NON-CONFIDENTIAL VERSION

Filed on behalf of the Appellant
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Exhibit: CGL3

BEFORE THE COMPETITION AND MARKETS AUTHORITY
IN THE MATTER OF AN APPEAL UNDER SECTION 23B OF THE GAS ACT 1986

CADENT GAS LIMITED

Appellant

and

GAS AND ELECTRICITY MARKETS AUTHORITY

Respondent

CADENT'S REPLY TO GEMA'S RESPONSES

A. INTRODUCTION AND STRUCTURE OF SUBMISSION

1. This is Cadent Gas Limited's ("**Cadent**") reply to the Gas and Electricity Markets Authority's ("**GEMA**") Responses to the Appeals on Finance Issues and TNUoS ("**Finance Response**") and Totex Modelling, Efficiency and Licencing ("**Totex Response**") (together, the "**Responses**") and their supporting evidence and other accompanying documents.

2. This reply (the "**Reply**") focuses on a number of discrete points arising out of GEMA's Responses. It cannot, however, respond to all the points arising out of GEMA's substantial Responses. Where Cadent does not address a specific issue, this should not be taken as an acceptance of GEMA's position. Cadent continues to rely in full on its Notice of Appeal ("**NoA**") and supporting evidence.

3. The documents accompanying this Reply are set out in Section B. The remainder of the Reply then proceeds as follows: Sections C and D deal with two recurring themes in Ofgem's Responses, namely the standard of review and the process followed by GEMA; Sections E to I address specific issues relating to each of Cadent's grounds of appeal; Section J considers financeability and the impact of GEMA's errors; and Section K concerns the treatment of potential 'interlinkages'.

4. Any terms defined in the NoA and used in this document have the same meanings given to them in the NoA, unless the context otherwise requires or they are otherwise defined herein.

B. ACCOMPANYING DOCUMENTS

5. This Reply is accompanied by and incorporates:

(a) the Second Witness Statement of David Moon, Director of Asset Investment and RIIO-2 at Cadent, which principally addresses the RIIO-2 process in reply to GEMA's raising of these issues as a key element of its defence;

(b) the Second Witness Statement of Richard Druce, Director at NERA Economic Consulting, to which the second NERA report[1] ("**NERA 2**") is exhibited as Exhibit RD2;

(c) the First Joint Witness Statement of Dr. Maciej Firla-Cuchra, Partner at KPMG LLP, and Professor Alan Gregory, Managing Director of AGRF Ltd, to which the second KPMG report[2] ("**KPMG 2**") is exhibited as Exhibit MFC5, the second KPMG Outperformance Wedge report[3] ("**KPMG OW 2**") is exhibited as Exhibit MFC6, the KPMG MARs report[4] ("**KPMG MARs 1**") is exhibited as Exhibit MFC7 and the first AGRF report[5] ("**AGRF 1**") is exhibited as Exhibit AG1; and

(d) Exhibit CGL3 (where reference is made in either this document or the supporting evidence to documents that were not already included in Exhibits CGL1 or CGL2). Exhibit CGL3 contains a full index of documents.

6. This Reply also refers to evidence provided in Exhibit CGL1 (as exhibited to the NoA) and Exhibit CGL2 (as exhibited to Cadent's submissions on the CMA's PR19 redeterminations).

7. References in the Reply to CGL1-3 take the form **{CGL[●]/Volume/Tab}**.

C. STANDARD OF REVIEW AND GEMA'S APPROACH TO ITS RESPONSE

8. The central theme that runs through GEMA's response is that its regulatory judgement should be respected. The appellants' complaints, so it says, on the whole amount to nothing more than a disagreement with the exercise of its expert regulatory judgement and therefore disclose no appealable error.

9. It is of course right that it is not the CMA's role to substitute its judgement for that of GEMA simply on the basis that it would have taken a different view if it were the regulator. Equally, where a decision of GEMA required an exercise of judgement, GEMA will have a margin of appreciation. The CMA will apply appropriate restraint and should not interfere with GEMA's exercise of judgement unless satisfied that it was wrong.

10. GEMA is also right to draw a distinction between the CMA's role in the present appeals and under the different statutory regime that applied to the redeterminations of the PR19 water price controls.

11. However, it does not follow that any exercise of regulatory judgement by GEMA is somehow immune to challenge. The <u>standard of review</u> applicable to these appeals is explained in Cadent's

[1] Entitled, 'Second Expert Report on Ofgem's Approach to Cost Assessment at RIIO-GD2'.
[2] Entitled, 'Targeted analysis of GEMA's Response on the CoE'.
[3] Entitled, 'Reply to GEMA's Response to the RIIO-2 Appeals: Outperformance Wedge'.
[4] Entitled, 'Relevance of MARs and the WPD transaction for setting required returns in the context of the GD2 price control'.
[5] Entitled, 'Notes on Robertson's 'Estimating Beta II''.

NoA at Appendix 4 ¶¶ A4.27–34. Critically, as the CMA has emphasised, the standard of review on an appeal goes further than the traditional grounds of judicial review. The key question is whether GEMA made a decision that was wrong on one of the prescribed statutory grounds. To that extent, the merits of GEMA's decision must be taken into account: *British Gas v GEMA*[6].

12. The statutory grounds of appeal are concerned directly with the correctness of GEMA's decision; including *inter alia* whether GEMA had proper regard to, or assigned sufficient weight to, its statutory objectives. This squarely puts the exercise of GEMA's discretion into the spotlight.

13. And clearly this must be right. The legal framework that applies to energy licence modification appeals reflects the specific policy intention that there should be an appeal body with economic as well as legal expertise that is capable of scrutinising regulatory decisions. In the consultation preceding the introduction of the current appeal regime, the Government explained its view that there should be—

> *an appeal process which is capable of scrutinising factual issues of an economic/technical nature to ensure the regulator is held to account for their decisions. We therefore consider that a mechanism over and above an ability to bring a claim for Judicial Review is required in these circumstances.*[7]

Many decisions of an economic/technical nature will involve a degree of judgement, but the CMA is well equipped to scrutinise such decisions.

14. GEMA's approach by contrast is summed up well by the following statement in the witness statement of Mr Simon Wilde, its Director of Analysis and Assurance:

> *If the true WACC can never be known, GEMA's view for Step 1 (CAPM) should be difficult to be found "wrong": arguably, the greater the WACC uncertainty, the more discretion the CMA should afford GEMA.*[8]

If this proposition were correct, it would fundamentally undermine economic regulation in the UK. It is precisely because there is uncertainty in estimating the WACC that the way in which a regulator exercises its discretion is so important—and indeed why its decisions cannot be beyond scrutiny.

15. The CMA has observed, endorsing principles drawn from earlier Competition Commission ("**CC**") decisions, that usually an appellant will succeed in demonstrating a decision by the regulator was wrong by demonstrating the flaws in the decision and the merits of an alternative approach: *Firmus v NIAUR.*[9] This is the approach that Cadent has chosen in its NoA.

16. This is not a matter of asking the CMA simply to prefer a different approach. The grounds Cadent pursues in its NoA identify aspects of GEMA's decision where Cadent is able to demonstrate either that GEMA has made straightforward errors, as for example in relation to the modelling of LTS rechargeable diversions, or that there were clearly better options available to GEMA on the evidence, as in the context of the cost of equity where GEMA's selective and unbalanced use of the available market evidence has led to an unsustainable outcome. As the CC has explained (in

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[6] CMA, British Gas Trading Limited v the Gas and Electricity Markets Authority, Final Determination **{CGL1/C/17}**.

[7] Implementation of the EU Third Internal Energy Package: Consultation on licence modification appeals: DECC; September 2010, ¶ 1.5, page 8 **{CGL3/A/1}**.

[8] 1st Wilde, ¶ 29.1.

[9] Firmus v NIAUR ¶3.20(d) **{CGL1/C/19}**.

the context of the similar regime for telecommunications price controls; *Carphone Warehouse v Ofcom* [2010] [10]):

> *In a case where there are several alternative solutions to a regulatory problem with little to choose between them, we do not think it would be right for us to determine that Ofcom erred simply because it took a course other than the one that we would have taken. On the other hand, if, out of the alternative options, some clearly had more merit than others, it may more easily be said that Ofcom erred if it chose an inferior solution.*

17. Simply pointing to regulatory discretion at each juncture cannot be a substitute to engaging with the substance of the complaints, which GEMA has repeatedly failed to do in its Responses. Where GEMA has exercised its judgement, it needs to be able to point to the evidence that supports its decisions and explain its reasoning so that the CMA can assess whether GEMA's decisions stand up on the merits.

18. The CMA has rightly been clear that in the absence of evidential support, GEMA's discretion alone cannot be treated as sufficient to justify a decision, and that there has to be a limit to the discretion of regulators, which remains bounded and subject to legal principles: *Northern Powergrid v GEMA.*[11]

19. In its Responses, GEMA repeatedly falls into the error of overstating the limits of its discretion by asserting that its approach meets the baseline standard of rationality (e.g. '*It is not the case that GEMA has adopted an approach that is without any recommended basis, <u>such that no reasonable regulator would adopt it</u>*').[12] This is not the standard of review applicable in the present case, which goes further and is concerned directly with the merits of GEMA's decision. Where an alternative approach would have been clearly better, GEMA's decision is wrong. It is not necessary for Cadent to show that GEMA acted outside the bounds of reasonableness; that is the test for judicial review (*Wednesbury* unreasonableness). A merits review will quite rightly hold GEMA's decisions to a higher standard.

20. GEMA cites the CMA's October 2020 Open Letter for the proposition that '*the CMA is not expected to impose its own judgement in place of that of the sector regulator <u>provided that the regulator's response is reasonable</u>*'.[13] It would be wrong, however, to rely on the CMA's letter as support for the proposition that the applicable legal test is Wednesbury unreasonableness. GEMA will have a margin of appreciation but its decisions need to be able to stand up to scrutiny, including by reference to the available alternatives.

21. Nor is it correct for GEMA to say that '*[T]he question before the CMA … is whether GEMA's decision "<u>lay outside the bounds within which reasonable disagreement is possible</u>*"':[14] this wording is drawn from the Court of Appeal judgment in Assicurazioni Generali v Arab Insurance Group [2003] 1 WLR 577.[15] That case supports the proposition that, while disputes of primary fact are for the CMA to decide, judgements on unchallenged primary findings and inferences are to be approached in the same way as other exercises of discretion: British Gas v GEMA.[16] In the

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[10] The Carphone Warehouse Group plc v Office of Communications, Case 1111/3/3/09, Determination **{CGL1/C/9}**.

[11] CMA, Northern Powergrid (Northeast) Limited and Northern Powergrid (Yorkshire) plc v the Gas and Electricity Markets Authority, Final Determination {**CGL1/C/18**} ¶¶ 4.140 and 142.

[12] Finance Response, ¶ 128.

[13] Finance Response, ¶ 49.4, Totex Response, ¶¶ 65 and 70(4).

[14] Finance Response, ¶ 284.

[15] See Totex Response ¶ 55.

[16] CMA, British Gas Trading Limited v the Gas and Electricity Markets Authority, Final Determination ¶ 3.30-31 **{CGL1/C/17}**.

present context, however, the standard of review in relation to matters of judgement is not limited to Wednesbury unreasonableness.

22. Another example of GEMA's erroneous assessment of the standard of review can be seen from its reliance on the following passage from R v DG Telecommunications [1999] ECC 314 at [26] [17]:

> *If (as I have stated) the court should be very slow to impugn decisions of fact made by an expert and experienced decision-maker, it must surely be even slower to impugn his educated prophesies and predictions for the future.*

Again, however, the court in that case was explaining the approach in ordinary judicial review proceedings as is apparent from the text immediately preceding the passage cited by GEMA (in the same paragraph of the judgment):

> *It is appropriate to state briefly the relevant principles on which the court is to act in judicial review proceedings … Where the existence or non-existence of a fact is left to the judgement and discretion of a public body and that involves a broad spectrum ranging from the obvious to the debatable to the just conceivable, it is the duty of the court to leave the decision of that fact to the public body … save in a case where it is obvious that the public body, consciously or unconsciously, is acting perversely.*

A challenge to an exercise of discretion by GEMA in the present case patently is not limited to perverse findings, leaving untouched out of deference decisions that are '*debatable*' or only '*just conceivable*'.

