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RIIO-ED2 PRODUCTIVITY TARGET

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Executive Summary

In its Draft Determinations for RIIO-ED2, Ofgem has proposed to set an ongoing efficiency challenge of 1.2% for totex. In this paper we provide a high level review of the parallels between Ofgem's proposed ongoing efficiency challenge for RIIO-ED2, and the decisions Ofgem made in RIIO-ED1 (the Smart Grid Benefits (SGBs) decision) and RIIO-GD2/T2 RIIO-GD2/T2 (the Innovation Uplift decision) which were subsequently overturned on appeal to the CMA. The scope of this paper therefore does not include an in-depth review or evaluation of CEPA's data analysis and methodology, which is being undertaken separately for the ENA by NERA. We understand that NERA's report identifies a number of errors in CEPA's analysis and Ofgem's use of CEPA's analysis.

The proposed target of 1.2% is a marked increase on past regulatory practice, in which the productivity target has generally been set at 1% or less. In both of the prior price review decisions highlighted above, Ofgem proposed novel approaches to cost assessment which drew on parallel underlying reasoning to that being relied on now for ED2. Both of those past decisions attempted to justify increasing the productivity parameter to 1.2% (directly in the case of the Innovation Uplift, and indirectly in the case of SGBs).

For ED2, Ofgem says it is now relying on (*inter alia*) a new adaptation and interpretation of the EU KLEMS growth accounting analysis. This might appear at first to represent a different basis for Ofgem's decision making, compared to the "bolt-on" modelling approaches that were rejected by the CMA in RIIO-ED1 and RIIO-GD2/T2. However, these apparent differences are superficial - Ofgem's RIIO-ED2 proposal amounts to no more than a third attempt to introduce the same incremental productivity target, which has been comprehensively rejected already by the CMA in the last two price reviews. The CMA has been clear that any judgement made by Ofgem must be grounded in sound evidence. We consider that - holding aside any potential new errors - many of the same weaknesses and errors that were identified in the RIIO-ED1 and RIIO-GD2/T2 appeals apply equally to the proposals now made by Ofgem for RIIO-ED2.

We believe the CMA's fundamental requirement for evidence-based decision making is highly valuable for customers. This is particularly true in respect of assumptions as material to cost allowances as the productivity assumption. We calculate that reducing the productivity assumption from 1.2% to 1% (i.e. the highest level generally applied by other regulators and by Ofgem historically) would increase cost allowances by £222m across the sector over ED2; while a value of 0.5% (i.e. the lower end of the range of assumptions included in company plans according to Ofgem) would increase cost allowances by £786m. The disallowances associated with an erroneously high productivity target are highly material.

To be clear, we do not refer to the CMA's past opinions because we believe they establish hard-and-fast rules which must be followed by Ofgem in all future decisions. As the CMA explained in the GD2/T2 appeal, Ofgem's innovation uplift was not wrong simply because it was inconsistent with the CMA's decision in the ED1 Northern Powergrid appeal. The point of identifying the parallels with past decisions is to highlight a (now) repeated pattern of attempts by Ofgem to introduce a novel change to the productivity parameter which has insufficient underlying basis in evidence. We consider it is likely that investors will now perceive that Ofgem has made repeated attempts to arbitrarily 'goal seek' an outcome of 1.2%. The fact that Ofgem has been willing to do so – despite the two previous appeals – will inevitably increase the perception of regulatory risk for UK energy networks.

Further, Ofgem had previously attempted to introduce novel computational analyses in the form of the SGBs adjustment and innovation uplift to justify a 1.2% target. Those modelling approaches were heavily criticised by the appellants and ultimately found to be erroneous by the CMA. Rather than seeking to improve the way it collects data or to correct the errors that were identified in its previous analyses, Ofgem has instead reverted to high-level qualitative arguments that contain nothing more than speculation and assertion about the effect that contextual factors for ED2. This is an outcome which cannot be consistent with the CMA's fundamental requirement for evidence-based decision making, nor is it in customers' interests for such material decisions to be left entirely to regulatory judgement and discretion in the absence of evidence.

As a consequence, the DD proposal places unnecessary jeopardy on the delivery of the critical investment that is needed to meet Net Zero. In our view it is crucial that the networks and Ofgem work together in order to avoid a third successive CMA appeal on this topic, which would drag substantial senior resource and attention – at both Ofgem and the DNOs – away from the critical task of delivering Net Zero throughout much of 2023. An appeal could also put at-risk Ofgem's ability to engage on critical questions related to Net Zero which need to be considered for the gas networks and electricity transmission networks ahead of RIIO-3. In this context we would urge Ofgem to consider carefully whether it has sufficient evidence to support its "*judgement*" (para 7.461) of 1.2% productivity, which is almost certain to invite appeals of ED2.

