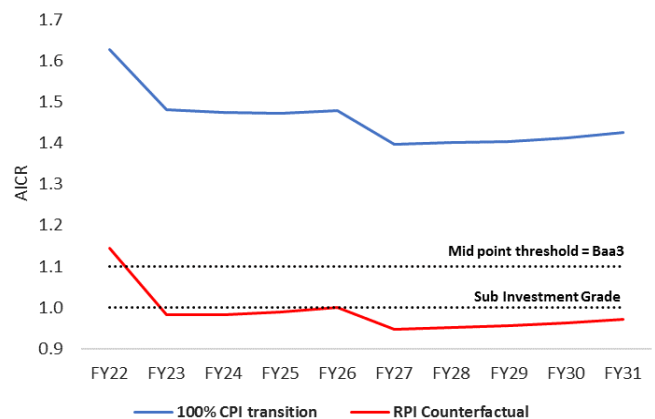


Figure 22.13 illustrates the impact of changing to CPIH on AICR and shows undoubtedly how key financial ratios are being supported by the one-off cash acceleration created by switching to CPIH indexation. If RPI indexation were retained, AICR falls to sub-investment grade, meaning that the network is no longer generating sufficient revenue to meet its interest costs.





## We can finance our plan

Short term cash flow increases, whilst supporting metrics in RIIO-2 and RIIO-3, will create financeability issues in the longer term as ensuring NPV neutrality of the indexation transition results in negative cashflow impacts in subsequent price controls. This is likely to be exacerbated by other long-term implications, particularly when future funding will reflect CPIH but a significant proportion of costs are likely to remain nominal or RPI linked creating a mismatch between revenue and costs.

As a result, using CPIH transition to support Ofgem's proposed package will have a detrimental impact on the long-term sustainability of the network, which is key to

safeguarding future investment and providing confidence that transition is neutral to investors.

### 3.3 Application of financeability levers

As we have shown, the notional company is not financeable using Ofgem's working assumptions; the company has limited financial headroom and limited resilience to cost shocks highlighted by weak financial ratios.

Ofgem have set out four potential levers (the first four actions set out in table 22.14) to address these issues to which we add balancing the risk reward offering through use of the appropriate allowed return:

**Table 22.14 potential financeability levers**

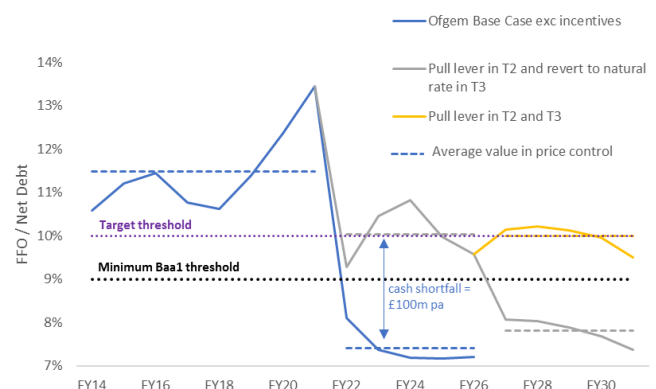
|   |   |
|---|---|
| <b>Adjust capitalisation rates</b>        | Percentage of totex to be added to the RAV is set to balance costs paid by existing and future consumers, considering the proportion of capex costs expected during the price control period.   |
|   | <b>Use as financeability lever:</b> The simplest to understand and arguably most economic lever to use. However, use should be limited to marginal changes otherwise the impact of bringing cash forward is unlikely to be sustainable in the long term and will create intergenerational mismatches in consumer bills.   |
| <b>Accelerate regulatory depreciation</b> | Set to balance costs paid by existing and future consumers, taking into account expected economic life of assets and uncertainty in their future use.   |
|   | <b>Use as financeability lever:</b> Any adjustment to address short term financeability concerns will reduce the transparency of how cost recovery is set to match the benefits consumers receive.  |
| <b>Reduce notional gearing</b>            | Demonstrates the financial risk of the company as it measures the level of net debt in the context of the total value of the RAV.   |
|   | <b>Use as financeability lever:</b> Lower gearing levels can enable companies to maintain credit metrics under a wide range of market conditions, but only if set to reflect the cashflow risks from the overall business plan submission, For RIIO-1 gearing levels are set at 62.5% so we have already recognised a reduction consistent with a change in our capex levels. Any further reduction should be supported by our current business plan or framework; as any change, purely to enable cashflows to support short-term credit metrics, risks inconsistency with the underlying risk profile of the business and how the weighted average cost of capital has been calculated. |
| <b>Reduce dividend yield</b>              | Dividend yield should be set to align with equity investor expectations.  |
|   | <b>Use as financeability lever:</b> The notional company should be financeable based on an appropriately calibrated package and should not therefore require dividends to be cut.   |
| <b>Risk reward balance</b>                | There must be a transparent and fair balance of risk and reward between consumers and networks.   |
|   | <b>Use as financeability lever:</b> Allowed return needs to be set at a level high enough to not require the use of short-term levers which bring cash forward but also erode future value.   |