D. PROCESS

23. The other recurring theme running through GEMA's Reponses is that it has consulted at every turn, considered appellants' comments, and taken them into account or rejected them after careful reflection, which in turn is said to point to an appropriate and well-informed exercise of judgement which cannot now be impugned.[18]

24. This is not a fair or accurate account of the procedural history. As David Moon explains in his second Witness Statement accompanying this Reply, at each stage of the RIIO-2 price control, GEMA's process has been characterised by a significant number of errors. There were significant delays in Cadent receiving material information, with an 'errata process' taking place after the Final Determination. This had a significant impact on Cadent's ability to assess GEMA's proposals, likely hampered GEMA's ability to assess the overall price control package and resulted in a number of errors remaining in GEMA's final decision, particularly in relation to cost allowances.

25. Many of the errors identified in Cadent's grounds of appeal are attributable in whole or in part to GEMA's failure to carry out a robust and efficient process. By way of example, GEMA has already accepted in response to Ground 1A of Cadent's appeal, that its totex modelling was flawed in its treatment of LTS diversions. The result of correcting for this error materially impacts the setting of GEMA's efficiency benchmark for the industry and the efficiency rankings of the networks. The consequential adjustments in turn support Cadent's position on other grounds of appeal, including: Ground 1B (that the apparent efficiency gap between London and other regions is the result of errors of approach by GEMA and is not reflective of underlying relative

[17] Finance Response, ¶ 43; Totex Response ¶ 64.
[18] See, e.g., Totex Response, ¶¶ 17 *et seq*.

efficiency); and Ground 1C (that Cadent's Business Plan set the efficiency benchmark and therefore Cadent's efficiency assumption of 0.94% represents wholly ongoing efficiency).

26. More broadly, and in stark contrast to the position presented by GEMA, the troubled procedural history of the RIIO-2 price control serves in large part to explain the clear errors which have arisen, undermining the overall reliability of GEMA's final decision.

E. LTS RECHARGEABLE DIVERSIONS (GROUND 1A)

27. Cadent welcomes GEMA's admission that its approach to LTS Rechargeable Diversions Costs was in error because it wrongly failed to exclude those costs where they relate to projects over £5m, to '*ensure [they] do not distort the modelling*'.[19]

28. Cadent repeatedly highlighted during the administrative process that including rechargeable costs distorts the modelling,[20] yet GEMA maintained its approach in the final decision. Cadent therefore had no choice but to raise the matter on appeal, focusing on LTS Rechargeable Diversions Costs as their inclusion had the greatest adverse impact. As explained in NERA 1[21], GEMA's final decision provided '*no justification as to why it treats rechargeable LTS diversions worth more than £5 million differently when compared to non-rechargeable LTS diversions*'.[22] The ultimate effect of GEMA's erroneous approach was unfairly to penalise and discriminate against Cadent for its uniquely high share of such costs.[23]

29. Despite GEMA's effective acceptance of Ground 1A, it raises four points, none of which is valid.

30. <u>First</u>, it argues that, save for two projects, it was unable to identify whether the remaining LTS Rechargeable Diversions Costs correspond to projects over £5m in value,[24] and that this was because Cadent did not submit engineering justification papers ("**EJPs**").[25] This point is obviously without merit, and appears to be advanced simply as an exercise in deflection. It faces two insurmountable difficulties:

    (a) On the one hand, EJPs were used only for <u>technically assessed</u> costs. These are <u>not</u> technically assessed costs. GEMA accepts as much.[26]

    (b) On the other hand, GEMA is wrong to allocate a minority of Cadent's LTS Rechargeable Diversions Costs to projects over £5m.[27] The large majority in fact correspond to such projects.[28] Cadent is preparing a detailed response to GEMA's 8 April letter,[29] setting out

[19] Totex Response, ¶¶ 343 and 344.
[20] This is set out in 1st Moon at ¶¶ 70 *et seq*.
[21] '**NERA 1**' refers to the first expert report by Richard Druce exhibited as Exhibit RD1 to his first Witness Statement of 3 March 2021 accompanying the NoA.
[22] NERA 1, ¶ 168.
[23] NoA, ¶¶ 3.28 to 3.44.
[24] Totex Response, ¶ 533.
[25] Totex Response, ¶ 533.
[26] Mr Wagner acknowledges that '*for forecast rechargeable projects, [GEMA] do[es] not consider that a technical assessment would be required because they are funded by third parties, and have net costs to consumers of around zero*'. 6th Wagner, ¶ 109. See also 1st Moon, ¶¶ 73 to 75.
[27] Totex Response, ¶¶ 533 and 534.
[28] 1st Moon, ¶ 65.
[29] On 8 April 2020, GEMA sent a letter to a single Cadent adviser setting out its view of the allocation of LTS Rechargeable Diversions Costs to projects over £5m, which it reproduced in its defence **{CGL3/A/4}** – see Totex Response, ¶¶ 533 and 534.

the correct allocation of costs. This may, however, take some time as GEMA's proposal requires collecting and reviewing large amounts of data.[30]

31. Second, despite GEMA's concession that it erred on LTS Rechargeable Diversions Costs, it maintains that its approach was nevertheless '*appropriate in its regulatory discretion*'.[31] It was not. It was wrong.[32]

32. Third, GEMA's remedy is flawed because it does '*not address the most important problem with its approach, that the MEAV variable does not control for* [*LTS Rechargeable Diversions Costs*]'.[33] NERA's remedy is robust and demonstrably superior: LTS Rechargeable Diversions Costs should be outside the model. They cannot be controlled for inside it.[34]

33. Fourth, GEMA claims that Cadent's statutory grounds of appeal do not reflect the substance of Ground 1A.[35] Again, GEMA is wrong. GEMA's inclusion of LTS Rechargeable Diversions Costs understated Cadent's baseline totex allowance and otherwise overstated allowances for the rest of the industry. The under or over-funding of utilities is not in consumers' interests. GEMA thus failed properly to have regard to, and to give appropriate weight to, the interests of consumers and thereby its Principal Objective (and related duties).[36]

F. LONDON REGIONAL FACTORS (GROUND 1B)

34. The essence of GEMA's defence to Ground 1B is that its pre-modelling adjustments, together with the model itself, adequately control for regional factors that increase the London GDN's efficient costs. In support of that defence, GEMA contends:

    (a) that in accepting, partially accepting, or rejecting proposed adjustments it '*acted at all times within its margin of discretion*' after it had '*carefully exercised its expert judgment as to whether those proposals were sufficiently evidenced*';[37] and

    (b) that '*London regional factors have been accounted for through various pre-modelling adjustments and in the model itself*',[38] such that any remaining efficiency gap is '*explained by the inefficiency of Cadent's London GDN*'[39].

35. Both defences are without merit.

36. **Regulatory discretion**. GEMA seeks to present its approach as a defensible exercise of regulatory judgement. It advances three new points in support of its position.[40]

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[30] NERA 2 at ¶ 5 explains the practical difficulties created by GEMA's proposal (including the need for industry-wide cooperation which may not be realistic at this stage).

[31] Totex Response, ¶ 345.

[32] NERA 2, Appendix A.

[33] NERA 2, ¶ 9.

[34] NERA 2, Sections 2.2 and 2.3, and Appendix A.

[35] Totex Response, ¶ 345.

[36] NoA ¶ 3.144(a) and (b). See also NoA, ¶ 3.144(c) to (h) for the additional statutory grounds triggered by GEMA's errors.

[37] Totex, Response, ¶¶ 392 and 393.

[38] Totex Response, ¶ 432.

[39] Totex Response, ¶ 434.

[40] To the extent that GEMA also argues that it approached Cadent's proposed adjustments with an open mind and was willing to change course where the evidence supported this (Totex Response, ¶ 392), it does no more than to recapitulate its reasons for rejecting claims in the FDs. These rejections or partial allowances were wrong: see Cadent's NoA (at ¶¶ 3.58 to 3.84), NERA 1 (at Section 6) and the first Witness Statements of David Moon and Howard Forster (at Section C(v) and Section C respectively).

37. First, GEMA asserts that although its regional factors approach was similar at GD1 and resulted in a similar efficiency ranking/disallowance, the London GDN was nevertheless able '*comfortably*' to outperform its allowances.[41]

38. This is irrelevant. GEMA's wholesale reform of RIIO means that there is substantially less scope for outperformance in GD2 relative to GD1 (if any).[42] It also ignores the fact that at its creation four years ago Cadent's inherited performance and efficiency was among the worst in the sector, but under new leadership it has worked relentlessly to improve its efficiency: 1st Moon, Section A(ii).

39. Second, GEMA cites the reduction in London's efficiency gap between DDs and FDs as a result of GEMA's acceptance of additional adjustments.[43]

40. This too is irrelevant and is also misleading. That reduction arose principally from the correction of material data and arithmetic errors on GEMA's part and not as a consequence of GEMA accepting additional adjustments in light of new evidence.[44] The same is true for any change in London's efficiency scores between initial FDs and post-errata FDs. GEMA can claim no credit for its final decision being relatively less wrong than its earlier even more flawed iterations.

41. Third, GEMA's statement that it accepted 70% of Cadent's claims for known regional factors does not mean that it has sufficiently controlled for any or all such factors impacting the London GDN.[45] It is certainly not a credible rebuttal of Cadent's econometric density driver evidence showing the contrary.

42. GEMA also introduces a number of more technical points to support its specific decisions for the rejected or partially accepted Cadent claims. Each of these is '*unsound*'[46] save that NERA agrees the discrete notional pay discrepancy no longer applies following Mr Wagner's technical clarifications now provided in his witness evidence attached to GEMA's Totex Response. This does not, however, impact the merits of Cadent's appeal on London: the efficiency gap clearly results from GEMA's failure sufficiently to control for regional factors.

43. **Accommodation in pre-modelling adjustments and/or in the model**. GEMA's second defence involves a significant concession. GEMA now explicitly admits that its pre-modelling adjustments cannot, alone, control for regional factors impacting the London GDN.

44. This is a material shift in GEMA's position, contradicting GEMA's assertion at FDs that its '*approach adequately captures GDNs' differences in operating environments via pre-modelling adjustments*' [emphasis added].[47] As set out in its NoA, Cadent agrees that GEMA was wrong to conclude in the FDs that its adjustments were sufficient to control for regional factors.[48]

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41 Totex Response, ¶¶ 380, 390 and 393(1).

42 1st Moon, Section A(iv).

43 Totex Response, ¶¶ 385, 386 and 393(2).

44 NERA 2, ¶ 14.

45 Totex Response, ¶ 393(2).

46 NERA 2, ¶¶ 20 and Sections 3.3 and 3.4. Among other issues, NERA 2 confirms that GEMA's decisions (i) suffer from logical flaws, e.g. suggesting that Cadent is able to control gas escapes occurring in customers' properties which is evidently false (¶ 26A); (ii) fail to account for limitations in GEMA's own approach, e.g. relying on outdated GD1 data for the urbanity productivity adjustment (¶ 21); (iii) make incorrect statements, e.g. that Cadent's proposed driver for emergency costs does not improve model fit (¶ 29); (iv) reject on narrow procedural grounds (e.g. materiality) adjustments for costs that are obviously unique to London, e.g. the congestion charge (¶ 24 and Section 3.4.6); and (v) apply blanket assumptions in spite of evidence to the contrary, e.g. that adjustments for labour productivity are equally appropriate for emergency costs (Section 3.4.2).

47 FDs, Core Document, ¶ 3.115 **{CGL1/A/20}**.

48 NoA, ¶¶ 3.48 and 3.85 – 3.99.

45. Having now acknowledged that the model <u>does</u> need to deal with London-specific factors, GEMA falls back on three new lines of defence, each of which is fundamentally unsound.