1 Introduction

Ofgem's RIIO-ED2 Draft Determination (DD) was published on 29th June 2022. Ofgem has proposed to set an ongoing efficiency challenge of 1.2% for totex, representing the productivity increases Ofgem expects all DNOs (including those deemed currently to be the most efficient) to deliver year-on-year.¹ In setting this target Ofgem has relied on a report by CEPA ('RIIO-ED2: Cost Assessment - Frontier Shift methodology', **the CEPA ED2 report**), which was published alongside the DD.

This report was commissioned by the Energy Networks Association (ENA) to provide a high level review of the parallels between Ofgem's proposed ongoing efficiency challenge for RIIO-ED2, and the decisions Ofgem made in RIIO-ED1 (the Smart Grid Benefits (SGBs) decision) and RIIO-GD2/T2 RIIO-GD2/T2 (the Innovation Uplift decision) which were subsequently overturned on appeal to the CMA. The scope of this paper therefore does not include an in-depth review or evaluation of CEPA's data analysis and methodology, which is being undertaken separately for the ENA by NERA. We understand that NERA's report identifies a number of errors in CEPA's analysis and Ofgem's use of CEPA's analysis.

The rest of this paper is structured as follows:

- In Section 2 we describe how Ofgem has reached its proposed productivity target in its ED2 DD and provide some high level comments (noting again that a full critique of the detailed method is being provided by NERA);
- In Section 3 we describe the appealed decisions in ED1 and GD2/T2 and identify relevant parallels with Ofgem's ED2 proposal; and

¹ Ofgem (June 2022) RIIO-ED2 Draft Determination – Core Methodology, paragraphs 7.459 – 7.479.

- In Section 4 we assess the implications of this for customers and networks.

2 Ofgem's RIIO-ED2 DD proposal

The primary source of quantified evidence that is used by regulators to inform their productivity targets is growth accounting analysis drawing on the EU KLEMS database. CEPA states that its analysis of EU KLEMS represents the foundation for its assessment and acknowledges there is strong regulatory precedent for relying on EU KLEMS, albeit CEPA also advises that Ofgem should come to a holistic view based on other factors.² In this section we comment on CEPA's growth accounting analysis at a high level, before describing the other factors which Ofgem says it has relied on.

At the outset, it is important that the materiality of the productivity assumption impact on cost allowances is clear. While we do not offer an opinion on a specific appropriate level of ongoing efficiency challenge for ED2 in this paper, the examples below illustrate the materiality. Holding all else equal in Ofgem's Draft Determinations:

- reducing the productivity assumption from 1.2% to 1% (i.e. the highest level generally applied by other regulators and by Ofgem historically) would increase cost allowances by £222m across the sector over ED2; and
- reducing the productivity assumption from 1.2% to 0.5% (i.e. the lower end of the range of assumptions included in company plans according to Ofgem) would increase cost allowances by £786m.³

These impacts are before the effect of the higher productivity assumption is factored in to the application of any uncertainty mechanisms. Clearly these are not trivial amounts – the disallowances associated with an erroneously high productivity target are highly material.

2.1 CEPA's growth accounting analysis

CEPA's main growth accounting results from EU KLEMS are replicated below.

² CEPA (June 2022) RIIO-ED2: Cost Assessment – Frontier Shift methodology paper, page 4 <https://www.ofgem.gov.uk/publications/riio-ed2-draft-determinations>

³ We note that if any errors in Ofgem's cost benchmarking models are fixed and if methodological changes are made, these values might change, but we would nevertheless expect that it remains material. The calculation assumes compounding of the alternative productivity assumption starts from 2021/22, mirroring Ofgem's DD approach.

Table 1: Average historic TFP growth rates based on the 2019 EU KLEMS database (to 1 d.p.)

Average TFP growth (%)	Full time series (1995-2016)		Various business cycle definitions	
	VA	GO	VA	GO
Unweighted average of narrow comparator set	0.8%	0.4%	0.3 to 0.4%	0.2%
Unweighted average of expanded comparator set ²	1.2%	0.6%	0.9 to 1.0%	0.5 to 0.6%
Weighted average of market Economy (all industries excluding L, O, P, Q, T, and U)	0.8%	0.4%	0.7 to 0.8%	0.3 to 0.4%

Source: CEPA analysis of EU KLEMS

It is immediately apparent from CEPA's analysis that the overwhelming weight of quantitative evidence points to a productivity target of less than 1.2% - and indeed, even less than 1%. This is evident even before any technical debate about the specific comparator set used; the various methodological choices which underpin these figures; or any potential weaknesses in the calculation of these numbers (all of which we understand are discussed in NERA's report for the ENA).

Only one of CEPA's estimates from EU KLEMS reaches 1.2%. This estimate is derived from what CEPA calls an "expanded" set of comparator sectors. It is important to be clear that the top row in CEPA's table represents the results that would be derived had CEPA selected the same comparator set which it recommended in the RIIO-GD2/T2 price control; while the bottom row represents the results from taking a weighted average of all EU KLEMS sectors (with some exclusions). The top and bottom rows are therefore the analyses which CEPA recommended Ofgem should rely on as recently as its November 2020 report for the RIIO-T2/GD2 FD;⁴ and during the subsequent CMA appeal for those sectors in the first half of 2021.