For the reasons set out in section 1, dividend yield is not a valid lever, leaving depreciation profiles, capitalisation rates and notional gearing as potential levers to address the limitations of Ofgem's financial package. We also consider the allowed return and what is an appropriate level to reflect the risks of a transmission network and ensure a balanced risk and reward package. FFO/net debt, as calculated by S&P, is typically our most constrained metric and therefore we focus on how the levers could be used to achieve financeability based on this ratio.

### Adjustment of capitalisation rates

We first consider adjusting the capitalisation rate. Using this single element would require fixing the rate to 56% versus a natural rate of 73% to ensure credit metrics achieve target investment grade in the RIIO-2 period.

**Figure 22.15 impact of capitalisation rate changes**



We are targeting a level equivalent to the middle of the rating range, consistent with the rating agency approach, which requires the equivalent of bringing c£100m of cash forward each year. The arrow on the graph in figure 22.15 indicates the gap to threshold which has been created by Ofgem's proposed package. However, as the trends show,



## We can finance our plan

simply bringing cash forward to address financeability issues in RIIO-2 is not sustainable because it can only defer those underlying issues into the next price control period. The solid grey line in RIIO-3 shows the gap to threshold which is created by reverting to the natural capitalisation rate which then requires further cash acceleration to address.

The materiality of the cash levels required to correct financial concerns with the overall package, is contrary to Ofgem's primary obligation of ensuring fair charges for existing and future consumers for the networks they use and the services they receive.

We have assessed what the capitalisation rate would need to be without including the cash equivalent of the performance wedge, as we do not consider it appropriate to assume outperformance in our financeability assessment. However, if the wedge were to be applied the capitalisation rate required to meet target thresholds would still be significant at 58%.

**Figure 22.16 payment profile of a single year's investment under alternative capitalisation rates**

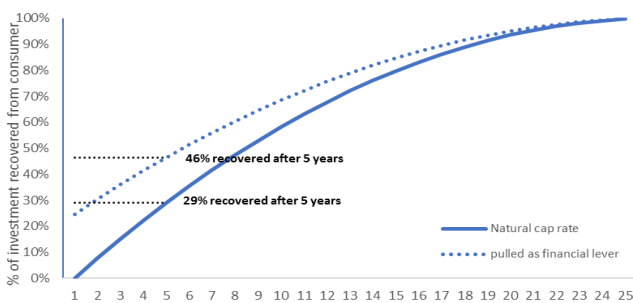


Figure 22.16 shows the profile of cash recovery for an investment made in the first year of RIIO-2. Where the natural capitalisation rate is used, ~30% of the investment cost will have been recovered from consumers after five years, whereas this is accelerated to ~45% when the capitalisation rate is adjusted to address financeability concerns. This means that for a single year of investment, future consumers will not be charged £100m for a service they will receive.

### Acceleration of depreciation

The same issues arise when considering the acceleration of regulatory depreciation. Making companies financeable through levers which bring cash forward and erode future value cannot be sustained in the long term and should not be considered as a substitute for setting equity returns to reflect the correct risk reward balance, particularly as credit rating agencies make changes to capitalisation rate and depreciation profile on the basis that the adjustments are NPV neutral.

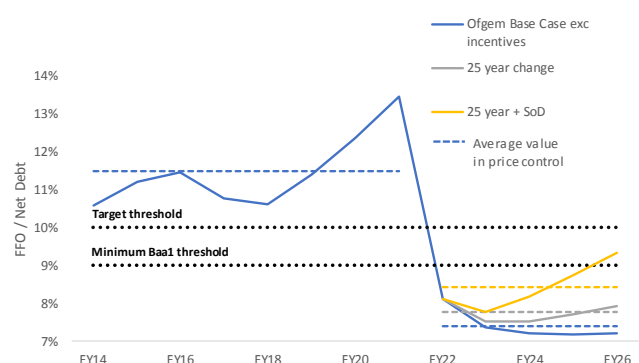
Whilst we have not proposed changes to depreciation to address financeability concerns, there is a requirement to align assumptions with the principles used to set regulatory depreciation and balance current and future usage with cost for the consumer.

