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for energy consumers

Call For Input - Impact of high inflation on the network price control operation

Introduction

Ofgem,[1] as the energy regulator, plays a key role in developing the regulatory framework to ensure that the energy network companies which transport electricity[2] and gas[3] ("licensees") act in the interests of gas and electricity consumers.

We set price controls[4] for these networks because they are privately owned natural monopolies; they are usually the only service provider in a geographic location. As part of the price controls, we set a weighted average cost of capital ("WACC") allowance to remunerate networks for their investment. Setting the WACC accurately will secure network investment and help keep consumer charges in line with efficient financing costs.

For the RIIO-1 & 2 price controls (GD&T[5]: 2013-26, ED[6]: 2015-28), we set a real WACC allowance in Consumer Prices Index including owner occupiers' housing costs ("CPIH")-deflated terms. We provide inflation protection to investors via Regulatory Asset Value ("RAV") indexation, amongst other features. This is based on delivering a key policy objective[7] of keeping real equity returns stable relative to inflation over time which facilitates securing required investment and delivering an efficient cost of capital for consumers.

This Call for Input considers the issue that in reality, where inflation deviates from the long run assumption, real equity returns can vary in a manner inconsistent with the policy intent. We term this variance the "leveraging effect" to distinguish this from the general

[1] References to the "Authority", "Ofgem", "we" and "our" are used interchangeably in this document to refer to GEMA, the Gas and Electricity Markets Authority.
[2] There are fourteen electricity distribution network operators (DNOs) operating, managed by six companies and three onshore electricity transmission network operators (TOs) operating in GB.
[3] National Grid Gas has recently agreed to sell a majority stake in its gas transmission and metering activity to a consortium. There are also eight Gas Distribution networks operating in GB, managed by four companies.
[4] Network price controls 2021-2028 (RIIO-2) | Ofgem
[5] Gas Distribution and Transmission
[6] Electricity Distribution
[7] RIIO-ED2 Final Determinations Finance Annex (ofgem.gov.uk) - Page 99 RIIO-ED2 Final Determinations Finance Annex (ofgem.gov.uk) - Page 99

inflation protection. Ordinarily this effect would not be considered detrimental as it would be expected to broadly balance over time and not result in sustained out or underperformance for licensees, however, the current inflationary environment has challenged this.

The leveraging effect is associated with the Cost of Debt ("CoD") allowance mechanism and the assumption used to deflate the allowance. The leveraging effect means where CPIH is higher (or lower) than a long run assumption (typically 2%), real equity returns typically rise (or fall) as a result. The extent of this impact on returns varies by each licensee, with a generally higher proportion of index-linked instruments within the capital structure reducing the impact of this effect on returns. Detailed mechanics are set out in Appendix 1 and a simplified model has been included with the Call for Input to provide an illustrative example. It should be noted this leveraging effect would also occur utilising notional capital structure assumptions as the majority of debt would be modelled as fixed rate under this basis.

In our June 2022 RIIO-ED2 Draft Determinations[8], we outlined our initial considerations in respect of this matter for the ED sector and sought views on three questions, which considered whether an adjustment to our approach to allowed returns was required. After considering the responses to the Draft Determinations, in our RIIO-ED2 Final Determinations[9], we decided not to adjust our approach for RIIO-ED2 but stated that we would consider and consult on the issue on a cross-sectoral basis during 2023. This document begins this process by outlining the issue, providing our initial considerations and a range of potential options which could be adopted to address the matter, and seeks stakeholder feedback. Specifically, the document seeks responses to the following questions:

1. **Have we characterised the issue accurately?**
2. **Have we adopted an appropriate approach to the quantitative assessment? Responses to the question should consider the relevant factors listed on page 4, the accompanying financial model and model user notes.**
3. **What are stakeholders' views on the policy options outlined and the associated benefits and risks associated with each option? Are there areas where the policy options outlined could be optimised? Please see the policy option section on page 7.**