The two new sectors added to CEPA's expanded comparator set are:

- Professional, Scientific, Technical, Administrative and Support Service Activities; and
- Information and Communication.

Ofgem says that the expanded comparator set has been "*developed for ED2*"⁵ and states:

*"Though we are not relying on any given figure from the growth accounting analysis, we are placing more weight on the expanded comparator set developed specifically for this price control."*⁶

Given the bespoke and novel nature of this change in CEPA's approach, and the apparent criticality of the expanded comparator set in determining Ofgem's proposed 1.2% productivity target, we would have expected Ofgem and/or CEPA to have scrutinised carefully the validity of including new sectors. Instead,

⁴ CEPA (November 2020) RIIO-GD2 and T2: Cost Assessment – Advice on Frontier Shift policy for Final Determinations, section 2.5, available in technical annex part 1 here: <https://www.ofgem.gov.uk/publications/riio-2-final-determinations-transmission-and-gas-distribution-network-companies-and-electricity-system-operator>.

⁵ Ofgem (June 2022) RIIO-ED2 Draft Determination – Core Methodology, paragraph 7.467, second bullet

⁶ Ofgem (June 2022) RIIO-ED2 Draft Determination – Core Methodology, paragraph 7.468

Ofgem's DD does not explore the matter at all, while CEPA provides only unevidenced qualitative assertions about the effect of digitalisation on the electricity distribution sector.⁷

CEPA's overall recommendation is that a productivity target of 1.2% would imply that historical growth rates calculated from EU KLEMS “significantly underestimate the frontier efficiency improvements that can be achieved in ED2”. This emphasises that Ofgem’s target is not (at least in CEPA’s view) supported by the EU KLEMS figures, but relies instead on other judgements, which we turn to in the next section.

2.2 Other factors relied on by Ofgem

A full review of the other factors relied on by Ofgem in reaching its decision is beyond the scope of this paper. However, at a high level we wish to offer the following observations.

Ofgem states that it has considered a range of factors in reaching its proposed ongoing efficiency challenge, listing seven factors (para 7.464).

- For two of these factors – namely the time period used for EU KLEMS analysis and reliance on forward-looking productivity forecasts for the economy - Ofgem identifies a potential issue but then dismisses its relevance. Neither factor has therefore actually supported Ofgem’s decision to set a target of 1.2%.
- Ofgem cites regulatory precedent which it acknowledges is generally clustered around 1% per annum. This does not support a 1.2% target.
- Ofgem points to embodied technical change as a reason for considering that the GO-based TFP analysis might underestimate historical productivity (para 7.464, 7.469). The GO-based estimates provided by CEPA range from 0.2% - 0.6%, the top end of which is based on the expanded comparator set (see table above). Holding aside any technical debate about the merits of this argument, neither Ofgem or CEPA have provided any quantified evidence to suggest that the effect of ‘correcting’ the embodied technical change issue (if that was necessary) would **more than double** CEPA’s GO-based estimates to support a decision of 1.2%. Speculation and mere assertion is not enough – if Ofgem considers this issue to be material enough to more than double the estimates from EU KLEMS, it is incumbent on Ofgem to provide evidence of this to the sector so that it can be submitted to appropriate scrutiny.
- Ofgem states DNO Business Plan submissions ranged from 0.5% - 1% and that all companies should be able to meet the most ambitious level. Ofgem later states that information asymmetry creates “*an intrinsic incentive for DNOs to submit relatively modest OE targets*”⁸. However, the CMA in the RIIO-2 appeals on the Outperformance Wedge confirmed that Ofgem has at its disposal a wide range of tools to address information asymmetry. This includes the ability to benchmark historical costs and business plan cost forecasts and the provision of a BPI incentive – both of which Ofgem says create an incentive

⁷ CEPA (June 2022) RIIO-ED2: Cost Assessment – Frontier Shift methodology paper, page 16

⁸ Ofgem (June 2022) RIIO-ED2 Draft Determination – Core Methodology, paragraph 7.476

for the companies to submit lean plans.⁹ Broader price control mechanisms like the Totex Incentive Mechanism are also in place and well targeted to encourage efficiency and information revelation over time. The CMA also noted its view that the ongoing efficiency assumption itself involved some ‘aiming up’ to address information asymmetries arising from technological change.¹⁰ The CMA’s conclusion shows that it is wrong for Ofgem to make vague references to information asymmetry to justify material and novel disallowances in place of proper assessment of evidence.