Depreciation of the RAV should be based on an assessment of the appropriate balance of costs to be paid by existing and future consumers, taking into account the expected technical and economic life of assets. Ofgem's current working assumption is 45 years but we note that the investment profile in the gas transmission network has changed over the previous price control, according to customer requirements and network usage. Prior to RIIO, spend mainly related to pipework installation but within RIIO-1 the significant proportion of investment is to maintain the existing network and ensure it continues to be compliant with changing environmental legislation. We expect this trend to continue into RIIO-2, with an initial review showing the types of assets we will invest in have a significantly lower technical life, averaging around 25 years. It would therefore be consistent to apply a similar reduction in asset life to the RAV additions within the RIIO-2 period.

In addition, the FES18 demand scenarios indicate a decline in the gas consumer numbers over the next 30 years, which means the risk that the RAV is unrecovered is now considerably higher than it was at the start of RIIO-1. This can be addressed through the acceleration of cash through the regulatory depreciation profile. Our view is that a reduction in the 45-year asset life to match consumer benefit to charge is required as is a weighting of the depreciation profile towards earlier years through adoption of a sum of digits approach to manage the stranding risk. The sum of digits depreciation profile was adopted by the gas distribution networks in RIIO-1 for the whole RAV so adoption by gas transmission for RIIO-2 additions would result in a more consistent approach across the gas sector, implying alignment of underlying assumptions about the future role of the gas network.

Through our engagement activity, domestic consumers have a strong preference for the cost of asset decommissioning and new gas equipment to be borne by current consumers. In contrast, non-domestic consumers and customers expressed concerns about a potential shift of greater costs to current consumers and customers. On the basis of intergenerational fairness, we have listened to the views of domestic consumers and proceeded with our proposals.

**Figure 22.17 FFO/net debt sensitivity analysis of regulatory depreciation rate profiles**





## We can finance our plan

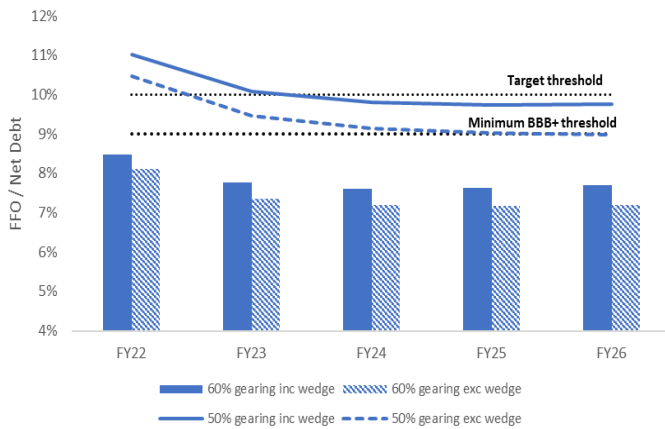
Whilst the driver for these changes is not to fix financeability concerns, applying a change to asset life and depreciation profile goes some way to achieving the target rating by the end of the RIIO-2 period but is still below threshold for the majority of the period. Addressing the remaining gap requires a c10% change to capitalisation rates from the natural rate which remains unsustainable in the longer term.

### Reduction in notional gearing

We have also considered the impact of reducing the notional gearing level to 50% as a lever to achieve acceptable debt metrics under Ofgem’s proposed package. Firstly, we have assumed a view keeping equity return at 4.3% but changing gearing. A change to the notional gearing changes the reference point for equity injections and the absolute level of debt. and therefore, impacts the weighted average cost of capital (WACC) used in revenue calculations. This would imply setting an equity return without reference to the change in notional gearing, increasing the WACC.

The alternative is to reflect the lower gearing levels in the equity return. This would reduce the headline equity return figure which would mean that the allowed WACC has little movement but financeability ratios would still show improvement given the reduction in net debt.

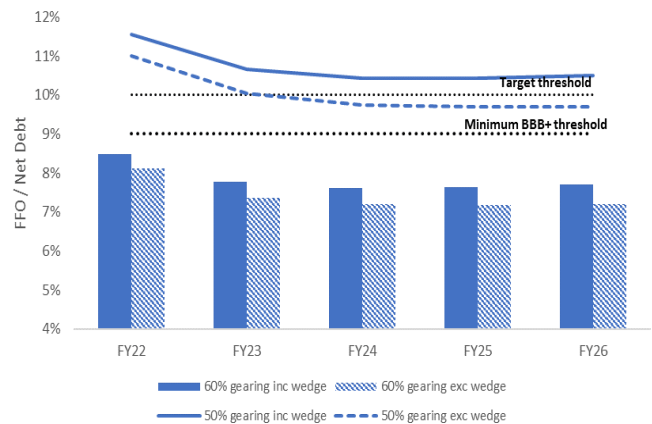
**Figure 22.18 FFO/net debt at 60% and 50% notional gearing keeping allowed returns aligned**



The graphs show that, even with a significant reduction in notional gearing, allowed returns need to increase to ensure metrics align with our target rating based on continued reliance on an implausible performance adjustment.