46. <u>First</u>, GEMA contends that the MEAV component of its CSV cost driver is able to achieve that goal, i.e. controlling for the '*additional factors*' raised by Cadent including density.[49] This contention is both surprising and wrong:

(a) GEMA is '*wrong'* to suggest that MEAV controls for regional factors to any extent. '*MEAV captures the size and volume of assets, not any characteristic of the environment in which they are located*'.[50]

(b) GEMA itself equivocates on whether MEAV is able to function as it claims: at ¶ 449 of its Totex Response, GEMA states that '*it is … clear that the use of MEAV in the model accounts for a number of the additional factors*'; while a few paragraphs later at ¶ 460(3) GEMA merely states that '*density <u>may</u> already be accounted for through the … inclusion of MEAV in the model*' [emphasis added].

(c) GEMA's lack of confidence in its own defence is illustrated by its deployment of MEAV as a panacea for <u>any</u> totex error identified by Cadent including LTS Rechargeable Diversions (see above). This is simply not credible.

47. These issues demonstrate that GEMA misunderstands its own modelling, the role of MEAV within it and the network costs that feed into the model.[51]

48. <u>Second</u>, GEMA attempts to challenge Cadent's factual and econometric evidence demonstrating that London's efficiency gap arises as a result of GEMA's inappropriate reliance on pre-modelling adjustments. None of the reasons GEMA advances in support of that challenge has any merit:

(a) **Alleged impressionism**. GEMA contends that Cadent's factual evidence is '*impressionistic and unsupported by any meaningful statistical analysis*'.[52] This criticism is unwarranted: the factual evidence of David Moon and Howard Forster is authoritative and detailed, and supported by the same statistical analysis that Ofwat and the CMA used at PR19 to capture the effect of density on costs (i.e. the use of a density driver in the regression analysis).[53]

(b) **Inadequacy of the model in accounting for London.** GEMA suggests that its model is able to account '*comprehensively*' for regional factors, thus implying that the London GDN's efficiency is reliably assessed by the model.[54] This is wrong. The limitations of GEMA's modelling '*severely limits the conclusions that can be drawn from [its] assessment of the London GDN's efficiency*'.[55] It uses an '*extremely small set of*

[49] Totex Response, ¶¶ 375, 379(3), 400(2), 435(5), 449, 457, 460, and 461.

[50] NERA 2, ¶¶ 13(C) and 27.

[51] See for example NERA 2 at ¶ 26(A): Richard Druce explains that GEMA is wrong to suggest that gas escapes occurring in customers' properties – and costs associated with responding to such escapes – are within Cadent's control.

[52] Totex Response, ¶¶ 445 to 448.

[53] NERA 1, Section 6.7.

[54] Totex Response, ¶¶ 374 to 376.

[55] NERA 2, ¶ 13. See also ¶ 16: '*GEMA's cost assessment approach, and the extent of GEMA's errors in implementing it, means the CMA should not have any faith whatsoever that the unusually high efficiency gap estimated for London can reliably be ascribed to inefficiency*'.

comparators',[56] has poor explanatory power for the London GDN as the sole outlier,[57] and its drivers do not control for regional factors.[58]

(c) GEMA mischaracterises Cadent's criticism of its **Regional Labour Cost Adjustment**. Cadent's point is that GEMA's subjective choice of a 5-year period is designed arbitrarily with a view to minimising the London GDN's allowances, in circumstances where the evidence clearly indicates that the unique features of London have not been properly accounted for in GEMA's assessment.[59] GEMA is wrong to view this as a disagreement regarding an expert view adopted by GEMA.[60] GEMA's FDs do not account properly for the unique features of London. That is not a matter of discretion. It is wrong.

(d) **Failure to engage with density driver evidence**. GEMA contends that it was '*fully entitled within its margin of discretion*' to disregard Cadent's density driver evidence.[61] However, despite its assertions to the contrary, it is clear that GEMA has not properly considered Cadent's econometric evidence or provided any meaningful statistical/econometric analysis to substantiate its position (e.g. through cross-checks or triangulating alternative approaches).[62] Instead, GEMA has chosen to proffer vague and theoretical criticisms of the density driver, which Ofwat and the CMA in PR19 viewed as a '*key cost driver*'. As to any suggestion that NERA considers the use of this driver as inappropriate, Richard Druce confirms that, notwithstanding any theoretical limitations, there is a statistically significant relationship between totex and density even where the London GDN is excluded (to avoid overfitting concerns), and this '*calls into question the reliability of GEMA's assessment that the London GDN is unusually inefficient*'.[63] GEMA was therefore wrong to dismiss the density driver model in its entirety. At the very least, it serves as a cross-check showing that GEMA has understated material efficient costs.

(e) **Erroneous criticism of practical compromise remedy**. GEMA devotes a significant part of its response to criticising Cadent's proposed remedy.[64] Cadent's proposed remedy is a practical compromise between use of a density driver and pre-modelling adjustments.[65] No single approach is perfect. It is not, however, arbitrary. It is a practical solution to a clear error, recognising the constraints of the appeal process and the policy efficiency in finding pragmatic and efficient solutions. Cadent stands ready to engage with the CMA on the appropriate form of relief at the remedies stage.

49. The <u>third</u> and final defence is a set of assorted sub-points, none of which has merit:

(a) GEMA wrongly separates Cadent's Ground 1B into two distinct appeals and puts forward incorrect legal tests for each.[66] In fact, as set out in the NoA at ¶3.57, the key question before the CMA in Ground 1B is whether GEMA has adequately controlled for the higher costs of operating in the London region. Given that GEMA's objective for cost

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56 Ibid. ¶ 13(B).
57 Ibid. ¶ 13(D).
58 Ibid. ¶ 13(C).
59 NERA 2, Section 3.4.5.
60 Totex Response, ¶¶ 452 to 457.
61 Totex Response, ¶¶ 458 to 461.
62 NERA 2, ¶ 13(H).
63 NERA 2, ¶ 13(E) and 13(F).
64 Totex Response, ¶¶ 437 to 443.
65 NERA 2, Section 3.5.
66 Totex Response, ¶¶ 391 and 432.

assessment was to set baseline totex at efficient costs, Cadent's evidence shows that GEMA failed in that endeavour.

(b) GEMA mounts a vague and hypothetical defence of its high evidential bar for pre-modelling adjustments, as well as its materiality threshold.[67] Cadent does not dispute that GEMA is *in principle* entitled to require well-evidenced material claims. What is wrong, however, is for GEMA to assess evidence using excessive subjectivity[68] and to apply its threshold in an overly restrictive and mechanistic manner, particularly in circumstances where it had clear evidence that this approach renders the London GDN unable to recover efficient costs.

(c) GEMA cites the fact that only one other GDN submitted a claim for adjustment.[69] But this does not mean that GEMA's approach was not discriminatory towards Cadent. Discrimination arises where similar situations are treated differently or where different situations are treated the same. It is clear, from the volume of claims submitted and its status as an outlier, that the London GDN is subject to uniquely burdensome operating conditions and was likely to be impacted disproportionally by any error or bias in GEMA's regional factors approach (including as to materiality).[70]

G. ONGOING EFFICIENCY (GROUND 1C)

50. GEMA defends its Ongoing Efficiency Target (set at 1.15% for capex/repex and 1.25% for opex) as '*an exercise of regulatory judgement*' based on a '*qualitative approach where it stood back and assessed the evidence in the round*'.[71] This defence is clearly unsustainable. The targets bear no reasonable relation to the evidence that was before GEMA and are obviously unrealistic. In the words of Richard Druce '*GEMA's interpretation of the economic evidence is manifestly unreasonable*'.[72]

51. The errors in GEMA's analysis are summarised in Cadent's NoA[73] and set out more fully in NERA 1.[74] In brief summary, GEMA chose to adopt Ongoing Efficiency Targets which:

(a) placed full weight on CEPA's Upper Bound, which in turn exceeded even the highest productivity estimates observed by CEPA, based on a range of evidence on the long-term growth rates for productivity in other sectors;[75]

(b) exceeded all of the available regulatory precedents;[76]

(c) exceeded the efficiency estimates in the GDNs' business plans;[77]

(d) failed to give weight to GO productivity measures, contrary to previous regulatory practice and its assertions otherwise;[78]

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67 Totex Response, ¶¶ 394, 423 to 431, 450, and 451.
68 NERA 2, Section 3.2.
69 Totex Response, ¶ 431.
70 NERA 2, ¶¶ 42 and 43.
71 Totex Response, ¶¶ 74(1) and 109.
72 NERA 2, ¶ 51.
73 NoA, ¶¶ 1.21-1.26.
74 NERA 1, Section 7.
75 NERA 1, Table 7.1 and ¶ 360.
76 NERA 1, ¶¶ 362 and 363.
77 NERA 1, ¶¶ 364 to 371.
78 NERA 1, ¶¶ 372 to 386.

(e) failed to give weight to focused comparators, which are more apt to reflect the specific characteristics of gas distribution;[79]

(f) prioritised historic productivity figures which do not reflect conditions since 2009 (or omit that year entirely);[80] and

(g) applied a 0.2% p.a. uplift for past '*innovation funding*', based on no proper analysis of the nature of the funding, which the evidence shows was <u>not</u> primarily intended to drive cost reductions and results in double counting.[81]

Taking these factors together, the targets cannot realistically be presented as the result of a balanced '*in the round*' assessment. They were systematically skewed upwards in the face of the quantitative evidence.

52. GEMA's defence of its Ongoing Efficiency analysis largely recapitulates its previous reasoning and is wrong for the reasons given in the NoA and NERA 1. Insofar as the Defence makes novel points, these are addressed in NERA 2 accompanying the Reply, at ¶ 56. Among other matters, NERA 2 notes as follows:

(a) GEMA asserts that gas distribution '*is a technologically more dynamic sector*' in an attempt to distinguish the 1% ongoing efficiency target recently adopted by the CMA in relation to the water industry.[82] This claim is unsupported and ignores the essential similarity of gas and water distribution, which both involve conveyance of an essential commodity through a network of underground pipes.[83]

(b) GEMA's defence repeatedly raises the monopolistic nature of the sector in support of its target, on the basis that energy networks are less likely to be exposed to economic shocks or downturns in productivity[84]. This ignores, however, that each argument GEMA advances in support of this theory would also support the opposite (i.e. that networks benefit less during high growth periods).[85] Given that CEPA's time period includes two complete business cycles which comprises periods of both strong and weak economic conditions, this factor loses any significance.

(c) GEMA's witness, Mr. Gary Keane, contends that – even if the Business Plans submitted to GEMA were not consistent with the efficiency targets which it adopted – such '*clarifications would not change our overall conclusion*'.[86] The Business Plans were, however, specifically relied upon in support of the targets adopted. GEMA's apparent inflexibility in the face of the evidence is symptomatic of the problem with its approach to Ongoing Efficiency.[87]

(d) Drawing from the CMA's decision in PR19, Mr. Gary Keane contends that '*embodied technical change' [was] as a factor which supported a more stretching target*' because EU KLEMS would tend to understate productivity growth arising from such change.[88] This concern does not, however, apply to the VA measures that GEMA used to set the

[79] NERA 1, ¶¶ 387 to 396.
[80] NERA 1, ¶¶ 397 to 415.
[81] NERA 1, ¶¶ 418 to 432.
[82] Totex Response, ¶ 75.
[83] NERA 2, ¶ 56(A).
[84] Totex Response, ¶ 136.
[85] NERA 2, ¶ 56(B).
[86] 1st Keane, ¶ 79.
[87] NERA 2, ¶ 56(C).
[88] 1st Keane, ¶ 165.

target and this factor '*therefore provides no basis to deviate from the quantitative evidence*'.[89]

(e) GEMA's primary focus in its Response is upon justifying why it is appropriate to give *some* regard to VA and economy-wide measures and pre-2007 data.[90] The problem, however, is that GEMA systematically prioritised (or relied exclusively on) those measures over giving equal weight to GO and targeted measures, as the quantitative evidence and precedent shows would be appropriate.[91] In any event, GEMA's target is higher than any VA-based evidence could support.