In short, 5 of the 7 factors Ofgem says it has considered in reaching its decision either did not or clearly should not have provided any comfort to Ofgem that its decision to select a target of 1.2% was reasonable. This is apparent even on Ofgem’s own terms i.e. before unpacking any debate about the legitimacy of Ofgem’s views on these qualitative factors.

The sixth factor Ofgem says it considered is the evidence in DNO business plans that past innovation funding has led to cost reductions for ED2. We discuss this issue further in Section 4 given its clear parallels to the GD2/T2 innovation uplift and ED1 SGBs decisions.

The final factor Ofgem relies on is the “*clear ambition to deliver transformational change in the electricity distribution sector over the RIIO-ED2 period, which may provide additional opportunities for productivity growth in RIIO-ED2 above and beyond what has been set in the past or what has been set in other regulated sectors.*”¹¹ The “*digital evolution*” is cited as the basis for CEPA’s inclusion of additional sectors in its EU KLEMS analysis. While this is being reviewed in detail by NERA, at a high level we note that Ofgem’s reasoning appears to us to be, at best, vague. CEPA concludes that the context of ED2 means that additional efficiency gains “*may be possible*” but that “*the magnitude of any additional improvements is highly uncertain and dependent on the wider evolution of the electricity distribution sector over the RIIO-ED2 period*”¹² and “*it is not possible to quantify the impact [of the contextual factors in ED2] on the potential for productivity growth in the electricity distribution sector with precision*”.¹³ These are all reasons to believe a productivity target point estimate of 1.2% would be unsafe and is not supported by the primary evidence or any of the supplementary factors highlighted by Ofgem. Instead, the decision appears to be based on Ofgem and CEPA’s speculation around what *may* be possible.

⁹ See, for example, CMA (October 2021) Energy License Modification Appeals 2021 - Final Determination, Volume 2B, paragraph 6.98 in which the CMA explains “We do not consider that being able to point to the existence of asymmetries of information should be regarded, in and of itself, as implying a ‘problem’ in terms of a regulator’s ability to set a price control that is a ‘fair bet’ (ie where there is a broadly equal chance of under-and out-performance). Rather, we consider it important when assessing this also to take account of the likely implications of the steps a regulator has taken, and may take, that are relevant to expectations concerning operational performance.” See also 6.148-6.149; 6.152; 6.157; 6.181(a)(iii), vi) and viii. <https://www.gov.uk/cma-cases/energy-liscence-modification-appeals-2021>

¹⁰ Ibid paragraph 6.138.

¹¹ Ofgem (June 2022) RIIO-ED2 Draft Determination – Core Methodology, paragraph 7.464, first bullet

¹² CEPA (June 2022) RIIO-ED2: Cost Assessment – Frontier Shift methodology paper, page 24

¹³ CEPA (June 2022) RIIO-ED2: Cost Assessment – Frontier Shift methodology paper, pages 5 and 37

3 The GD2/T2 and ED1 appeals

There are a number of clear parallels between Ofgem's proposed use of a 1.2% productivity target for RIIO-ED2, and the adjustments that were proposed (and rejected on appeal) in the two previous RIIO controls, namely:

- the "Smart Grid Benefits (SGBs)" adjustment in RIIO-ED1; and
- the "innovation uplift" on ongoing efficiency in RIIO-GD2/T2.

In the course of the appeals on both of these topics, Frontier submitted expert testimony to the CMA. We discuss each in turn below.

3.1 RIIO-ED1 Smart Grid Benefits

Ofgem defined SGBs in RIIO-ED1 as the savings that the electricity DNOs could make on the cost of operating and maintaining their systems as a result of implementing a variety of new 'smart' technologies.¹⁴ Ofgem required companies to submit estimates of how much cost was avoided within their ED1 business plans due to SGBs. That information was used by Ofgem to compare the level of avoided cost between the DNOs business plans, on the basis of which Ofgem imposed an incremental reduction in cost allowances (i.e. on top of the allowance reductions arising from Ofgem's benchmarking of ED1 forecast costs).

The underlying rationale and justification Ofgem provided for making the adjustment in RIIO-ED1 is directly parallel to the rationale now being proposed in RIIO-ED2 to support a target of 1.2%. For example:

- In the ED1 Draft Determinations, Ofgem noted that it had 'cross-checked' its SGB analysis with an assessment of the cost savings that could flow from the roll out of Low Carbon Network Fund (LCNF), NIC and NIA funding during the ED1 period.¹⁵ In the ED2 DD, Ofgem and CEPA again make various references to innovation funding as a reason to believe higher cost reductions are possible.
- In the ED1 Final Determinations, Ofgem directly linked the SGBs adjustment to the headline productivity assumption, stating the following (emphasis added).