At 60%, gearing remains consistent with the market. Whilst levels have been set lower, this has only been considered appropriate for companies undergoing significant RAV growth, a position not aligned with our baseline plan. As the risk profile of the network has also not decreased there seems to be limited justification in adjusting notional gearing simply to address financeability concerns.

**Figure 22.19 FFO / net debt at 60% and 50% notional gearing with allowed returns increasing**



Using gearing as a lever to support a return which has been set too low further deteriorates the investor proposition by transferring additional risk to equity and reducing asset growth.

### Dividend policy

The focus so far has been on achieving credit metric target thresholds in RIIO-2 but we have highlighted throughout that the equity investor proposition is not in line with the feedback from our shareholders or other regulated entities.

When we adjust to a 5% dividend yield consistent with market expectations, Ofgem’s proposed financial package falls below the target rating for all key financial ratios apart from net debt/RAV.

**Table 22.20 key metrics based on Ofgem’s working assumptions with a 5% dividend yield and excluding incentive performance**

| Quantitative Metrics               | T1 Final Proposals |       | T2    |       |       |       |
|------------------------------------|--------------------|-------|-------|-------|-------|-------|
|                                    | Dividend Yield     | 5.00% | 5.06% | 5.25% | 5.46% | 5.64% |
| Dividend Cover                     | 2.11               | 0.97  | 0.63  | 0.60  | 0.62  | 0.61  |
| Indicated rating from Moody's Grid | A3                 | Baa 1 | Baa 2 | Baa 2 | Baa 2 | Baa 2 |
| Core Metrics                       |                    |       |       |       |       |       |
| AICR                               | 2.08               | 1.52  | 1.35  | 1.32  | 1.30  | 1.28  |
| Net Debt / RAV                     | 63%                | 60.5% | 61.9% | 63.4% | 64.5% | 65.5% |
| S&P : FFO / net debt               | 11.48%             | 7.96% | 7.09% | 6.79% | 6.64% | 6.54% |

### Consumer implications

Dividend policy is not sustainable, putting **upward pressure on cost of equity**

**No financial resilience** to absorb the impact of cost shocks

**Inability to facilitate changing consumer requirements**



## We can finance our plan

The 5% dividend yield cannot be supported with Ofgem's proposed package. Dividend cover falls below 1 indicating that the dividend required by investors cannot be sustained, which is also shown through gearing levels which by the end of the period are above threshold at 65.5% suggesting equity issuance may be required.

There is a deterioration in the debt investor proposition as Moody's rating grid falls to Baa2 during the period, with

S&P also close to a BBB- rating. Using downward changes to the equity investor proposition to address short term concerns for debt metrics is not a substitute for setting base returns at a high enough level with an appropriately calibrated package.

Neither the reduction of the equity investor offering nor the use of short-term cash acceleration levers are aligned with our regulatory principles:

**Figure 22.21 assessment of Ofgem's proposed financial package against regulatory principles**

| Is the regulatory principle met?                       | Reasoning   |
|--|---|
| Balances risk and reward                               | Return is insufficient to reflect the risks inherent in running a transmission network and is not aligned with either investor expectations or market comparators.  |
| Demonstrates regulatory commitment and a stable regime | Ofgem's assumptions are inconsistent with past regulatory precedent, particularly in relation to setting allowed equity returns. Increasing perceptions of regulatory risk impacts investor confidence leading to increased cost of capital, and therefore bills, in the long term. |
| Takes a long term sustainable approach                 | Short term fixes are required to make Ofgem's package debt financeable, these can address immediate cashflow problems but only by deferring underlying issues into the next price control and creating an unfair balance of charges between current and future consumers.           |
| Provides strong incentives                             | There is no financial capacity to compensate networks for assuming more risk for developing new, innovative ways of working which drive lower consumer bills in the long term.  |

Investors continually trade off risk and return when they evaluate investment opportunities and they need to be rewarded for the risk they take for investing in National Grid. This requires an allowed equity return which is comparable and allows the company to maintain financeability.

In finance annex A22.01, we set out in detail our principles-based approach to determining our financial package. The package we propose can maintain both credit ratings and

offer an equity investor package which can attract and retain investment to keep financing costs efficient and as low as possible.

It also provides the capacity to compensate networks for assuming more risk, enabling delivery of the stretching outcomes stakeholders are telling us are important to them.

