BEFORE THE COMPETITION AND MARKETS AUTHORITY
IN THE MATTER OF AN APPEAL UNDER SECTION 11C OF THE ELECTRICITY ACT 1989 AND SECTION 23B OF THE GAS ACT 1986
BETWEEN:

(1) CADENT GAS LIMITED
(2) NATIONAL GRID ELECTRICITY TRANSMISSION PLC
(3) NATIONAL GRID GAS PLC
(4) NORTHERN GAS NETWORKS LIMITED
(5) SOUTHERN GAS NETWORKS PLC AND SCOTLAND GAS NETWORKS PLC
(6) SCOTTISH HYDRO ELECTRIC TRANSMISSION PLC
(7) SP TRANSMISSION PLC
(8) WALES & WEST UTILITIES LIMITED

APPELLANTS

- AND –

THE GAS AND ELECTRICITY MARKETS AUTHORITY

RESPONDENT

RIIO-2 PRICE CONTROL: RESPONSE TO APPEALS ON FINANCE ISSUES AND TNUOS

A. INTRODUCTION & SUMMARY

1. This is the response of the Gas and Electricity Markets Authority ("**GEMA**") to the Appellants' appeals on finance issues and transmission network use of system charges ("**TNUoS**"). GEMA will file separate submissions on the balance of the appeal grounds.

2. Where GEMA does not expressly respond to a particular paragraph of any Notice of Appeal, it should not be taken to be accepting the relevant submission.

3. The Appellants sought permission to appeal pursuant to s.23B(3) GA86 and s.11C(3) EA89 in respect of modifications to licences made by GEMA by a decision dated 3 February 2021 under s.23 GA86 and s.11A EA89 (the "**Licence Modifications**"). The Licence Modifications give effect to GEMA's price control determinations under the new price control regime known as RIIO-2. Permission to appeal was granted by the CMA on 31 March 2021 in respect of all grounds.

4. GEMA's decision-making in respect of the RIIO-2 price controls has involved a complex assessment by GEMA based on substantial data, comprehensive expert analysis, extensive consultation over almost four years, and the careful balancing of regulatory objectives. The Licence Modifications are the product of that work, and of the interaction of a broad range of factors considered by GEMA in accordance with its statutory duties. GEMA is confident that the process it has followed has delivered a result that is well-founded and consistent with its principal objective of protecting the interests of existing and future consumers and its wider duties.

5. An overarching account of the decisions, including: the regulatory context, Ofgem's assessment of RIIO-1 and strategy for RIIO-2; the interlinkages that GEMA considered in the round; and the extensive consultation and stakeholder engagement undertaken before GEMA made its final determinations, is set out in the witness statement of Akshay Kaul, which the CMA is invited to read. As indicated in earlier correspondence with the CMA and the parties, GEMA proposes that submissions on remedies should be made following Provisional Determinations (should such submissions be needed). The CMA has confirmed in correspondence that (i) it will take interlinkages into account;[1] and (ii) *"the appropriate time to consider submissions on remedies is after the CMA's Provisional Determinations, which is the approach usually followed by the CMA and which we intend to follow in this appeal"*.[2]

6. The Appellants' complaints, many of which amount to no more than disagreements with the way in which GEMA has exercised its expert regulatory discretion, are without merit. These grounds of challenge concern matters which have been subject to extensive consultation and on which GEMA's position has been set out in full in the Sector Specific Methodology Decision, Draft Determinations and Final Determinations. GEMA considers that these appeals should be rejected for the reasons

[1] CMA Letter of 30 October 2019, §14. [F1/16]

[2] CMA Letter of 20 April 2021. [F1/40]

explained in those documents and these submissions, and in any event because these challenges concern matters within the scope of GEMA's expert regulatory judgement.