*"Given the level of investment consumers have made in innovation projects and the smart metering programme, we would expect savings from these in addition to historical levels of ongoing efficiency. We have no evidence that ongoing efficiency forecasts for RIIO-ED1 are significantly above those for previous price controls where these factors did not apply. We have undertaken a top-down assessment of the additional savings we are requiring DNOs to deliver. This demonstrates that **the adjustment for smart grids and other innovation represents on average an additional***

¹⁴ See also Ofgem (November 2014) RIIO-ED1: Final determinations for the slow-track electricity distribution companies, Expenditure assessment, <https://www.ofgem.gov.uk/publications/riio-ed1-final-determinations-slow-track-electricity-distribution-companies>, Section 11. Table 11.3 lists the technologies Ofgem considered to be 'smart' in its FD.

¹⁵ Ofgem (September 2014) RIIO-ED1 Draft Determinations for the slow track energy companies - Overview, <https://www.ofgem.gov.uk/publications/riio-ed1-draft-determinations-consultation-slow-track-electricity-distribution-companies>, paragraph 4.29. See also Ofgem (November 2014) RIIO-ED1: Final determinations for the slow-track electricity distribution companies, Expenditure assessment, paragraph 11.1.

implied frontier shift of 0.2% per year for slow-track DNOs. This compares to ongoing efficiency assumptions embedded in DNOs' business plans of between 0.8 and 1.1% per year. We consider that this additional evidence demonstrates our adjustment is appropriate and corroborates our benchmarking assessment.”¹⁶

This suggests that Ofgem's view at the time of ED1 Final Determinations was that there was a degree of equivalence between the SGBs adjustment and the productivity assumption. In effect the “*additional implied frontier shift of 0.2%*” that Ofgem tried to impose indirectly via the separate SGBs cost adjustment in ED1 has now simply been embedded directly into a higher productivity target for ED2.

In short, at ED1 Ofgem sought to justify the SGBs decision with reference to its view that innovation (and particularly innovation funded by customers) should give rise to future productivity improvements associated with sector-specific technological developments, over and above those which might reasonably have been anticipated under a ‘business as usual’ cost assessment. The same reasoning is now being applied again in the ED2 DD as part of Ofgem’s qualitative assessment.

In the SGBs case the CMA set out a clear process by which this type of adjustment should be justified, should Ofgem seek to impose it. The CMA explained that:

“If … there was no good basis on which to conclude that the DNOs were likely to have underestimated SGBs materially, or if the general cost benchmarking exercise could be expected to have already addressed the risk of any underestimation to a sufficient degree, there can have been no justification for an adjustment.”¹⁷

The same process could readily have been applied for the RIIO-ED2 DD in relation to the ‘contextual factors’ which Ofgem relies on in reaching its decision.

As noted above, innovation funding in particular is referred to by Ofgem and CEPA.¹⁸ Ofgem says that it considers the DNOs have embedded cost efficiencies from innovation funding into business plans on an inconsistent basis.¹⁹ In the time available we cannot fully evaluate whether Ofgem provided sufficient guidance to DNOs that would enable it to expect consistent reporting, or evaluate Ofgem’s evidence for concluding that cost savings have been reported inconsistently (to the extent that evidence has been published). Nevertheless, Ofgem evidently accepts that savings from innovation funding have been included in the plans at least to some extent.²⁰ Even if this has been reported inconsistently (which we have not evaluated) the benchmarking process will by definition imply that the allowed cost baselines for ED2 – before the application of the productivity target – will have already embedded savings from past customer-funded innovation projects across the sector.

¹⁶ Ofgem (November 2014) RIIO-ED1: Final determinations for the slow-track electricity distribution companies, Expenditure assessment , paragraph 11.51

¹⁷ CMA (September 2015) Northern Powergrid, Final determination, paragraph 4.54.

¹⁸ See, e.g., CEPA (June 2022) RIIO-ED2: Cost Assessment – Frontier Shift methodology paper, page 16, 23, 24, 25, footnote 66.

¹⁹ Ofgem (June 2022) RIIO-ED2 Draft Determination – Core Methodology, paragraph 7.474

²⁰ We note that CEPA also states that Ofgem finds that “*all the network companies claim to have embedded cost efficiencies from previous innovation funding to varying degrees*” – page 5.

CEPA appears to agree with this,²¹ acknowledges the resulting clear risk of double counting,²² and recommends that Ofgem should only adopt 1.2% if there is evidence to suggest that these efficiencies are not already captured in Ofgem's benchmarking analysis.²³ Instead of following CEPA's recommendation, Ofgem says that it has been "*unable to quantify the extent to which any such efficiencies are already captured to some degree in the comparative benchmarking.*"²⁴ This suggests that Ofgem knows there is double counting in its approach, but has made no attempt to quantify it. Ofgem therefore has not met one of CEPA's key criteria for supporting a productivity target of 1.2%. Put another way, and following the CMA's process in the SGBs case (quoted above), Ofgem has not provided any reason to believe that any cost savings arising from past innovation funding are a) not sufficiently included already in DNO business plans and/or b) not sufficiently factored in to the baseline allowances for ED2 as a result of Ofgem's benchmarking.