[8] RIIO-ED2 Draft Determinations – Finance Annex (ofgem.gov.uk) - Page 58
[9] RIIO-ED2 Final Determinations Finance Annex (ofgem.gov.uk) - Page 62

4. **Should any other policy options be considered?**
5. **Are the principles proposed for policy formulation complete and appropriate?**
6. **Do the proposed evaluation criteria comprehensively consider the consumer interest in respect of this issue? Are there modifications or additional criteria that stakeholders would suggest?**
7. **Is there any further information or are there other factors which should be considered?**

This document should not be taken as an indication that Ofgem has concluded its assessment of the impact of this issue, is minded to take action, nor of Ofgem's individual preference for any particular option. For the avoidance of doubt, inflation protection is considered a cornerstone of our price control framework, and this Call for Input only considers the CoD mechanism. No other inflation protection mechanisms are within scope. We wish to emphasise we are not considering changing the overarching inflation protection principle of keeping real equity returns stable relative to inflation.

Context

Under the current methodology for the price control, it is intended that inflation would broadly align to the long run assumption over a reasonable period and therefore not result in sustained, significant outperformance or underperformance for licensees. As inflation fluctuates from year to year, any temporary underperformance or outperformance should not be considered problematic if outturn inflation is not inherently skewed above or below the long run assumption. Further, licensees could reduce their respective equity exposure to the leverage effect via the use of index linked debt or derivative instruments ("ILD"). The extent of their application or non-application would be a choice of financing policy for licensees with the risk and rewards of such decision residing with shareholders.

However, we now are recognising the current exceptional inflationary environment may have highlighted potential challenges for the normal operation of the CoD mechanism. In particular, the large peak in absolute terms, even over a short period, can skew upwards average inflation levels over an entire price control period. This could result in equity outperformance in the form of additional RAV growth and higher consumer bills which are carried forward into future periods.

The potential scale of out or underperformance, historically and for future periods, and in both absolute £ millions and £ per average customer terms, is important in our evaluation of whether the issue requires intervention. If we do determine that further policy action is

necessary, we need to ensure that such action is proportionate and in the consumer interest. We consider the relevant factors[10] for this quantitative assessment include:

- The 'counterfactual' and forecast levels of inflation;
- The length of the evaluation period;
- Consideration of notional and actual capital structure assumptions with respect to gearing and ILD levels;
- Treatment of inflation basis risk between the Retail Price Index ("RPI"), Consumer Prices Index ("CPI") and CPIH indices; and
- The discount rate used to present outputs in net present value terms.

These factors can have a significant impact on the scale of the issue. The length of the evaluation period is a pertinent example. As a principle, we consider a period spanning multiple price controls to be reasonable for evaluating the scale of out or underperformance for future and historical periods. This is commensurate with a long-term approach to investment and financing for the networks sector. However, we recognise that there is merit in considering the question as to what should constitute the exact length of the evaluation period. Potential evaluation periods include:

- A shorter-term timeframe focusing on the RIIO-2 period (GD&T: 2021-26, ED:2023-28) only for each price control. This would capture the recent high outturn inflation fully for GD&T and partially for ED, as well as the forecast inflation for the remainder of the period.
- A medium-term timeframe capturing the respective RIIO-1 and RIIO-2 periods (GD&T: 2013-26, ED: 2015-28) for each price control. This would capture the recent high outturn inflation fully, as well as below average inflation over the early years of RIIO-1 (GD&T: 2013-21, ED:2015-23) and forecast inflation for the remainder of the RIIO-2 period.
- A longer-term timeframe spanning back to the Bank of England's independence in 1997, which created a mandate for targeting a specific rate of inflation.