**Table 22.22 our proposed financial package**

| Parameter              | Our proposed assumption  |
|------------------------|--|
| Allowed equity return  | 6.5%   |
| Incentives performance | -  |
| Dividend yield         | 5%   |
| Gearing                | 60%, set at beginning of RIIO-2 and maintained throughout the period           |
| Allowed debt funding   | Full indexation, 15 year index plus 68 basis points additional borrowing costs |
| Debt profile           | 25% inflation linked debt throughout the period with RPI debt switched to CPIH |
| Inflation indexation   | Immediate transition to CPIH, CPIH assumed to be 2% per annum                  |
| Depreciation           | 25 years, sum of digits  |
| Capitalisation rate    | Natural rate   |

**Table 22.23 key metrics based on National Grid's proposed financial package**

| Quantitative Metrics               | T1 Final Proposals |       | T2    |       |        |        |
|------------------------------------|--------------------|-------|-------|-------|--------|--------|
|                                    | Dividend Yield     | 5.00% | 4.95% | 5.01% | 5.07%  | 5.07%  |
| Dividend Cover                     | 2.11               | 1.40  | 1.19  | 1.32  | 1.52   | 1.66   |
| Indicated rating from Moody's Grid | A3                 | Baa1  | Baa1  | Baa1  | Baa1   | Baa1   |
| Core Metrics                       |                    |       |       |       |        |        |
| AICR                               | 2.08               | 1.69  | 1.58  | 1.59  | 1.62   | 1.67   |
| Net Debt / RAV                     | 63%                | 59.6% | 60.1% | 60.5% | 60.5%  | 60.2%  |
| S&P : FFO / net debt               | 11.48%             | 9.50% | 9.16% | 9.53% | 10.11% | 10.74% |

### Consumer implications

**Dividend policy is sustainable**, and in line with investor expectations

**Network is able to borrow more cheaply** and can absorb the impact of cost shocks

**Network can operate flexibly** to facilitate changing consumer requirements

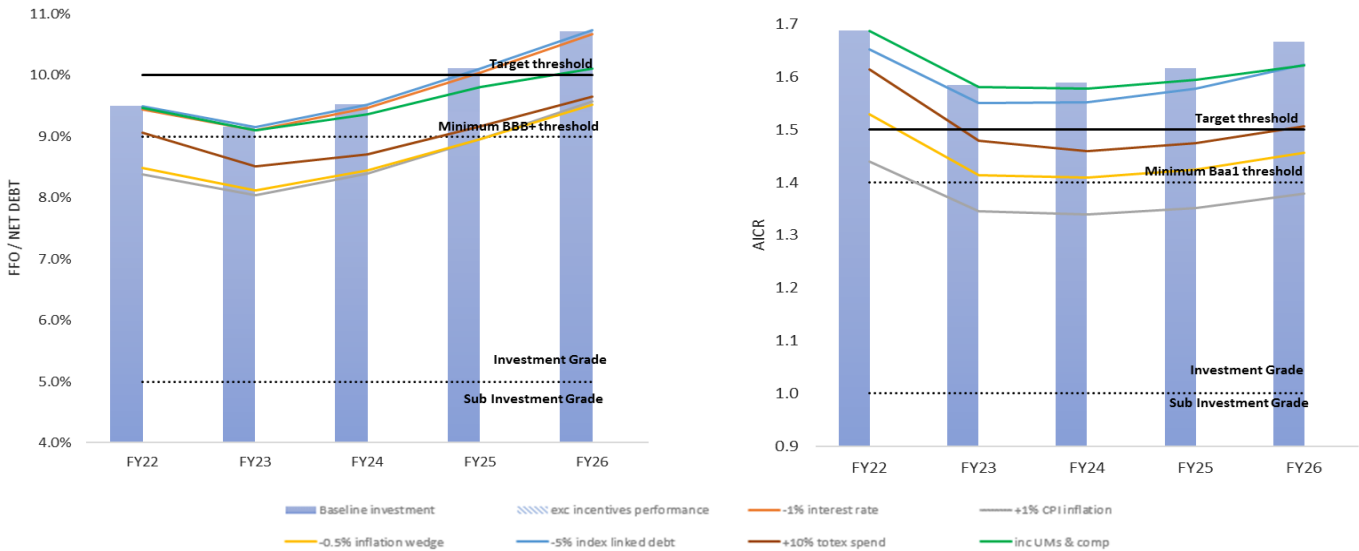


## We can finance our plan

We have tested our package against a range of macroeconomic and operational scenarios to ensure the notional company has sufficient headroom to absorb downside risks. This is more constrained in the earlier years of the price control but is above the minimum threshold and shows positive trends.