In this respect, there is one point of difference with the precedent from RIIO-ED1. In the SGBs case Ofgem went to some length to assess whether there was double counting associated with its SGBs adjustment and the general cost benchmarking analysis. Ultimately, however, the CMA accepted calculations submitted by Northern Powergrid which demonstrated that double counting had not been eliminated by Ofgem.²⁵ Ofgem therefore attempted (and failed) to mitigate the risk of material double counting at ED1. At RIIO-ED2 Ofgem does not appear to have even attempted to mitigate the risk, despite the precedent from the SGBs case and CEPA's recommendation.

The following CMA conclusion is also pertinent for ED2:

*"In our view, the context within which this assessment was made raised a number of significant challenges, given – among other things – inevitable uncertainties over what might be achievable in an evolving context, the novelty of the exercise (including the absence of an established and stable basis for identifying and reporting what should be treated as 'smart'), and the fact that a holistic cost benchmarking exercise had already been undertaken. We consider that this meant particular care was merited in seeking to draw a conclusion that the comparison of the data among DNOs supported a finding that there was a likely shortfall across all DNOs that justified an adjustment."*²⁶

The context and inevitable uncertainties to which the CMA was referring apply equally to ED2, if not more so in light of the highly uncertain impact that factors such as digitalisation could have on network costs. This would suggest the need for Ofgem to exercise greater caution than it has in its DD.

3.2 RIIO-GD2/T2 Innovation Uplift

The RIIO-T2/GD2 price controls set allowances for the electricity transmission, gas transmission, and gas distribution sectors. In its Final Determinations published in December 2020, Ofgem proposed a productivity

²¹ CEPA (June 2022) RIIO-ED2: Cost Assessment – Frontier Shift methodology paper, pages 24-25

²² CEPA (June 2022) RIIO-ED2: Cost Assessment – Frontier Shift methodology paper, page 5

²³ CEPA (June 2022) RIIO-ED2: Cost Assessment – Frontier Shift methodology paper, page 7

²⁴ Ofgem (June 2022) RIIO-ED2 Draft Determination – Core Methodology, paragraph 7.474

²⁵ CMA (September 2015) Northern Powergrid, Final determination, paragraph 4.105 – 4.109

²⁶ CMA (September 2015) Northern Powergrid, Final determination, paragraph 4.91

target of 1.2%. This was based on analysis by CEPA (done at the Draft Determination stage) which Ofgem used to justify a baseline target of 1%, and an “innovation uplift” of 0.2%.

In its DD report, CEPA stated that it had been unable to identify a “*firm relationship between the level of innovation funding and the expected efficiency improvements that could result from the funding*”.²⁷ Absent that evidence, CEPA instead calculated an innovation uplift which it said would deliver cost savings that “*would be required in order to make providing the innovation allowances seem a reasonable investment*.²⁸ CEPA set out a number of simplifying assumptions it had used in the analysis, and *inter alia* advised Ofgem that:

- there was a risk of double counting between the innovation uplift and the benchmarking of business plans, and Ofgem should therefore seek to satisfy itself that “*no additional ongoing efficiency driven by innovation funding in RIIO-1 is already embedded in the baseline spending plans submitted by the companies*.²⁹
- there was also a risk of double counting between the innovation uplift and the core productivity challenge of 1%.³⁰

The innovation uplift was appealed to the CMA by every licensee. The CMA overturned Ofgem’s decision – finding that Ofgem had made the following errors:³¹

- the value of the innovation uplift had been calculated incorrectly since it was based on incorrect assumptions;³²
- Ofgem had incorrectly assumed that innovation funding was entirely incremental to innovation spend in other EU KLEMS sectors – in effect meaning there was double counting with the core efficiency challenge;
- Ofgem had also double counted with cost savings that were in the business plans; and
- Ofgem had failed to consider sufficiently the potential disincentive effect of its reliance on past innovation funding to impose cost disallowances via the innovation uplift.

²⁷ CEPA (May 2020) RIIO-GD2 and T2: Cost Assessment – Frontier shift methodology, <https://www.ofgem.gov.uk/publications/riio-2-draft-determinations-transmission-gas-distribution-and-electricity-system-operator>, page 19

²⁸ CEPA (May 2020) RIIO-GD2 and T2: Cost Assessment – Frontier shift methodology, page 24

²⁹ CEPA (May 2020) RIIO-GD2 and T2: Cost Assessment – Frontier shift methodology, page 26. See also page 36, in which CEPA directly referenced the same issue being highlighted in the ED1 SGBs appeal.