(f) GEMA contends that Cadent was '*factually wrong*' in its NoA to argue that GEMA excluded 2009 as an outlier in considering the results of the EU KLEMS analysis.[92] However, GEMA's consultant, CEPA, specifically recommended '*considering the large productivity decline in 2009 as an outlier*' as an argument in support of the '*more stretching*' target which GEMA relied on (and exceeded) when setting its targets.[93]

(g) GEMA defends the 0.2% innovation uplift as a '*reasonable exercise of regulatory judgement*'.[94] However, GEMA conspicuously fails to respond to evidence that the past innovation funding relied on in support of the uplift '*will not increase the scope for productivity improvement during RIIO-GD2*'.[95] Any benefits generated by past innovation funding are likely to arise instead from environmental improvement / cost reductions in decarbonising the sector. The uplift also double counts innovation-driven savings already embedded in EU KLEMS and companies' Business Plans. Although GEMA expressly acknowledges this risk, it deliberately chooses to ignore it. This is not an appropriate basis for the exercise of regulatory discretion.[96]

53. In light of the above, Cadent continues to submit that its Business Plan Ongoing Efficiency Target of 0.94% (totex) is ambitious[97].

54. **Embedded Ongoing Efficiency in Cadent's Business Plan.** An issue also arises under this ground as to GEMA's assumption that the Ongoing Efficiency embedded in its Business Plan was 0.5%. For the reasons set out in Cadent's NoA[98] and 2nd Moon[99] the true value was 0.94%. GEMA contends that it was entitled to treat a portion of Cadent's 0.94% efficiency as including some catch-up efficiency.[100] This is incorrect. As set out in NERA 2:

(a) a company in Cadent's position could not realistically be expected to differentiate between Ongoing Efficiency and catch-up efficiency, a distinction which depends on how that company's costs compare to those of other companies in GEMA's cost assessment process, which it cannot know during its Business Plan preparations.[101]

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[89] NERA 2, ¶ 56(D).
[90] Totex Response, ¶¶ 113 to 118, 123-124, and 129.
[91] NERA 2, ¶ 56(E).
[92] Totex Response, ¶ 119.
[93] NERA 2, ¶ 56(F).
[94] Totex Response, ¶ 153.
[95] NERA 2, ¶ 60.
[96] NERA 2, ¶ 56(G) and Section 4.3.
[97] NERA 2, Section 4.2.
[98] NoA, ¶¶ 3.140-3.141.
[99] 2nd Moon, ¶¶ 24 to 28.
[100] Totex Response, ¶ 169.
[101] NERA 2, ¶ 65.

(b) In any event, and correcting for errors in the FDs, Cadent sets the level of the upper quartile efficiency challenge for the industry; and its embedded efficiency assumption must by definition represent ongoing efficiency improvement.[102]

H. COST OF EQUITY (GROUND 2)

(1) Errors in Estimating CAPM parameters (Ground 2A)

RFR

55. GEMA has relied exclusively on index-linked gilts ("**ILGs**") as a proxy for the Risk Free Rate ("**RFR**"). In doing so it has disregarded both theoretical and empirical evidence that ILGs alone understate the true RFR, and has chosen to ignore the additional evidence available from AAA-rated corporate bonds.

56. GEMA defends its choice by arguing that it '*has not taken the view that ILGs provide a perfect, error-free proxy*' but that '*the yields on ILGs are what they are and provide a reasonable proxy*' and that their '*simplicity … was an important consideration*'.[103] This is not a sustainable defence. Simplicity is not a goal in its own right, and ILGs alone are not a reasonable proxy when a blended index of ILGs and AAA corporate bonds provides a clearly better alternative that is more theoretically sound and in any practical sense is no more difficult to implement than GEMA's chosen approach.

57. Cadent sets out in its NoA, at ¶¶4.33–47, supported by a report on the cost of equity by KPMG ("**KPMG 1**"), Sub-Sections 6.3 and 6.4, why ILGs alone are not a good proxy for the RFR; why GEMA has erred in concluding that there was no better way to estimate RFR; and why a combination of ILGs and AAA-rated corporate bonds provides a better benchmark for determining the RFR.

58. GEMA's Response does not add to its position in the FDs. Cadent's central criticism of GEMA's approach is that in relying solely on ILGs it appears to ignore a fundamental theoretical assumption of the CAPM, namely that the RFR is a rate at which all market participants can borrow as well as lend—which ILGs are not. In response, GEMA simply reiterates that it does not agree that the '*practical application*' of CAPM requires its theoretical assumptions to hold, and that what matters is that the marginal investor in utilities is a net lender (Finance Response §79 - 82 and Jessica Friend's second witness statement ¶¶39 - 41). This view is clearly misplaced: the marginal investor in the "zero beta" CAPM literature is the theoretical investor in the market portfolio, not the marginal investor in the asset that is being priced – this investor need not be a net lender, see KPMG 1, ¶¶ 6.3.26–31.

59. GEMA also argues that in choosing ILGs it had picked the '*closest proxy*' to RFR (Finance Response ¶ 73). Apart from offering no support for this assertion, this attempts to set up the strawman that GEMA's choice was somehow limited to choosing between ILGs and AAA corporate bonds, both imperfect proxies, and that it chose the better one. But this misunderstands the criticism, and ignores the obvious solution, as adopted most recently by the CMA in PR19 and proposed in KPMG 1, at ¶¶ 6.4.2 to 6.4.9, to take into account information from both sources of evidence through a blended index. As KPMG explains this matches most closely the theoretical framework of the 'zero beta' CAPM literature to use a portfolio of rates to represent the RFR

[102] NERA 2, ¶¶ 66 to 68.
[103] Finance Response ¶¶ 73, 74 and 76.

parameter. Where in reality borrowing and lending rates of different investors may differ, it is an error to rely only one source as GEMA has done[104].

60. Constructing such a blended index is no more complicated or costly in practice than relying on ILGs alone[105]. GEMA's response that AAA bonds would require extensive and potentially arbitrary adjustments before they could be used to estimate the RFR (Finance Response ¶ 86, 2nd Friend ¶¶ 59–60) misses the point. It is accepted that corporate bond rates overstate the true RFR. However, at the same time, ILGs understate the true RFR. The attraction of using a blended index is precisely to avoid a need to adjust either proxy: KPMG 1, ¶¶ 6.3.32 and 6.4.2 to 6.4.9.

61. Ms Friend advances a number of further criticisms that appear to be linked to particular AAA bond indices and are easily avoided by choosing an appropriate index[106]. Similarly, Ms Friend raises the spectre that Ofgem may have chosen to adjust the CPIH real RFR down even further by reducing the CPIH/RPI wedge on the basis of the mooted 2030 RPI reform. But, apart from uncertainty about whether the proposed change will go ahead as planned, and in the absence of any robust analysis on this topic, it appears most likely that any impact on investor inflation expectations from changes to cash flow discounts this far into the future would at best be limited[107].

62. In the end, GEMA's defence amounts to no more than the assertion that its chosen proxy was reasonable, which is not sufficient and in the present case also wrong, and commended itself by its simplicity, which misunderstands the alternative and is in any event no substitute for choosing an appropriate proxy. GEMA also reiterates that there is ample regulatory precedent for its approach. But that does not advance matters either where it is only recently that the issue of ILGs underestimating actual RFRs has been fully acknowledged due to the current unprecedented rate environment, and the most recent regulatory practice has started to move away from older precedents[108]. GEMA's reliance on the CMA's NATS decision to rebut this observation is misplaced[109]. As the CMA itself explains[110], this case turned on its own particular circumstances and the RFR specifically received only limited consideration and none at all after the preliminary findings.

63. A further, separate issue is GEMA's use of a short, one-month averaging window for calculating its indexed RFR. As Cadent explains in its NoA, at ¶¶ 4.48–4.52, this is inappropriate because it introduces undue volatility into the RFR which is passed through into allowed returns and ultimately company cash flows.

64. In its Response, GEMA simply dismisses this criticism (amongst others) as '*no more than trivial disagreements with elements of GEMA's regulatory judgment*' and prefers not to address its substance[111].

65. This is not a sustainable defence. Regulatory discretion does not absolve GEMA of the need to justify its decisions. As the KPMG 1, at ¶¶ 6.3.41–44 and 6.4.10-11, and the CMA's own recent practice show, a longer, 6-month averaging period is clearly preferable to GEMA's approach

[104] KPMG 1 ¶¶ 6.3.2 to 6.3.37 and 6.4.2 to 6.4.9.
[105] KPMG 1 ¶¶ 6.3.32 and 6.4.2 to 6.4.9.
[106] KPMG 2 Sub-Section 5.1.
[107] KPMG 1, ¶¶ 6.3.38–40 and KPMG 2, Sub-Section 5.2
[108] NoA, ¶ 4.46(c).
[109] Finance Response, ¶ 75.
[110] PR 19 Final Report, ¶ 9.60 **{CGL2/7}**.
[111] Finance Response ¶ 101.

whose unnecessary volatility only serves to exacerbate the financeability challenges created by its FDs—an issue to which GEMA apparently has no answer.

TMR

66. As set out in Cadent's NoA and KPMG 1, GEMA has erred in estimating Total Market Returns ("**TMR**") by—

(a) applying an incorrect approach to deflating historical returns[112]; and

(b) applying an incorrect approach to deriving the annual average of historical returns[113]; before

(c) relying on inappropriate cross-checks to validate its results[114].

67. GEMA dismisses these complaints in its Response as '*narrow, esoteric points*' and argues that because TMR is inherently unobservable, '*the CMA should be very slow to interfere with GEMA's regulatory judgment*'.[115]

68. In particular, in relation to the inflation complaint, GEMA dismisses the criticism that it has not made use of the best available evidence as a mere quibble with the exercise of its regulatory judgement[116], and argues that '*In light of the clear scope for reasonable disagreement on the available evidence, and the inherent uncertainty in predicting future equity returns, this is an area in which the CMA should self-evidently be circumspect about supplanting GEMA's own regulatory judgement.*' [117].

69. This overstates the degree of deference the CMA should give to GEMA's decisions. Given the central importance of the cost of capital to a price control, GEMA cannot simply refer to the inherent parameter uncertainty and argue that because their true value can never be known GEMA's view '*should be difficult to be found 'wrong'*'[118]. On the contrary, it is precisely because of the difficulty in estimating cost of capital parameters that scrutiny of GEMA's approach is important. GEMA needs to be able to show that its decisions appropriately take account of the available theoretical and empirical evidence.

70. However, GEMA's approach to deflating historical returns is demonstrably flawed because the available evidence points clearly to an approach that reflects both CED/CPI and CED/RPI data for the reasons set out in Cadent's NoA and KPMG 1. In these circumstances, the CMA should have no difficulty to find GEMA's approach wrong.

71. GEMA's response in this respect is reflective of its overall approach and general failure to engage meaningfully with the substance of the appellants' complaints. On the substance of Cadent's inflation complaint, the Response does not advance matters and Cadent continues to rely on its position as set out in its NoA.

72. In relation to the averaging complaint, GEMA similarly argues that '*It is not the case that GEMA has adopted an approach that is without any recommended basis, such that no reasonable*

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[112] NoA, ¶¶ 4.55–70, KPMG 1, ¶¶ 5.4.2 to 5.4.56, 5.5.1 to 5.5.6, and 5.5.23 to 5.5.26
[113] NoA, ¶¶ 4.71–4.74 KPMG 1, ¶¶ 5.4.57 to 5.4.66, 5.5.1 to 5.5.6, and 5.5.23 to 5.5.26
[114] NoA, ¶¶ 4.75-78, KPMG 1, ¶¶ 5.4.67 to 5.4.78 and 5.5.7 – 5.5.26.
[115] Finance Response, ¶ 110.
[116] Finance Response, ¶ 117.
[117] Finance Response, ¶ 123.
[118] 1st Wilde, ¶ 29.1.

regulator would adopt it'[119]. This is not a sustainable defence for the same reasons as set out above. The approach that GEMA has adopted is flawed and a clearly better alternative was available.[120] In the context of the present appeals, the relevant question is not whether GEMA's approach somehow still lay within the bounds of reasonableness, but whether it can stand up to scrutiny on its merits—which it cannot.