As figure 22.24 shows, we are able to maintain financeability and remain resilient, a position which is key in safeguarding our future investment ensuring we have the capacity to facilitate change to a low carbon economy and deliver the energy networks of the future.

**Figure 22.24 sensitivity analysis to assess implications for FFO/net debt and AICR using National Grid’s proposed financial package**



### 3.4 Financeability assessment of the actual company

Our assessment so far has focussed on the financeability of the notional company but we also need to assess financeability of the actual company. The onus for ensuring the financeability of the actual companies lies with networks, but this can only be assured on a sustainable basis if supported by a package which delivers a financeable notional company.

For the actual company, notional gearing is adjusted to actual gearing and actual debt and tax costs are included with other financial parameters remaining at notional values. We also include any cashflows which will be recovered/incurred during RIIO-2 but are related to the RIIO-1 price control period. We align our assessment with credit ratings agencies methodology.

Considering Ofgem’s package, including 0.5% of incentive performance, we see a deterioration in the results of our financeability assessment when assessed on an actual basis. We work hard to ensure debt is issued as efficiently as possible to minimise total interest rate charges, yet we are still underperforming compared to cost of debt allowances which are set based on the 11-15-year tracker. This is because the duration of the tracker is inconsistent with the average tenor of the debt we raise, which is c20 years.

As already outlined for the notional company, assuming incentives performance at this level is neither a credible assumption nor is it in line with how credit rating agencies will view the network in practice. Taking out any assumed incentive outperformance shows FFO/net debt falls significantly below the A- credit rating we aim to support for the actual company. We target A- because this ensures

access to a wide range of debt instruments and capital markets at an efficient interest rate which is key to supporting our debt financing strategy.

With this package the equity investor proposition is also misaligned with both our peer group and shareholder feedback. Adjusting to a 5% dividend yield, we see metrics deteriorating further with trends showing a gradual increase in gearing levels. By the end of the period we are above threshold (66.9%), suggesting equity issuance will be required to ensure alignment with an efficient capital structure.

Of the potential actions to address these issues, the use of capitalisation and depreciation rates are not applicable as they are seen as cash acceleration tools by rating agencies and so will not impact their rating of the actual company.

Also proposed by Ofgem are equity injections to reduce gearing levels. It is unlikely that we would be able to attract additional investment when higher returns can be earned in comparable sectors (e.g. water, tobacco). In reality, it is likely that returns would need to be higher to compensate investors for increasing their exposure to a sector which may be perceived as being riskier because of the political and regulatory uncertainty.

A further lever proposed by Ofgem is the refinancing of expensive debt. From a commercial perspective, our strategy for the actual company already includes review of our debt portfolio and making commercial decisions to optimise our financial position. In addition, this lever only impacts the financing position of the actual company. The interest costs for the notional company are not impacted as they are based on the cost of debt tracker inputs.



## We can finance our plan

The only sustainable way to support both debt and equity financeability is to set an appropriately calibrated package. The package we propose ensures financeability for both the notional and actual company and allows us to continue efficiently financing our activities whilst supporting sustainably lower consumer bills in the long term.

### 4. Bill impacts

The application of the RIIO-2 regulatory framework to our business plan determines the revenues we are allowed to recover through the price control period. Our revenues, for both Transmission Owner (TO) and System Operator (SO), are collected through National Grid's Transportation Charges, paid by all users of the NTS across Great Britain.

The NTS charges are paid by the customers of the SO; being shippers who put gas on and take gas off the system and distribution networks. These customers pass the charges through to end consumers via suppliers. We consider the impact of our plan both on our customers and the end consumer.

The process for calculating the charges is complex and subject to the particular charging methodology in force at the time. When calculating the bill impacts we make the simplifying assumption that the charging methodology will not change from its current form. This allows us to quantify the specific bill impacts associated with our business plan

and to directly compare RIIO-2 charges with those under the previous price control.

#### 4.1 Customer and non-domestic consumer bills

We have built this plan with the help of our customers and have incorporated their views in our submission.

When we have talked to our customers and non-domestic consumers about how we can help them understand their bill impacts for RIIO-2, they have told us that we should give them visibility of our revenue trends, including potential charge implications. This will allow them to calculate their own specific bill impacts based on their individual circumstances.