Our initial analysis[11] suggests that from the start of RIIO-1 for each network price control to the end of FY 2022/23 (using outturn data only) the inflation leveraging effect results in circa £1.5bn[12] of additional RAV growth for networks. This equates to a circa £2.30

[10] This is not intended to be an exhaustive list of factors. Please refer to the accompanying financial model and model user notes for a more detailed analysis of how these factors can impact the assessment of scale. Estimates are derived applying notional capital structure assumptions.
[11] Refer to our financial model for further details
[12] Expressed in present value terms - 2023 base year

average domestic consumer bill impact annually assuming a 45-year payback period. The overall impact estimate over RIIO-1 & RIIO-2 (medium-term approach) is highly sensitive to the assumptions[13] made on future inflation which may increase or reduce the overall impact. For example, when utilising the March OBR CPI forecast[14] we estimate a total of circa £1.2bn of additional RAV growth over the whole period, but based on the May HMT consensus forecast[15] this would cause the estimate to rise to circa £3.4bn. The bill impact utilising these two different CPI forecasts would correspondingly result in a total bill impact of circa £1.50-£5.10 annually assuming a 45-year payback period. We would like to stress that these are illustrative figures which are highly sensitive to the aforementioned factors and forecast inflation, meaning it could outturn lower or higher than these estimates.

Further potential grounds for considering intervention with respect to historical or future periods are outlined below:

- A similar symmetrical shock below the long run assumption may have compelled Ofgem to intervene, to protect consumers from the potential consequences of systemic underperformance of licensees and consequent instability in the sector. This means, in the current exceptional inflationary environment, the current structure may not represent a fair balance of risk for consumers.
- The possibility that the long run assumption utilised systematically underestimated market expectations for inflation. This could mean the policy is reasonably expected to result in overcompensation and is inherently unfair for consumers.
- The additional returns to equity driven by high inflation do not correspond to outperformance of consumer outcomes (such as quality of service) and so could undermine the legitimacy of the price control.

Principles for policy design and implementation

In line with our principal objective and other statutory duties, we consider the following principles as key for the formulation of any policy action in its design and implementation:

[13] Ofgem utilise unadjusted CPI forecasts for future CPIH assumptions due to the absence of readily available CPIH forecasts.
[14] OBR Economic and fiscal outlook - March 2023 - Table A. 1 - Page 144
[15] Independent Forecasts for the UK Economy May 2023 - Table M3 - Page 20

- **Financial resilience** – we will evaluate the potential financial resilience impact on licensees from policy options and seek to minimise this, for example by ensuring there is an appropriate transition timeline as discussed below.
- **Policy symmetry** – applying policy action with symmetrical effect to deliver fairness to investors and consumers. For example, if the inflation-driven outperformance opportunity is reduced or removed, a corresponding reduction is made to the underperformance risk. We acknowledge that this would result in both investors losing an outperformance opportunity when inflation is above the long run assumption and consumers when inflation is below the long run assumption.
- **Managing the pace of implementation** – providing appropriate transition timeframes to enable licensees to make necessary adjustments to adapt to a policy change, for example, making changes to their capital structures. An appropriate timeframe would vary with the option ultimately adopted and, for example, could involve a transition timeframe spanning multiple years or price controls.

Criteria for Evaluation

In line with our principal objective and other statutory duties, we consider the following aspects to be key criteria for evaluating policy options in respect of the consumer interest:

- **Protecting consumer interests –** whether we conclude the policy was detrimental to the consumer's interests, with a reasonable expectation that the policy would result in equity outperformance. Additionally, whether we conclude the policy will be in the consumer's interests in the future.
- **Ensuring prices are fair for the consumer and are efficient –** we will consider whether policy action may be able to reduce costs or offer greater price stability for the consumer over the long run.
- **Regulatory stability and predictability –** policy action, particularly if it was not anticipated or in line with accepted best practice, may impact the perception of the stability and predictability associated with the regulatory regime. Regulatory stability underpins the ability to minimise perceptions of risk and the cost of capital for the consumer. It is also key to investor confidence and the investability associated with the sectors we regulate over the long term. It is possible policy action may raise the cost of capital to consumers to the extent it offsets the likely benefits of such an action. We will therefore consider to what extent there are risks to regulatory stability and associated costs in our policy evaluation.
- **Optimal allocation of risk –** if we conclude policy action may result in a more optimal distribution of risk between the consumers and licensees or a net reduction of risk overall. The principal considerations in the allocation of risk include which

parties are best placed to influence or manage these risks effectively, whether the allocation improves the incentive framework for efficient performance and an efficient cost of capital and how the allocation influences the complexity of the control. The removal of the inflation leverage effect for example could reduce inflation risk for both consumer bills and network returns.