73. GEMA also argues that it is telling that the appellants have not in fact provided evidence that its uplift is too low[121]. This is not correct. The fact that properly constructed averages arrive at higher values than GEMA's approach is direct evidence that the uplift that it has applied is not sufficient. As set out in KPMG 1, ¶ 5.4.61, an uplift of 1.5–1.7 percentage points is supported by the empirical evidence.

74. Furthermore, GEMA argues that its uplift of approximately 1.3%–1.5% is higher than that applied by practitioners and consistent with the UKRN report: Finance Response ¶130. As set out at KPMG 2, Section 3, proper analysis shows that the uplift implied in GEMA's data is in fact likely to be significantly lower than 1.3%–1.5%.

75. GEMA also attempts to argue (at Finance Response ¶131) that adopting alternative approaches would not in any event result in a material change. It points to the CMA's analysis in PR19 for support. However, GEMA's statement is misleading. The figures it cites as comparators for its estimate are a selective sample taken from a table in the PR19 provisional findings (reproduced at Finance Response ¶119). In fact, 9 out of 10 CED/CPI figures in that table are above the 6.5% estimated by GEMA. Moreover, in its Final Report[122] the CMA concluded that the evidence overall showed a TMR range of 5.6%–6.5% in RPI real terms, or c.6.53%–7.44% in CPI real terms[123]. This not only shows that GEMA's estimate is potentially materially too low, but that it in fact sits below the range the CMA considered as supported by evidence in PR19.

76. Finally, in relation to the <u>cross-check complaint</u>, GEMA reproduces, at Finance Response ¶112, an Oxera chart summarising the various cross-checks that GEMA has considered and the TMR range on which it ultimately relied. GEMA argues that it is telling that appellants have not sought to challenge the '*big picture*' and that the chart shows that GEMA ultimately made a '*cautious*' choice, setting TMR at the '*upper end*'[124].

77. Referring to the '*big picture*' is no answer to the criticisms of the cross-checks presented in that chart and their vastly varying degree of robustness and reliability[125]. Further, it is inconsistent with the fact that both UKRN and GEMA itself agree with Cadent's expert KPMG that long run, *ex post* estimates are the most robust approach to estimating TMR. This explains the appellants' focus on the construction of GEMA's data set and the 'UKRN study' column in the chart.

78. Seen in this context, it is also apparent that there is no basis to describe GEMA's choice of TMR as '*cautious*'. Selectively comparing it against largely meaningless comparators such as investment manager forecasts, whilst omitting alternative approaches such as the Dimson Marsh Staunton ("**DMS**") decomposition of *ex ante* data also considered by the CMA in PR19[126] –

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[119] Finance Response, ¶ 128.

[120] NoA, ¶¶ 4.71–4.74. KPMG 1, ¶¶ 5.4.57 to 5.4.66, 5.5.1 to 5.5.6, and 5.5.23 to 5.5.26

[121] Finance Response, ¶ 129.

[122] PR19 Final Report, ¶ 9.334 **{CGL2/7}**.

[123] KPMG Paper, ¶ 4.2.9 **{Exhibit MFC4}**.

[124] Finance Response, ¶ 113.

[125] KPMG 1, ¶¶ 5.4.67 to 5.4.78 and 5.5.7 to 5.5.26.

[126] KPMG 1, ¶¶ 5.5.7-12.

which, if applied using robust approach and underlying data (see following paragraph) would have provided further, higher data points – does not change this.

79. GEMA also argues that the CMA's own historical *ex ante* estimates in PR19 are in line with GEMA's decision in RIIO 2[127]. However, as explained in Cadent's submissions on the PR19 Final Report, at ¶ 38, and the accompanying KPMG Paper, at ¶¶4.3.3–16 and section 4.4, there are certain problems with the approach applied in PR19, which Cadent suggests merit review in the present context, including in respect of the approach taken to the DMS decomposition, the approach to adjusting estimates for the effects of serial correlation, and the reliance on flawed data.

Equity Beta

80. ***Benchmarking / comparator selection.*** As set out in Cadent's NoA, GEMA erred in its choice of comparator companies for estimating equity beta for the purposes of RIIO-GD2 because GEMA's choices fail to reflect the systematic risks of GDNs appropriately,[128] in particular those faced by GDNs in respect of Net Zero,[129] because GEMA—

(a) placed too much weight on data from water companies (which GEMA calls the "**Water Company Issue**");

(b) failed to recognise the impact of NG's lower risk US business on NG Group's beta (which GEMA calls the "**NG Decomposition Issue**"); and

(c) failed to take into account evidence from relevant European comparators (which GEMA calls the "**European Comparator Issue**").[130]

81. Each of these failings contributed to the overall error of selecting a beta estimate that does not reflect the systematic risks of GDNs (which GEMA calls the "**Gas Network Risks Issue**").[131]

82. A large part of GEMA's response to each of these issues involves either (i) pointing to its decision lying within the bounds of its regulatory discretion; or (ii) justifying its refusal to take evidence into account on the basis that it would involve the exercise of too much regulatory discretion.

83. It is important to remember that the context for GEMA's decision is that there is no perfect proxy for a UK GDN – none is a listed company - and there is clear qualitative evidence that Net Zero has created a paradigm shift for GDNs. This means that it is necessary to consider the evidence that is available, even if imperfect, and to consider the most plausible interpretation of that evidence and whether it supports the hypothesis that gas networks are disproportionately affected by the economy-wide transition to Net Zero. To dismiss all the available evidence on the grounds that considering it would be speculative or require too many judgements to be made is wrong and, significantly, inconsistent with the approach GEMA takes elsewhere to the effect of the transition to Net Zero on gas networks, for example, its decision to apply a sixteen year payback period for Repex investments to reflect uncertainty over the future of gas[132] its decision to apply front-loaded depreciation.[133]

[127] Finance Response, ¶ 138.
[128] NoA, ¶ 4.89.
[129] NoA, ¶ 4.83(a).
[130] NoA, ¶¶ 4.90-93.
[131] Finance Response, ¶¶ 156.5.
[132] GEMA DDs, Core Document, ¶ 5.10 and footnote 35 **{CGL1/A/10}**.
[133] GEMA DDs Finance Annex, ¶¶ 10.1 to 10.12 **{CGL1/A/12}**.

84. Insofar as GEMA provides a substantive response:

(a) On the Water Company Issue, GEMA provides some limited reasons for why reliance on NG's beta would risk overestimating the risk of a pure-play energy network during RIIO-2,[134] but the explanation given is unconvincing as it conveniently ignores factors that understate the beta for a UK energy network which considerably outweigh factors that might overstate it. Specifically:

(i) Although there is insufficient data to assess the share of operating income attributable to the system operator business on a historical basis, based on 2020 annual accounts[135] the share would be less than 5%.

(ii) KPMG 1 finds that the share of the non-regulated business is modest at less than 10% of total operating income.

(iii) In contrast, the US business has generated c. 40% of NG's operating profit during the last 10 years and is primarily subject to a lower risk incentive-based regulation as discussed in KPMG 1. This means that the share of lower risk cashflows incorporated into the NG Group beta significantly exceeds that of both system operator and non-regulated cashflows, offsetting the higher risks associated with these activities. The decomposition analysis in KPMG 1 decomposes the NG group asset beta into a UK, US and non-regulated asset betas and so accounts for the higher risks of the latter. Directionally, it is clear that the decomposition analysis demonstrates the residual UK regulated network risk is notably higher than that of the Group beta.

(b) On the NG Decomposition Issue, in relation to the strength of evidence based on decomposition of NG's Group beta, the KPMG 1 is clear that there is inherent uncertainty associated with the choices needed to be made when applying a decomposition analysis, and as a result the Report uses the NG decomposition as a directional signal for UK network risk, or a cross-check of the estimates based on a wider set of data, rather than as a firm basis for setting the point estimate for beta. Nevertheless, the evidence should not be dismissed, even if limited weight were to be placed on it, given it is the closest empirical evidence on the current beta for a regulated energy network in the UK. Even if imperfect, the evidence demonstrates empirically that the beta for the UK business is consistently higher than the beta for the Group as shown in KPMG 1, based on their preferred approach to decomposition.

(c) On the Gas Network Risks Issue, KPMG 2 sets out how the evidence presented in KPMG 1 on the beta differences between Spanish and Italian gas and electricity companies supports the qualitative discussion presented in KPMG 1. KPMG 2 also sets out how GEMA's alternative explanations for the differences between Spanish and Italian gas and electricity networks are unlikely to explain the observed trend.[136]

[134] 1st McCloskey, ¶¶ 236, 237 and 290.

[135] National Grid plc, Report for year ended 31 March 2020, [Available at: https://www.nationalgrid.com/document/133101/download], **{CGL1/H/55},** p.30 and National Grid Electricity System Operator Limited, Report for year ended 31 March 2020 [Available at: https://find-and-update.company-information.service.gov.uk/company/11014226/filing-history/MzI3ODY1MTk1OWFkaXF6a2N4/document?format=pdf&download=0], **{CGL3/A/2}**, p. 76

[136] KPMG 2, Sub-Section 4.1.

85. Another strand of GEMA's response is to claim that any error made in respect of the Water Company Issue or the Gas Network Risks Issue would have a limited impact on the cost of equity allowance. This is not correct on a proper consideration of the data.

(a) GEMA's position is that the Water Company Issue would have no material impact '*if the CMA accepts that GEMA was right to place greater weight on observations of beta over large samples'*.[137] As set out in KPMG 2, GEMA's position that any Water Company Issue error has no material impact on the cost of equity allowance hinges on taking NG beta estimates over a particular 10-year estimation window and comparing them with water company betas over a 5-year estimation window. KPMG 2 makes it clear that this is inappropriate and amounts to "cherry-picking".[138]

(b) In respect of the Gas Networks Risks Issue, GEMA states that its assessed unlevered beta weighted towards long-term (10-year) estimates of National Grid's beta would mitigate concerns, as it would incorporate risks associated with National Grid's gas transmission and gas distribution businesses.[139] However, it cannot be concluded with any degree of confidence that signals of gas risk included in the NG share price from five or more years ago are appropriate proxies for gauging the risk of a gas distribution network at present: The different sector risks around the Net Zero agenda that have only crystalised in the last few years.

86. ***Technical Approach.*** In the NoA[140] and KPMG 1, Cadent identifies a number of methodological errors GEMA has made in deriving its equity beta. In terms of GEMA's response:

(a) In respect of the Sample Period Issue,[141] the findings of KPMG 2 make it clear that the approach of taking NG beta estimates over a particular 10-year estimation window involves cherry-picking.[142]

(b) In respect of the use of gross debt in the de-gearing/re-gearing formulae[143], as set out in KPMG 2, net debt is preferable because cash balances in excess of that needed to manage day-to-day working capital requirements represent a low risk asset on the firm's balance sheet which would be reflected in the beta estimate under the gross debt approach. In order to capture the risk of the firm's underlying operations, leverage should therefore be measured as net debt i.e. after deducting surplus cash – to derive a beta estimate for the underlying operations.[144]

87. ***Specific Issues.*** There are three further, specific issues that arise out of GEMA's response:

88. First, GEMA queries references made by Cadent to "the equity beta" in its NoA.[145] Cadent confirms that both the measured equity beta for comparators (and by extension the calculated asset betas for comparators) as well as the judgement taken to convert those ranges of observed asset betas into a point estimate for a GDN (and by extension the resulting notional equity beta) are inappropriate. In that sense, we consider that GEMA have made errors in both the technical estimation of beta ('measuring observed equity beta') as well as in the judgement on how to

[137] Finance Response, ¶ 159.
[138] KPMG 2, Section 4.2.
[139] Finance Response, ¶ 163.
[140] NoA, ¶¶ 4.94 and 4.95.
[141] Finance Response, ¶¶ 166.1 and 167 to 168.
[142] KPMG 2, Section 4.2.
[143] Finance Response, ¶¶ 172 to 174.
[144] KPMG 2, Section 4.4.
[145] 1st McCloskey, ¶ 257.

interpret that evidence, along with relative risk analysis, to derive a point estimate for the asset as well as equity beta for a GDN.