Customers can take advantage of different charging products with varying prices. The impact of our plan on customer charges will vary based on their access and use of the NTS. We therefore use simplifying assumptions to calculate the impact of our RIIO-2 business plan on customers. Specifically, as shippers pay both capacity and commodity charges, an aggregation of these into two charge categories, entry and exit, is appropriate and provides a view of the average impact on charges across the price control. Our forecast revenue ranges for our draft business plan submission, after deduction of directly collected revenues are:

**Table 22.25 forecast revenue charged through entry and exit customer charges**

| £m (2018/19 price base) | 2021/22 | 2022/23 | 2023/24 | 2024/25 | 2025/26 | RIIO-2 average | RIIO-1 average |
|-------------------------|---------|---------|---------|---------|---------|----------------|----------------|
| National Grid framework | 935     | 935     | 999     | 990     | 978     | 967            | 919            |
| Ofgem framework         | 904     | 914     | 958     | 917     | 887     | 916            | 919            |

A key driver for change in the revenue presented in the October draft business plan to the final plan results from an additional £22m cost associated with the cost of managing constraints in accordance with the constraint management incentive (detailed in chapter 14).

Assuming that supply and demand remain at forecast 2020-2021 levels across RIIO-2, results in the following forecast impact of our plan on customer charges:

**Table 22.26 forecast percentage changes in entry and exit charges**

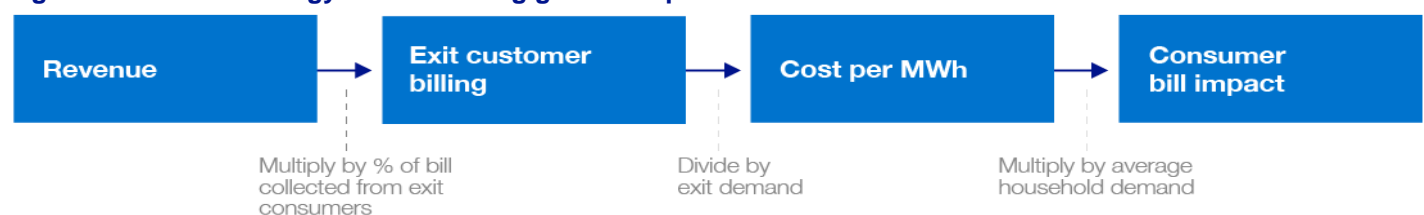
| (2018-19 price base)  | Change from RIIO-1 average to RIIO-2 average | Change over RIIO-2 (2021-2022 to 2025-2026) |
|-----------------------|--|---|
| Average entry charges | -9% to +1%                                   | -1% to +4%                                  |
| Average exit charges  | -9% to +1%                                   | -1% to +4%                                  |

In addition, we provide mechanisms to help customers assess their bill impacts via NTS Charging Methodology Forums and published tools and pricing information.

#### 4.2 Consumer bills

We calculate our consumer bill impact using a simple top-down approach that follows the methodology described by Ofgem. The consumer bill is expressed as National Grid's NTS network charges passed on to households by suppliers. We use the following four-step process to calculate the consumer bill impact:

**Figure 22.27 methodology for calculating gas bill impacts**





## We can finance our plan

Our approach is based on the charging methodology and inputs from 2019-20, so our forward-looking estimates, such as demand assumptions, do not include potential future changes to these variables.

Using this methodology, on average across RIIO-1, National Grid's direct charges to end consumers account for around two per cent of the average household gas bill, which is around £9.05 a year.

All values are quoted in the equivalent of 2018-19 prices. This gives transparency to the impacts expected from our business plan by removing the effects of inflation on bills.