- **Price control legitimacy –** the additional return is a result of an economic sensitivity inherent within the price control and is not associated with business performance or outcomes for the consumer. This dynamic may undermine the perception of legitimacy of the price control framework. We will therefore consider the protection of the legitimacy of the price control in our policy evaluation.
- **Credibility of voluntary plans submitted –** the extent to which any plans submitted by licensees are robust, credible and consistent across licensees and clearly demonstrate the consumer benefit from such plans.

Policy options under consideration

We have outlined 5 high level policy options below. In the event we are minded to take action, we may choose a combination of these options. As previously outlined, this should not be taken as an indication that Ofgem is minded to take action, nor of Ofgem's individual preference for any particular option.

1. **No policy action in relation to this issue** - This may be the most appropriate solution if over the long run we can demonstrate that consumers have not incurred (and likely will not incur) detriment as a result of the policy; that the long run assumption remains reasonable and is not likely to result in systematic out or underperformance on average; or we conclude available policy options do not create sufficient benefits to outweigh their potential risks and costs and are not in the consumer interest. While taking no action maintains greater regulatory stability, the leveraging effect would be retained as a feature of the price control.

2. **Distribution policy reporting and transparency** – At present, GD&T licensees[16] must annually provide to Ofgem an explanation of dividend policies and dividends declared and paid, and how these take account of long-term financial sustainability, including delivery for customers and other stakeholder obligations[17]. We note that the level and quality of disclosure in this area for the 2021/22 Regulatory Financial Performance Reporting ("RFPR") was mixed. We expect licensees, at a minimum,

[16] To be introduced to the ED sector from 2024
[17] RIIO-2 RFPR - Regulatory Instructions and Guidance - Page 42

to act responsibly, transparently and in the consumer interest when making annual distribution decisions and reviewing their distribution policies. In making distribution decisions, we expect companies to give appropriate weight to shoring up financial resilience, ensuring sufficient equity availability for the expected increased investment in context of facilitating the transition to net zero and/or accelerating investments to increase the speed of delivery for customers. We will place increased focus on company disclosures in their 2022/23 annual reports and RFPR submissions. Additionally, we could consider policy action in respect of this area to enhance existing requirements to secure higher levels of compliance, consistency and public transparency of the reporting. This will help ensure that there is a clear and transparent evidence base for demonstrating that a licensee's distribution policies and decisions on quantum are appropriate for the outturn performance achieved. To this end, we may consider:

- Requiring more robust levels of board assurance;
- Publication of submissions to improve public transparency of distribution policies and decisions;
- Ensuring disclosures meet minimum standards which enable external stakeholders to better understand and compare across the sector: how distribution decisions are arrived at and link to business performance (in particular customer delivery) and takes into account longer term considerations, such as financial resilience, investment needs and equity funding needs; and
- Including shareholder loan payments within the definition of distributions.

3. **Changes to future price control design** – As part of the next set of network price controls we could consider a range of methodology changes to reduce or remove the out/underperformance effect or enhance the calibration of the control. Examples of such options include but are not limited to:
   i. Creating a CoD allowance for fixed rate debt and deflating this by forecast inflation and including an end of period true up to outturn,
   ii. Providing a nominal allowance for fixed rate debt,
   iii. Deflating the CoD by another long-run assumption, or
   iv. Implementation of a Return Adjustment Mechanism ("RAM") type threshold for inflation to cap or share outperformance and underperformance.

   Under this option, it may be more appropriate to make any decision as part of the next price control process rather than as a standalone consultation. The option would not remove temporary "excess" RAV growth and may require a lengthy

implementation period, but could mitigate or remove the effect for future periods and have a lower impact on the perception of regulatory stability and cascading impact on the cost of capital borne by the consumer.