89. Second, GEMA seeks to justify the weight it placed on water sector evidence by reference to an extract from Cadent's response to FQ5 of the DD in which Cadent recognised the similarities in risks that investors in UK regulated utility networks bear within the confines of a regulatory period. GEMA refers to the fact that it highlighted Cadent's response in its FDs and that Cadent did not, in its NoA retract this view or object to the use of this quote by GEMA in the FDs.[146]

90. The way in which GEMA has quoted from Cadent's response to FQ5 of the DD in both the FDs and the Response is highly selective. This is immediately clear from looking at Cadent's full response,[147] in which the relative risks within a price control period and over the longer term are clearly contrasted and in which Cadent concludes that '*the gas distribution sector is higher risk than water*'. Cadent did not raise this issue following publication of the FDs or in its NoA because the approach it has consistently taken is to avoid unproductive criticism and instead to focus on the substance of the issues.

91. Third, GEMA suggests that Cadent did not raise the issue of the different risk profile of gas in response to GEMA's DD.[148] As set out at Paragraph 90 above, this is incorrect.

CAPM cross-checks

92. As set out in Cadent's NoA, GEMA used inappropriate cross checks to support its step 1 CAPM-implied cost of equity range and to justify its assertion that it was in fact aiming up in its step 2 point estimate.[149] KPMG 1[150] provided a detailed analysis of why the cross checks used by GEMA were inappropriate and set out more appropriate cross checks.

93. GEMA's response is essentially that, because cross-checks are used as a sense-check, the selection of cross-checks cannot be criticised, irrespective of asset type or risk profile, and any error made by GEMA cannot have had a material effect on the cost of equity point estimate.[151]

94. It is however evident from GEMA's Response that GEMA attached considerable importance to its cross-checks in respect of justifying its cost of equity decision. By way of examples:

(a) As set out below in Sub-Section 2 of this Section H, in justifying not aiming-up GEMA itself states that, '*the evidence from multiple market-based cross-checks gave GEMA very high confidence that 4.55% is unlikely to be an underestimate of the true cost of equity*';[152] and

(b) GEMA further argues that aiming in the middle of its CAPM-implied cost of equity represents a '*conservative reading*'[153] of the body of evidence from GEMA's Step 1 and Step 2 evidence. The Step 2 evidence to which GEMA refers is its cross checks, and therefore we again see GEMA's cross-checks being used to provide fundamental support to GEMA's cost of equity decision.

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146 1st McCloskey, ¶¶ 288 and 289.

147 RIIO-2 Draft Determination: Cadent Consultation Response – Finance Questions (FQ's), **{CGL1/B/9}**.

148 1st McCloskey, ¶ 297.

149 NoA, ¶ 4.97 to 4.104.

150 KPMG 1, Section 11.

151 Finance Response, ¶¶ 179 and 181.

152 Finance Response, ¶ 257.3

153 Finance Response, ¶ 261

95. GEMA's cross-checks were, therefore, clearly material to the cost of equity decision which GEMA reached and its selection of cross-checks, including in relation to asset type and risk profile, accordingly cannot be beyond scrutiny.

96. As set out in Cadent's NoA and the KPMG 1, GEMA's cross checks are demonstrably inappropriate for providing reliable evidence. Further explanation of the inappropriate cross-checks used by GEMA is set out in KPMG 2,[154] which in particular re-emphasises that GEMA's selection of cross-checks is incomplete and that GEMA is simply wrong to state that no cross-check supports a cost of equity above 5%.

97. In respect of specific cross-checks, it is clear that GEMA places particular emphasis on MARs, and specifically the Western Power Distribution ("**WPD**") transaction. Cadent set out in its NoA, as supported by KPMG,[155] why the wide range of factors that impacts MARs tests means they do not provide credible or robust evidence in respect of cost of equity.

98. Given the prominence GEMA has placed on MARs and the WPD transaction, Cadent has supplemented this with the additional KPMG MARs Report. This sets out in further detail why it is incorrect to rely on MARs generally, and the MARs derived from the WPD transaction specifically, as a basis for supporting or determining the cost of equity in the way GEMA suggest. The stylised analysis undertaken by KPMG in respect of the WPD transaction shows that it is possible to develop a MAR that explains the premium paid using reasonable assumptions that do not depend on assuming a lower actual cost of equity or on assuming expected outperformance by the sector as a whole. Overall, this demonstrates that there is little that can be reliably inferred for the purpose of setting a regulatory allowance from the estimated premium on this transaction.

99. In fact, what appears most clearly from the WPD transaction is NG's strategic pivot away from gas, which aptly illustrates the concerns Cadent and other appellants have raised about the structural challenges facing the gas sector and the need to capture these structural risks. This adds to the growing number of data points which demonstrate the paradigm shift in risk exposure faced by gas network companies such as Cadent as a result of the Net Zero. As Cadent has set out in its NoA[156] supplemented by this Reply, and backed-up by the analysis of Cadent's expert KPMG,[157] this risk exposure sets the gas sector apart from the water and electricity sectors and is not adequately reflected in GEMA's RIIO-2 approach to cost of equity.

100. In terms of GEMA's further comments in respect of the individual cross-checks it has used and rejected using,[158] we simply note the detailed analysis of each of these is provided in KPMG 1.[159]

101. Cadent's submissions in respect of GEMA's approach to financeability are provided at Section J below.

[154] KPMG 2, Section 6
[155] NoA ¶ 4.102(b), KPMG 1, ¶¶11.3.19 to 11.3.28.
[156] NoA, ¶¶ 4.89 to 4.93 and 4.124 to 4.160.
[157] KPMG 1, ¶¶ 7.4.17 to 74.33 and 7.4.39 to 7.4.70; KPMG 2, Section 4, and KPMG MARs 1, Sub-Section 4.4.
[158] Finance Response, ¶¶ 190 to 243.
[159] KPMG 1, Section 6.

(2) Failure to 'aim up' (Ground 2B)

102. Cadent's NoA sets out why aiming up is necessary in the context of RIIO-GD2.[160]

103. First, GEMA argues that underestimation of the cost of equity will not lead to underinvestment on the basis that overestimation of the cost of equity for RIIO-1 did not lead to over investment. This is a wholly unconvincing argument:

(a) Where the allowed cost of equity is lower than required, companies will face difficulties in attracting or retaining capital, and may have little incentive to try and identify new investments. By contrast, in a (theoretical) situation where the allowed cost of equity is higher than required, there will be numerous factors at play which will determine whether over investment in fact transpires.

(b) In any case, no convincing evidence has been presented that the 'required return' was overstated at RIIO-1. GEMA here conflates *ex post* realised performance, with the *ex ante* required cost of equity (or hurdle rate) that investors expect to earn over the life of the investment, in order to commit capital. The required *ex ante* return is inherently unobservable, and is distinct from the ex post realised return, which depends materially on performance against the price control's incentive mechanisms and potentially external factors, neither of which investors can predict at the time they are committing capital.

104. Second, GEMA suggests that, '*To the extent that the allowed returns on capital under RIIO-2 begin to fall below the true costs of capital, GEMA would expect to see this reflected in the market value of networks – which will inform allowed returns on future price controls and in extremis justify adjustments to allowed returns in RIIO-2*'.[161] This is not a credible position since:

(a) it does not provide to investors the necessary confidence in cost recovery; and

(b) in undermining short term financeability and leaving adjustment to future price controls, it envisages a deferral of investment and suboptimal operational decisions, which would not be in the interests of consumers.

105. Third, GEMA takes the position that it has such confidence in the mid-point of its CAPM-implied cost of equity being equal to or greater than the true cost of equity that aiming up is not required.[162] This position is inconsistent with the point GEMA itself emphasises that the '*the true cost of equity cannot be known and must be estimated*'.[163] This inherent uncertainty in the true cost of equity, with which Cadent agrees, is in fact a key reason for the need to aim up to maximise the consumer welfare.

106. Aside from this inconsistency, the grounds on which GEMA's Finance Response seeks to justify GEMA's high degree of confidence in its CAPM-implied cost of equity mid-point are flawed:

(a) GEMA purports that the market-based cross-checks that it has performed (in particular MARs) give it '*very high confidence*'[164] that the mid-point of its CAPM-implied cost of equity is unlikely to be an underestimate. Cadent's NOA, as supported by the KPMG 1,[165] demonstrates that the cross-checks GEMA has relied upon are not robust and that valid cross-checks in fact support a higher cost of equity point estimate. Section 6 of the KPMG

[160] NoA, Section 4, Sub-Section D.
[161] Finance Response, ¶ 257.5.
[162] Finance Response, ¶¶ 257.3 to 257.5 and ¶ 267.1.
[163] Finance Response, ¶ 254.
[164] Finance Response, ¶ 257.3.
[165] Exhibit MFC1, KPMG 1, Section 11.

2 together with KPMG MARs 1 further demonstrate the flaws in GEMA's cross-checks and provide detail of why MARs are not a robust basis on which to set the cost of equity.

(b) GEMA suggests that the indexed nature of its RfR protects against the allowed return on equity falling out of line with the true cost of equity of RIIO-2.[166] However, under a TMR approach for the CAPM as typically applied in UK regulation,[167] the impact of RfR volatility on the overall allowed cost of equity is limited, if equity beta is close to 1. The main drivers of uncertainty in cost of equity will therefore in this case be TMR and beta, and KPMG 1 was conservative in only considering beta uncertainty when estimating the level of aiming up for consumer welfare**.**[168]

(c) GEMA also argues that 4.55% is in fact a '*conservative*' reading of the body of evidence from GEMA's Step 1 and Step 2 cost of equity calculations and that companies have reasonable expectations of outperforming the allowed return on equity by at least 0.25%. The reasons why this is not correct are key parts of Cadent's appeal.

107. In respect of the <u>need to aim up for asymmetric risk in the GD2 package</u>, GEMA continues to argue that while material package asymmetry justifies aiming up there is no such asymmetry to be found in the GD2 package.[169] The approach and significant number of errors that characterised GEMA's RIIO-2 cost assessment process, as described in the Second Witness Statement of David Moon,[170] call into serious doubt how GEMA could have performed any meaningful assessment of asymmetry in respect of Totex.[171] Cadent's NoA[172] together with KPMG 1, KPMG's first outperformance wedge report ("**KPMG OW 1**"), and the Witness Statements of David Moon and Stephen Hurrell as all referred to therein set out in detail why there is in fact demonstrable asymmetry.

108. In respect of the <u>need to aim up to account for the asymmetric risk arising from structural factors faced by the gas sector</u>, GEMA appears to base the resistance to this in its Finance Response on a view that accelerated depreciation would be a more appropriate way in which to manage this risk.[173]

109. As set out in the KPMG 1,[174] accelerated depreciation cannot solve the problem of potential asset stranding. In fact, accelerating depreciation exacerbates the issue because the resulting price increase will accelerate any potential move to alternative sources of energy as gas becomes less competitive, resulting in a greater loss of the customer base. In turn, this loss of customers will lead to a need for further accelerated depreciation and price rises and so on, such that there is a spiralling effect. GEMA has itself implicitly accepted this, recognising that the structural risks faced by the gas sector do not reside exclusively with gas consumers, agreeing with NGG that '*a rapid and sustained decline in gas volumes may mean that return of the RAV becomes less viable at each price control review*'.[175]

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166 Finance Response, ¶ 257.4.
167 Where equity risk premium (ERP) is the residual value of TMR less RfR.
168 KPMG 1, ¶ 9.4.3.
169 Finance Response, ¶ 269.
170 2nd Moon.
171 2nd Moon,.
172 NoA, ¶¶ 4.133 to 4.144.
173 Finance Response, ¶¶ 270 to 272.
174 KPMG 1, ¶¶ 7.4.31 to 7.4.33 and 9.4.14 to 9.4.15.
175 GEMA DDs, Finance Annex, ¶ 10.6 **{CGL1/A/12}**.