³⁰ CEPA (May 2020) RIIO-GD2 and T2: Cost Assessment – Frontier shift methodology, page 22

³¹ CMA (October 2021) Energy License Modification Appeals 2021 - Final Determination <https://www.gov.uk/cma-cases/energy-licence-modification-appeals-2021>, Volume 2B, paragraph 7.802

³² We note that the CMA only considered one of the multiple assumptions that were challenged by the appellants for the purposes of its determination and since that error on its own was material, it was sufficient to conclude that Ofgem’s quantification was wrong, without having to evaluate the other assumptions made. (see paragraphs 7.509 – 7.513)

Ultimately the CMA concluded that: “*Although we recognise that some past innovation funding is likely to result in cost reductions, we nevertheless conclude that the appellants have shown that Ofgem’s choice of 0.2% was a material error.*”³³

In section 3.1 above we highlighted how the SGBs adjustment created a double counting problem given that cost savings were baked in to business plan requests which were themselves the subject of benchmarking. The analogous issue in the GD2/T2 appeal was that the TOs and GDNs had already baked in savings arising from past innovation funding into their business plans. The CMA concluded that while it could not quantify the double count with accuracy, it was clear that Ofgem’s approach did involve double counting.³⁴ This was sufficient reason to conclude Ofgem had made an error. The CMA also rejected Ofgem’s argument that it could not consistently quantify the double count – stating that while that analysis might be difficult, Ofgem nevertheless “*should have attempted to account for the savings already in the business plans.*”³⁵ Again, these issues represent clear parallels with the RIIO-ED2 DD. As identified in Section 3.1, Ofgem appears to acknowledge that it has double counted, but says that it has been unable to quantify the extent of this.

CEPA makes multiple references to innovation funding supporting higher productivity in its ED2 advice to Ofgem.³⁶ CEPA’s view is that “*while the CMA agreed with the principle that past innovation funding may lead to additional cost savings in the future, a range of concerns were identified with Ofgem’s approach to direct quantification of the impact on the OE challenge. As such, we consider that the impact of historical innovation funding and other ED2 specific factors described in this report should be considered qualitatively.*”³⁷ CEPA advises that Ofgem “*should stop short of including a quantified ‘uplift’ to the OE challenge to reflect the impact of individual factors.*”³⁸ First, we note that CEPA is wrong to state that the CMA found (even in principle) that past innovation funding may lead to “*additional*” cost savings i.e. over-and-above a baseline level – no such conclusion was reached by the CMA. Second, so long as Ofgem’s decision is informed, either quantitatively or qualitatively, by the innovation funding provided to companies, a double counting error will arise, as it did in ED1 and GD2/T2. Similarly, the errors of double counting with the core challenge and failure to consider incentive effects, as identified by the CMA in the GD2/T2 appeal, apply equally to the ED2 DD.

4 Implications for customers / networks

In broad terms, our view is that both of Ofgem’s previous attempts to increase the productivity target to 1.2% (indirectly in the case of SGBs and directly in the case of the innovation uplift) stemmed ultimately from the same place – namely, a view that innovation funding and the potential for future technological change meant that a tougher allowance than the “standard” competitive benchmark was required. Parallel reasoning is being applied again in RIIO-ED2, despite the results of the appeals of those past decisions.

³³ CMA (October 2021) Energy License Modification Appeals 2021 - Final Determination, Volume 2B, paragraph 7.806

³⁴ CMA (October 2021) Energy License Modification Appeals 2021 - Final Determination, Volume 2B, paragraph 7.601

³⁵ CMA (October 2021) Energy License Modification Appeals 2021 - Final Determination, Volume 2B, paragraph 7.603

³⁶ See, e.g., CEPA (June 2022) RIIO-ED2: Cost Assessment – Frontier Shift methodology paper, page 16, 23, 24, 25, footnote 66.

³⁷ See, e.g., CEPA (June 2022) RIIO-ED2: Cost Assessment – Frontier Shift methodology paper, page 5

³⁸ See, e.g., CEPA (June 2022) RIIO-ED2: Cost Assessment – Frontier Shift methodology paper, page 25

To be clear, we do not refer to the CMA's past opinions because we believe they establish hard-and-fast rules which must be followed by Ofgem in all future decisions. As the CMA explained in the GD2/T2 appeal, Ofgem's innovation uplift was not wrong simply because it was inconsistent with the CMA's decision in the ED1 Northern Powergrid appeal.³⁹ The point of identifying the parallels with past decisions is to highlight a (now) repeated pattern of attempts by Ofgem to introduce a novel change to the productivity parameter which has insufficient underlying basis in evidence.

The CMA has been clear that any judgement made by Ofgem must be grounded in sound evidence.