4. **Out or underperformance true up –** We could consider applying an adjustment (e.g. to RAV) at the end of the RIIO-2 price controls to adjust for licensees' actual out or underperformance over a defined evaluation period. The extent of the adjustment could range from a partial to full adjustment. This policy would seek to directly reduce outperformance earned by licensees over the period of elevated inflation. This adjustment would be sized in relation to the out or underperformance element only and would not seek to remove the indexation necessary to sustain real returns in respect of inflation. While this option may create some benefits for consumers by removing any temporary "excess" RAV growth (the precise scale of which is currently uncertain due to the aforementioned factors set out on pages 3-4), it could also create significant costs for consumers by undermining the stability and predictability of the regulatory framework if investors perceive elevated regulatory risk, leading in turn to a potentially sustained increase in the cost of capital borne by consumers. This is particularly pertinent in the context of the elevated investment requirements in the near term to facilitate the transition to Net Zero; with relatively small changes to the cost of capital able to outweigh any benefits associated with this option.

5. **Voluntary submissions by licensees** – We welcome further dialogue with licensees and suggestions as to how they could share benefits of inflation-driven equity outperformance with consumers. This could include a commitment to return incremental RAV growth driven by this issue back to consumers, plans to accelerate or increase investment during the current price controls and/or a commitment to use the equity outperformance to improve financial resilience.

Next steps

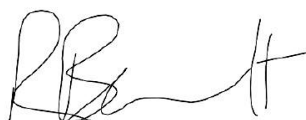
We are keen to engage with a wide range of industry and interested parties during this process and draw on your experience and expertise. This includes network companies, investors, rating agencies, end-consumers, suppliers, generators, system operators, government, regulators, representatives of relevant organisations and other bodies.

To start this process and help us shape the considerations on this issue, we have set out specific questions regarding inflation in this document. We would welcome written comments on these questions, or any other issues you believe we should address in the review, by 26th September 2023. Please email responses to RegFinance@ofgem.gov.uk. Unless clearly marked as confidential, we will publish responses on our website shortly after the response deadline.

Subject to consideration of the responses we receive, and if we are minded to explore policy options further, we intend to publish an informal consultation on this issue and provide stakeholders with further detail around policy options, design principles, evaluation criteria and timelines, including whether we continue to consult on a standalone basis or via the Sector Specific Methodology Consultation for the next set of price controls. Timelines would be guided by the timetable for the next price control setting process (to be published), but we would not intend to publish any informal consultation on this matter before late 2023.

We are very cognisant of the need to proceed very carefully on this issue, particularly in the context of the need for increased levels of investment to facilitate the transition for net zero and the wider consumer interest. We intend to consult widely and move at an appropriate pace given the complexity and sensitivity of this issue.

Yours faithfully,



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Appendix 1: Technical Explanation

The CoD allowance for both GD&T2 and ED2 utilises a trailing average methodology. At each measurement point of the trailing average, this is deflated by a long run assumption of CPIH, being the year 5 OBR forecast at that point. The long run assumption has typically aligned to 2%.

Use of a long run assumption to deflate the CoD allowance means the real allowance does not adjust to short term inflationary spikes and only if there is a structural shift in long run expectations. This means the real CoD allowance remains invariant to outturn inflation. However, because the interest paid on fixed rate debt (or nominal cost) does not change with inflation, when inflation rises, the real cost of fixed rate debt falls. The reverse is also true in periods where inflation falls. This generates a mismatch between the allowance and the cost of debt incurred where inflation deviates from long run expectations. This mismatch generates the out or underperformance potential for equity.

It should be noted the extent of out or underperformance risk varies significantly by licensee due to differences in the proportion of ILD in their respective capital structures. For ILD, the nominal cost is linked with inflation and the real cost is held constant. This means an increased proportion of ILD reduces or removes the potential mismatch risk between the allowance and the real cost of debt incurred.

Please see the accompanying model for an illustrative simplified example.