110. Further, excessive depreciation gives rise to intergenerational fairness issues. It is important to ensure that current customers do not pay more than their fair share for assets based on an assumption that a future loss of value occurs.

111. This is related to the fact that accelerating depreciation today is akin to recognizing that a value loss might have already occurred (hence prices need to adjust today). This misunderstands the issue because the issue is that a future loss of value might occur, and it is the risk of this loss that needs to be compensated in prices and expected equity returns today (i.e. this is an 'insurance premium' argument, rather than a recognition of loss of value today).

112. In any event, GEMA already deployed accelerated depreciation for gas distribution in GD1, introducing a 45-year sum of digits approach replacing a 45-year straight line methodology that it continued to use for gas transmission.[176] This means that GEMA's attempt to contrast the position of the GDNs with that of NGG is misplaced: GEMA's RIIO-2 decision to change the depreciation for gas transmission was to bring it into line with the Gas Distribution businesses.[177]

113. GEMA also tries to distinguish the position of NGG from those of the GDNs by stating that NGG's notice of appeal does not refer to any gas stranding risk, but this is wrong: NGG's notice of appeal does refer to stranding risk.[178] In any event, it would be wrong to seek to draw inferences from the extent to which NGG emphasises the different risks of gas and electricity given the common ownership of NGG and NGET and National Grid's decision to make a strategic pivot (as referenced in paragraph 99 above). It is also not necessarily the case that the transition to Net Zero will impact gas transmission in the same was as gas distribution, given the different network customers, drivers and scale.

114. As to GEMA's moral hazard argument,[179] GEMA does not state clearly what hazard it is concerned about, but in so far as GEMA is implying that companies should be incentivised to propose accelerated depreciation or be cautious in terms of new investments, GEMA is able (indeed obliged) to set the depreciation rates and the investment pay-off periods that it considers appropriate. In any event, as set out above, accelerating depreciation cannot remove the risk to investors and therefore is not an alternative to remunerating investors appropriately for the risks they bear.

115. Further, even if there were some foundation to GEMA's moral hazard argument, it cannot be a justification for under-remunerating investors and setting the cost of equity too low: GEMA has not articulated what the hazard is, nor whether there are other means available to it of mitigating the risk that it may have identified.

116. Finally, GEMA's Response places emphasis on regulatory precedent not creating a '*general rule*' that aiming up is required. The CMA has recently considered this regulatory precedent in the PR19 Final Report[180] and GEMA's attempt to distinguish the conclusions of PR19 on the basis of PR19 being a redetermination rather than a merits based review[181] is misplaced, given the clear evidence for aiming up representing the correct approach.

[176] GEMA DDs, Finance Annex, Table 39.
[177] GEMA DDs, Finance Annex, ¶ 10.12 **{CGL1/A/12}**.
[178] NGGT Notice of Appeal, Paragraph 3.121(d).
[179] Finance Response, ¶ 272 and 1st Wilde, ¶ 102.
[180] PR19 Final Report, ¶¶ 9.1226 to 9.125 **{CGL2/7}**.
[181] Finance Response, ¶ 264

I. OUTPERFORMANCE WEDGE (GROUND 3)

117. In its Response, GEMA seeks to characterise this ground of appeal as a narrow dispute about a specific piece of evidence and then focuses on the supposed lack of substantive challenge to this evidence:

> *At its essence, this is a dispute about a limited category of evidence. That is the evidence of outperformance of regulated companies across price controls, across sectors, and over time. That evidence is clear and compelling*[182]*.*
>
> *The CMA should not be drawn into seeking to resolve the multitude of satellite issues by which the Appellants seek to obscure the clarity of the data.*[183]
>
> *As one would expect, GEMA's dataset has been subject to rigorous analysis by the licensees and the various consultants they have commissioned. In that context, it is striking that the challenges made to the data (such as they are) are insubstantial and/or couched in generalities and platitudes.*[184]

118. The question of whether GEMA was wrong to introduce the outperformance wedge does not however turn on whether GEMA is able to produce evidence of outperformance in past price controls. That is why Cadent's appeal did not focus on the narrow issue of challenging GEMA's dataset, but on the flaws in GEMA's overall approach, including the inferences drawn by GEMA from the dataset.

119. Notwithstanding this, in the light of GEMA's Response, KPMG have reviewed the dataset. In the limited time available for this review, KPMG has found serious and obvious errors in GEMA's dataset, which are far from being '*insubstantial*'. For example, the dataset shows significant outperformance for the 2002 gas distribution price control, with companies apparently underspending their allowances by 35%. This, however, is the result of comparing five years of cost allowances with three years of expenditure. In the three years in which both allowances and actuals are shown, companies in fact overspent.[185] Another example is that the dataset omits the last year of data from the PR14 price control, such that it appears that companies underspent on average when in fact they overspent.[186]

120. Further, GEMA claims to have controlled past outperformance data for RIIO-2 parameters, arguing that this defeats any arguments that changes in RIIO-2 mean past performance is not indicative of performance under RIIO-2.[187] However, KPMG find that all but one of the parameters that GEMA controls for have no effect on whether there is outperformance or not. In contrast, a factor that clearly affects performance but has not been controlled for by GEMA is the removal of the IQI glidepath in RIIO-2. Adjusting for that results in a 38-basis point reduction to the return on regulated equity for Cadent and a 33-basis point reduction for GDNs on average, i.e. more than GEMA's proposed outperformance wedge and equal to GEMA's total estimate of RIIO-1 cost outperformance controlling for RPEs.[188] Further, GEMA has not sought to assess the effect of the new measures it has taken to reduce information asymmetry. KPMG step through each of these factors, including the Business Plan Incentive and the Price Control Deliverables,

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182 Finance Response, ¶ 283.
183 Finance Response, ¶ 284.
184 Finance Response, ¶ 313.
185 KPMG OW 2 Report, ¶ 2.11.
186 KPMG OW 2 Report, ¶ 2.13.
187 Finance Response, ¶ 324.
188 KPMG OW 2, ¶ 2.20

and note GEMA's concessions that they are likely to reduce the effect of any information asymmetry.[189]

121. Finally, KPMG has reviewed GEMA's claim[190] that its approach is supported by equity analyst estimates and MARs. A full response on this point is provided in KPMG MARs 1 but in summary there are multiple potential reasonable explanations of any premia due to different factors unrelated to potential outperformance, including private value factors that are not relevant to market-wide assumptions.

122. Therefore, even on GEMA's narrow approach to the issue, GEMA's claim that an outperformance adjustment of 0.25% is *conservative* is not credible. It is equivalent to £100 million of Totex outperformance or 80% of the available ODI incentive rewards.[191]

Compatibility with incentive-based regulation

123. On the substance of Cadent's appeal, it is striking that GEMA has failed to engage in any meaningful way with Cadent's central complaint that GEMA had failed to consider properly whether the outperformance it expects is in fact undesirable rather than earned and whether seeking to eliminate it with an outperformance wedge is compatible with incentive-based regulation.[192]

124. GEMA's Response indirectly addresses this issue by contending that all that GEMA is seeking to adjust for is information asymmetry. However, GEMA rightly accepts this is not the only factor contributing to outperformance and despite its assertions of '*rigorous evaluation of the evidence*' appears to rely almost exclusively on its flawed historical data set and does not appear to have conducted any analysis at of the source of any expected outperformance.[193]

125. In support of its contention that outperformance relates to information asymmetry, GEMA cites the Chief Executive of National Grid's comments at a UK Investor Teach-In in September 2018:

> *I think this is my sixth or seventh price control. Usually at this point people say well where is the outperformance going to come from? I'm very confident we've got the capability and the organization…to be able to identify those opportunities. And let's not forget as well technology is always moving forward, and therefore technology also offers a great opportunity for us to outperform.* [194]

126. Nothing in this statement however suggests that National Grid are expecting to outperform as '*a matter of course*'[195] (or indeed at all, given the context of this statement and the fact that it was made before the full regulatory settlement was known). Rather, it appears to be clear evidence of *ex ante* incentive-based price regulation working as it should, with National Grid being properly incentivised to find opportunities <u>that are not yet known</u> to outperform for the benefit of both its shareholders and consumers. This is considered in further detail in the KPMG OW 2.[196]

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[189] KPMG OW 2, ¶¶ 2.17 to 2.23.
[190] Finance Response, ¶ 317.
[191] DM1, Paragraphs 122 and 59.
[192] NoA, ¶¶ 5.10 to 5.15.
[193] Finance Response, ¶ 350
[194] Finance Response, ¶ 315.
[195] Finance Response, ¶ 350.
[196] KPMG OW 2, ¶ 2.5.

Detrimental Impacts

127. GEMA's response to Cadent's second point – that the outperformance wedge distorts incentives and has negative consequences[197] – is principally to suggest that the impact is likely to be minimal,[198] in particular on the basis of its (unproven) assumption that outperformance of 0-0.25% occurs without effort[199] and its assessment (based on historical data, which has little relevance to RIIO-2) that there is a relatively small probability of companies falling within the '*deadband zone*'.[200] However, this is counter-intuitive and it remains the case that GEMA has conducted no proper analysis of the impact of the outperformance wedge on incentives. This is in stark contrast to standard regulatory practice, where for example regulators normally carefully consider the incentive effects of cost sharing rates and the calibration of the ODI package. In any event, it is notable that GEMA concedes that there is an impact on incentives unless the company expects to outperform.[201] This is of particular relevance to the incentive on companies to bring forward investment under discretionary reopener mechanisms.[202]

128. The impact of the outperformance wedge on investment, regulatory risk, efficiency and service improvements is set out in more detail in KPMG OW 2.[203]

Other tools reduce the scope of outperformance in RIIO-2

129. Cadent also highlighted in its NoA that GEMA has put considerable focus throughout the price control and the preceding business plan process on minimising the scope for outperformance, calling into question the basic justification for the outperformance wedge.[204] GEMA's response is to say that, in its expert regulatory view, '*information asymmetry cannot be completely eliminated from the RIIO-2 package*[205]', although its reasoning for this[206] is unconvincing, as set out in KPMG OW 2.[207] KPMG OW 1[208] and the witness evidence of David Moon,[209] , equally set out extensive evidence on the changes made to the RIIO-2 package.

Regulatory principles

130. Finally, Cadent argued in its NoA that as a result of all the above factors, the outperformance wedge is not consistent with the principles of good regulation or best regulatory practice, and risks severely undermining regulatory confidence.[210] GEMA makes a number of points in response, none of them convincing.

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[197] NoA, ¶¶ 5.17 to 5.33.
[198] Finance Response, ¶ 286.2.
[199] Finance Response, ¶¶ 350 and 356.
[200] Finance Response, ¶ 355.
[201] 1st McCloskey, ¶ 190.
[202] NoA, ¶ 5.18.
[203] KPMG OW 2, ¶¶ 2.25 to 2.36.
[204] NoA, ¶ 5.34.
[205] Finance Response, ¶ 320.
[206] Finance Response, ¶ 321.
[207] KPMG OW 2 , ¶ 2.17-18.
[208] KPMG OW 1, Section 5
[209] 1st Moon ¶¶ 38-41.
[210] NoA, Section 5(B)(4).

(a) GEMA states that its approach is '*grounded in the evidence and regulatory principles expounded in the UKRN Report*'[211] and its '*decision is rooted in a detailed study*'.[212] This ignores the significance of the caveats and limitations in the UKRN Report, as summarised in the NoA at paragraph 5.63,[213] and which are not, as GEMA attempt to suggest, a simple matter of disagreement between authors.[214] It is no answer that it was not GEMA's intention to implement the UKRN approach exactly or in full[215]: the point is that the UKRN Report provides an insufficient analytical basis for the introduction of the outperformance wedge and GEMA needed to carry out its own assessment of whether doing so would be in accordance with its Principal Objective.