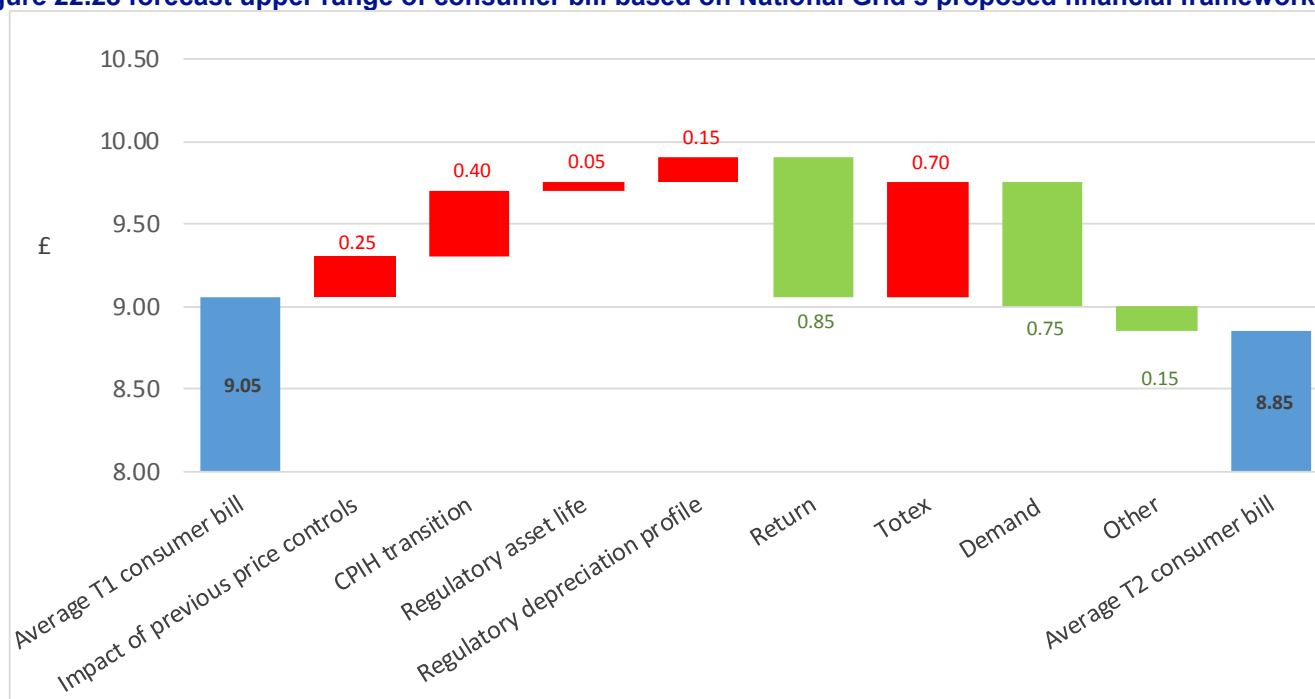
Applying Ofgem's proposed financial package, with the capitalisation rate adjustment to ensure that the company remains able to achieve credit metrics at Baa1 grade for the RIIO-2 period (section 3.3), results in an average RIIO-2 consumer bill of £8.35, an average reduction in the annual bill of 70p compared with the current price control.

However, by adopting Ofgem's proposed framework, we recognise that there are additional risks for consumers:

- The equity investor offering is reduced and is not in line with that of our peers, which risks a rise in the cost to invest in the network or limits our ability to make the required investment.
- The short-term fix of amending the capitalisation rate to bring additional revenues into the RIIO-2 period from future periods moves away from the principle of matching consumer charges to asset use.

Our proposed financial package mitigates these risks and ensures that charges are set to reflect consumers' use of the gas network. Under our proposed package, the average RIIO-2 consumer bill is £8.85, an average reduction in the annual bill of 20p compared with the current price control. The drivers which result in the change in the average consumer bill from RIIO-1 to RIIO-2 for our proposed framework can be categorised as follows:

**Figure 22.28 forecast upper range of consumer bill based on National Grid's proposed financial framework**



### • Previous controls: +£0.25

The level of RAV additions in the RIIO-1 and legacy adjustments will flow through to the RIIO-2 bill but arise as a result of true-ups required for the previous price control.

### • Framework changes: +£0.60

The transition to a CPIH indexed price control accelerates cashflow.

We are also proposing a change in the regulatory asset lives and depreciation profile (section 3.3 and finance annex A22.01) which increases the consumer bill in RIIO-2.

### • Financial package: -£0.85

This category covers changes to financial parameters: allowed equity return, cost of debt allowances and gearing. Under both our and Ofgem's proposed financial package, the cost of capital decreases mainly due to lower allowed equity return when compared with RIIO-1.

Cessation of accelerated revenue which formed part of the RIIO-1 framework also contributes to the reduced return.

### • Totex plan: +£0.70

Our totex plan is driven by what our stakeholders require from the transmission network and the investment needed to deliver a safe, reliable network which will be key to realising the UK's clean growth ambition. We have tested



## We can finance our plan

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and communicated elements of the plan with stakeholders, for example, through the Willingness to Pay exercise.

- **Demand projections: -£0.75**

We use the medium Typical Domestic Consumption Values as published by Ofgem. We have continued the 2019-20 charging methodology and demand assumptions through the remainder of the current price control and into subsequent periods.

- **Other adjustments: -£0.15**

A further reduction is attributable to forecast changes in pass-through and incentive income.

We have engaged with stakeholders on our communications on the consumer bill. In November 2018, we commissioned a study that explored awareness of the energy industry among the public, including their understanding of what makes up the energy bill. Based on the results and feedback we have engaged with stakeholders to explain our portion of the consumer bill and how it is calculated. This information is available at <https://www.nationalgridgas.com/about-us/breaking-down-your-bill>. We have also explained how the bill impacts reflect value for the network they use and the services they receive now, while being fair to both current and future generations. This engagement will continue throughout and contribute to development of our plan.