- In the GD2/T2 case, the CMA stated that "*With regard to NGN's arguments that GEMA's decisions should be supported adequately by reasoning and evidence, we consider that this reflects a broader test of regulatory good practice rather than being specific to the CMA's Northern Powergrid decision. As such, we have considered the reasoning and evidence that Ofgem provided in the relevant sections of this chapter as part of our assessment.*"⁴⁰
- Similarly, the CMA's view in the ED1 appeal was:
 - "*We consider, however, that robust, evidence-based decision-making, taking into account the potential limits of evidence on issues where there is significant uncertainty, is itself central to protecting the interests of consumers.*"⁴¹
 - "*the importance of smart grid solutions as a policy goal cannot [...] negate the need for decisions in relation to SGBs in the price control to be justified and supported adequately by reasoning and evidence.*"⁴²
 - "*in our view, these two key sources of support for GEMA's judgement that there was an underestimation are significantly undermined. The third [key source], as characterised by GEMA in its response to our provisional determination, was its sectoral regulatory expertise. We accept that, in general, Ofgem was able to draw on a wide range of evidence and its regulatory judgement in reaching the decisions that informed its RIIO-ED1 Final Determinations. However, in the context of this ground of NPg's appeal, we have considered carefully what was presented to us as that wider evidence base including the approach which Ofgem adopted at Final Determinations to estimate embedded and potential SGBs. In our view, for the reasons set out above, neither the evidence nor the reasons put forward by Ofgem, at the time or subsequently, support Ofgem's decision to make a specific SGB adjustment. In the absence of evidential support for the judgement, Ofgem's discretion cannot, in our view, be treated as sufficient to justify the adjustment to NPg's totex that it made.*"⁴³
 - "*we considered carefully our duty to protect the interests of consumers. We do not consider that this duty requires us to uphold, or permitted GEMA to introduce, a significant change in approach*

³⁹ CMA (October 2021) Energy License Modification Appeals 2021 - Final Determination, Volume 2B, paragraphs 7.635 – 7.645.

⁴⁰ CMA (October 2021) Energy License Modification Appeals 2021 - Final Determination, Volume 2B, paragraph 7.645

⁴¹ CMA (September 2015) Northern Powergrid, Final determination, paragraph 4.59

⁴² CMA (September 2015) Northern Powergrid, Final determination, paragraph 4.132

⁴³ CMA (September 2015) Northern Powergrid, Final determination, paragraph 4.139 - 4.140

that was inadequately justified. Our assessment of GEMA’s approach to SGBs at Final Determinations is that it was unsafe and could not be relied on to justify the adjustment that was made.”⁴⁴

- “*While we recognise Ofgem’s intentions in its approach to SGBs, and the importance of smart grid solutions, there has to be, in our view, a limit to the discretion of regulators to make adjustments to the costs assumed in setting the price control where the consultation process has failed to demonstrate evidence in support of those adjustments. The exercise of regulatory discretion remains bounded and subject to legal principles.*”⁴⁵

While we are not offering a legal opinion, we believe the CMA’s fundamental requirement for evidence-based decision making is clear based on the above. This is highly valuable for customers – particularly in respect of assumptions as material to cost allowances as the productivity assumption. It is a core part of the protection provided to investors in regulated assets by the appeals regime, and by Ofgem’s statutory duties (as well as through other tools such as the Better Regulation principles). This system means investors can be confident that regulators decisions will not act in a way that is arbitrary, unevidenced, or unduly short-termist. This in turn is part of what attracts the required investment into UK regulated sectors at an efficient cost of capital, thereby benefitting consumers over time.

We consider it is likely that investors will now perceive that Ofgem has made repeated attempts to arbitrarily ‘goal seek’ an outcome of 1.2%. The fact that Ofgem has been willing to do so – despite the two previous appeals – will inevitably increase the perception of regulatory risk for UK energy networks.

Further, Ofgem had previously attempted to introduce novel computational analyses in the form of the SGBs adjustment and innovation uplift to justify a 1.2% target. Those modelling approaches were heavily criticised by the appellants and ultimately found to be erroneous by the CMA. Rather than seeking to improve the way it collects data or to correct the errors that were identified in its previous analyses, Ofgem has instead reverted to high-level qualitative arguments that contain nothing more than speculation and assertion about the effect that contextual factors for ED2. This is an outcome which cannot be consistent with the CMA’s fundamental requirement for evidence-based decision making, nor is it in customers interests for such material decisions to be left entirely to regulatory judgement and discretion in the absence of evidence.

The DD proposal places unnecessary jeopardy on the delivery of the critical investment that is needed to meet Net Zero. In our view it is crucial that the networks and Ofgem work together in order to avoid a third successive CMA appeal on this topic, which would drag substantial senior resource and attention – at both Ofgem and the DNOs – away from the critical task of delivering Net Zero throughout much of 2023. An appeal could also put at-risk Ofgem’s ability to engage on critical questions related to Net Zero which need to be considered for the gas networks and electricity transmission networks ahead of RIIO-3. In this context we would urge Ofgem to consider carefully whether it has sufficient evidence to support its “*judgement*” (para 7.461) of 1.2% productivity, which is almost certain to invite appeals of ED2.

⁴⁴ CMA (September 2015) Northern Powergrid, Final determination, paragraph 4.141

⁴⁵ CMA (September 2015) Northern Powergrid, Final determination, paragraph 4.142



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