(b) GEMA states that the Utilities Act 2000 '*is not prescriptive*'[216] and that it first consulted upon the principle of adjusting returns by reference to expected outperformance in March 2018, and it has been part of every consultation and decision document since that date.[217] But neither of these points is an answer to a failure to carry out a robust evaluation or impact assessment of the outperformance wedge or to engage fully with the consultation process, as outlined in KPMG OW 1 .[218]

(c) GEMA states that there is no general principle of regulatory theory or practice prohibiting a lump-sum adjustment to allowed returns on equity and that, '*If there were, the Appellants would have invoked it*'.[219] On the contrary, there are many regulatory principles that conflict with the approach taken by GEMA to the outperformance wedge, including those invoked by Cadent, namely the Principles of Good Regulation,[220] past decisional practice,[221] and first and foremost the fundamental principles of incentive based economic regulation, all of which can be found in GEMA's own RIIO handbook.[222] The most important regulatory principle is of course whether given the extensive scope for unintended consequences of such a poorly designed regulatory mechanism, the outperformance wedge is in the interests of consumers and therefore compatible with the Principal Objective, a question that has not been seriously addressed by GEMA (or indeed any of the UKRN authors except Phil Burns, who clearly rejects an adjustment such as the outperformance wedge).

J. FINANCEABILITY AND THE IMPACT OF GEMA'S ERRORS

131. In its NoA, at Section 6, and in the supporting witness statements by David Moon and Stephen Hurrell, Cadent included evidence which summarised the impact of the errors being appealed on its projected financeability position for RIIO-2.

132. Cadent's conclusion was that, if left uncorrected, these errors would give rise to significant financial pressures that would impact Cadent's ability to attract new capital and incentivise a risk

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211 Finance Response, ¶ 326.
212 Finance Response, ¶ 287.
213 NoA, ¶ 5.63.
214 Finance Response, ¶¶ 335-6.
215 Finance Response, ¶ 355.
216 Finance Response, ¶ 334.
217 Finance Response, ¶ 362.
218 KPMG OW 1 , ¶¶ 3.8.1 – 3.8.3.
219 Finance Response, ¶ 308.
220 NoA, ¶ 5.45.
221 NoA, ¶¶ 5.47 and 5.52.
222 NoA, ¶¶ 5.49 and 5.30.

averse and short-term approach to investment to the detriment of consumers. Cadent observed that a robust assessment of the financeability of the FDs would have revealed GEMA's errors, and showed that GEMA's own analysis was critically flawed because it relied on a series of artificial and unrealistic assumptions.

133. In its Response, GEMA argues that the criticisms of the adjustments it has made to the specification of the notional company (changes in notional gearing, proportion of index linked debt, dividend yield) are '*no more than a disagreement with GEMA's exercise of regulatory judgment in relation to matters to which reasonable people may differ*' and that '[t]*he fact that KPMG has arrived at a different assessment on the basis of alternative assumptions does not disclose any appealable error*'.[223]

134. This misunderstands Cadent's criticism to the extent that Cadent has not actually sought to identify GEMA's financeability analysis as a separate appealable error, but has highlighted it simply as the reason why GEMA has failed to spot the consequences of its other errors. GEMA's response is nonetheless disappointing, as it follows GEMA's general pattern in the Responses of failing to engage with the substance of complaints, instead preferring to argue simply that its approach is '*reasonable*' and thus good enough for the CMA not to interfere.

135. However, under the guise of its discretion, GEMA has consistently made choices that have taken a selective view of the available evidence and have all been biased in one direction, towards a 'tighter' price control and lower returns. These choices are amplified by design changes in the price control which have resulted in a risk profile that is significantly skewed to the downside. Irrespective of whether some of GEMA's choices can still be said to be within the bounds of what '*reasonable people may differ*' about, and many are straightforwardly flawed in any event, in combination these choices are also no longer 'reasonable'.

136. GEMA's financeability analysis illustrates this point well. GEMA's changes to the specification of the notional company quite clearly seek to make the notional company fit the FDs, rather than setting a price control that meets financeability tests and so discharges GEMA's financeability duty. In doing so, GEMA not only redefines what is 'financeable', it also arrives at clearly unreasonable and unrealistic assumptions, including that:

(a) an adjusted cash interest coverage ratio ("**AICR**") below the relevant threshold (the primary metric, for example, for Moody's) would not constrain the achieved credit rating[224];

(b) notional gearing can be assumed to decrease without incurring significant, unfunded refinancing/transaction/break costs[225];

(c) the notional company can achieve a higher proportion of index linked debt without material costs which is unrealistic in light of actual capital structures and the nascent market for CPIH debt[226];

(d) dividend yields can be reduced drastically to levels significantly below applicable market benchmarks[227];

[223] Finance Response, ¶ 279.
[224] NoA, ¶ 6.20.
[225] NoA, ¶6.23(a).
[226] NoA, ¶ 6.23(b).
[227] NoA, ¶ 6.23(c).

(e) the notional company will be able on average to outperform the regulatory settlement[228]; and

(f) there is sufficient financial headroom to manage increasing risk and increased asymmetry implied by the FD[229].

137. GEMA has largely failed to address the detailed criticisms Cadent and KPMG have advanced in respect of these factors.

(a) On the unsustainability of a strong investment grade credit rating, GEMA in fact appears to concede the criticism, when it moves the goal post to argue that '*We also note that the network companies' licences do not require a Moody's rating of a certain category and that a number of actual companies consider themselves perfectly financeable ... at a rating of Baa2.*'[230] Moreover, GEMA sets out a series of arguments relating to the interpretation and application of rating agency methodologies in its Final Determination and KPMG's Financeability Report submitted with Cadent's NoA, but these culminate in the statement that '*While our view is that our in-the-round assessment of the notional company in the FDs is consistent with credit quality equivalent of BBB+/Baa1, this does not require Moody's to be of the same view*'[231]. This position is inappropriate. Rating agency methodologies are the key independent market test for determining credit quality, and financeability ultimately needs to be confirmed based on tests relied upon by providers of capital in the market.

(b) The references to CMA precedents (NATS and Firmus)[232] to justify changes to the notional company are equally misplaced. These decisions turned on company specific factors that do not apply in the current context (NATS's actual gearing was significantly lower than notional gearing, coupled with an asset light business model; while Firmus *inter alia* expected to receive additional cash flows from past under-recovery of revenues). In respect to the CMA's approach to financeability, Cadent repeats its submissions on the PR19 Final Report, at ¶¶ 51–56, which highlight the strong endorsement by the CMA of a financeability cross check to the calibration of the cost of equity, and note that whilst Ofwat similarly suggested that changes to the notional company might address financeability, the CMA rejected this.

(c) In relation to dividend yield, GEMA fails to engage with the extensive discussion on the evidence and literature on the importance of dividends for income stocks such as utilities in KPMG's Equity Financeability report submitted with Cadent's NoA.[233]

(d) Cadent's criticism of the lack of support for GEMA's assertion that the notional company will be able to outperform its settlement is discussed in the context of the outperformance wedge above.

(e) Finally, GEMA has no basis for its assertion that Cadent's analysis of risk exposure is over-stated[234] (as it has not carried out its own risk analysis).

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[228] NoA, ¶ 6.23(d).
[229] NoA, ¶ 6.24.
[230] 1st Wilde, ¶ 182.
[231] 1st Wilde, ¶ 182.
[232] 1st Wilde, ¶ 160.
[233] KPMG Financeability Report, Appendix 1.
[234] 1st Wilde ¶ 165.3

138. More generally, GEMA argues that '*a financeability assessment (with a focus on credit ratings but also consideration of equity metrics) could only be reliably used to cross-check that the cash flows under the RIIO-2 settlement overall were sufficient*' as opposed to the cost of equity specifically[235]. In so far as this is addressed at Cadent, it misrepresents its criticism. Cadent's financeability assessment highlights mis-calibration of totex allowances, downside exposure implied by regulatory mechanisms (with no corresponding adjustments to returns), *as well as the cost of equity* as drivers of the financeability constraints implied by GEMA's FDs.

139. Moreover, assuming no out- or under-performance against the regulatory framework, the cost of equity is the *primary* driver of free cashflows available for management of risk, projected coverage metrics applied by rating agencies as well as distributions. There is clear line of sight between calibration of the allowed cost of equity and financeability constraints identified for the notional company.

140. In summary, GEMA's preferred approach to its regulatory discretion in the discharge of its financeability duty – as in essence allowing it to choose the notional company parameters to fit the requirements of the price control – undermines the financeability test as a meaningful and robust cross check on the calibration of the GD2 package, and in the present case has deprived GEMA of a tool that would have allowed it to identify the mis-specification of the FDs. Instead of a robust assessment of financeability, GEMA has chosen to focus on novel cross checks, e.g. its MAR analysis. Why these are problematic is set above at ¶¶ 91 to 100, at KPMG 1, Section 11 and in particular ¶¶ 11.3.19 et seq., and KPMG MARs 1.

141. Finally, in Simon Wilde's witness statement, GEMA in addition sets out a series of arguments relating to the interpretation and application of rating agency methodologies in its Final Determination and KPMG's Financeability Report submitted with Cadent's NoA. These culminate in the statement that, whilst GEMA's '*in-the-round assessment of the notional company in the FDs is consistent with credit quality equivalent of BBB+/Baa1, this does not require Moody's to be of the same view*': 1st Wilde, ¶ 182. This position is inappropriate. Rating agency methodologies are the key independent market test for determining credit quality, and financeability ultimately needs to be confirmed based on tests relied upon by providers of capital in the market.

K. INTERLINKAGES

142. The CMA, in its letter of 20 April 2021,[236] stated that it was only to the extent that GEMA makes submissions on interlinkages in its response that relate to grounds of appeal rather than remedies that the CMA might consider submissions before the Provisional Determinations.

143. Whilst GEMA proposes many interlinkages in its Responses, there appears to be only one interlinkage identified by GEMA that can be said to be part of GEMA's response to Cadent's grounds of appeal. This is GEMA's claim that its decision on aiming up was influenced by its level of confidence in the robustness of the cost of equity assessment and that the expected return on equity would be above the assessed cost of equity.[237] It will however already be apparent to the CMA from Cadent's appeal that Cadent considers GEMA's confidence on these points to be wrong.

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235 Finance Response, ¶ 279.1.

236 Letter of 20 April 2021 from the CMA **{CGL3/A/5}**.

237 1st Wilde, ¶ 207; see also Finance Response, ¶ 266.

144. Accordingly, Cadent makes no further comment on GEMA's position regarding interlinkages at this stage, although the CMA will be aware that the Gas Regulation Group of the Energy Networks Association wrote to the CMA with its concerns about GEMA's proposed approach to interlinkages and a 'post appeal review' last year.[238]

145. Finally, Cadent welcomes the CMA's position of providing appellants with the opportunity to make submissions on the topic of interlinkages at a later stage in the process.

L. STATEMENT OF TRUTH

Cadent believes that the facts stated in this document are true.

Signature of Authorised Representative	**[REDACTED]** ………………………………………
Name of Authorised Representative	**DAVID NICHOLAS MOON** ………………………………………
Date	**10 MAY 2021** ………………………………………

for and on behalf of Cadent Gas Limited

[238] Letter of 5 October 2020 to the CMA from the Gas Regulation Group of the Energy Networks Association **{CGL3/A/3}**.

Filed on behalf of the Appellant
Cadent's Reply to GEMA's Responses
Date: 10 May 2021
Exhibit: CGL3

BEFORE THE COMPETITION AND MARKETS AUTHORITY
IN THE MATTER OF AN APPEAL UNDER SECTION 23B OF THE GAS ACT 1986

CADENT GAS LIMITED

Appellant

and

GAS AND ELECTRICITY MARKETS AUTHORITY

Respondent

CADENT'S REPLY TO GEMA'S RESPONSES

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