7. GEMA accordingly invites the CMA to dismiss the appeals.

8. In summary, and as further developed below, GEMA's position is as follows:

8.1 All of the Appellants challenge GEMA's approach to estimating the cost of equity and the Capital Asset Pricing Model ("**CAPM**") parameters.[3] These appeals should be rejected because they do not demonstrate that GEMA's decision was wrong on one or more of the statutory grounds of appeal. GEMA had regard to all relevant evidence and material and to its statutory obligations, gave those matters appropriate weight, and reached a decision based on its own expert regulatory judgement and in accordance with the legal framework. In particular:

a) On the risk-free rate ("**RFR**"), GEMA's approach is not appealable. The RFR is a hypothetical number, which GEMA set in accordance with well-established regulatory theory and practice, using a proxy that provides the closest RFR without requiring a series of discretionary adjustments to be made. That was a reasonable and lawful use of GEMA's regulatory discretion. The Appellants' complaints do not establish otherwise and do not provide any proper basis for the CMA to overturn GEMA's approach;

b) GEMA's approach to Total Market Return ("**TMR**") has similarly been guided by the principle of using the evidence that appeared to GEMA, as the expert regulator, to be the best available, in order to set what is an unobservable number. The Appellants' objections amount to no more than disagreements with GEMA's exercise of its regulatory judgement on this point and provide no reason why GEMA was not entitled to take the view of the evidence that it did;

c) Nor have the Appellants identified any material error in GEMA's assessment of the notional equity beta of an efficient energy network. The alleged "errors" identified by the Appellants, in reality: (i) relate to matters of regulatory judgement with which the CMA should not interfere; and (ii) in many cases have no material impact on the RIIO-2 allowed return on equity unless combined with other alleged errors;

d) GEMA's use of cross-checks received broad support from stakeholders in principle; to the extent that the Appellants now take issue with that approach, their arguments are without foundation. GEMA again exercised its own regulatory discretion in relation to the cross-checks it applied, and has taken a cautious approach to interpreting the results of those cross-checks such that, even if there had been any error (which is not accepted), it would have had no material impact;

[3] This includes the challenges to GEMA's approach to: the use of cross-checks; 'aiming up'; equity beta; Total Market Return ('TMR'); and the risk-free rate ('RFR').

e) On "aiming up", the decision as to where to set the allowed return on equity is, again, a matter of regulatory judgement. "Aiming up" within the range is not a regulatory requirement to be applied regardless of the context or the range of other issues that a regulator may take into account, e.g. the conservatism of assumptions used in estimating the range and/or the regulator's confidence in the robustness of its estimates. GEMA considered the arguments in favour of "aiming up", as well as all other relevant matters, and concluded that 4.55% was highly unlikely to be an under-estimate of the true cost of equity of the efficient energy company and that 4.3% allowed return on equity when combined with actual expected outperformance was highly unlikely to under-provide equity investors. The Appellants identify no proper basis for the CMA to interfere with that judgement.

8.2 All of the Appellants appeal against GEMA's approach to expected outperformance.[4] These appeals are without merit and should also be rejected. In particular, the principled distinction GEMA has drawn between expected returns and allowed returns is strongly grounded in economic evidence, which supports the view that information asymmetry is a structural feature of price controls and that a degree of outperformance based on information asymmetry cannot be excluded. GEMA's decision to make a modest adjustment to allowed returns is a rational and considered response to the evidence and in any event is well within the bounds of the regulator's judgement. Moreover, any risk of harm is low because the impact on incentives is minimal, and the ex-post mechanism further protects the incentive to invest and financeability.

8.3 [redacted] That argument is legally hopeless. GEMA's approach in RIIO-2 reflects the well-established regulatory practice, accepted and applied by the CMA on many occasions, of assessing financeability by reference to the notional efficient company in the relevant sector. The use of an external index calibrated by reference to the sector average cost of debt and adjusted for notional company characteristics outside company control is a rational and rigorous regulatory approach which is well within the scope of the regulator's discretion.

8.4 WWU also challenges GEMA's treatment of interest expenses incurred on derivatives for the purpose of assessing the tax clawback. This appeal is out of time and should be rejected. No substantive changes have been made to GEMA's approach to the treatment of interest payments on derivative instruments since 2009, and that approach was again confirmed by GEMA in 2019. If there is going to be a change to that approach it will be addressed in future Price Control Financial Model ('PCFM') Guidance, which is currently

[4] Cadent Ground 2; NGET Ground 2; NGG Ground 2; NGN Ground 2; SGN Ground 2; SHE-T Ground 2; SPT Ground 2; WWU Ground 2, B6.
[redacted]

being consulted on. There is, accordingly, no "*decision by GEMA to proceed with the modification of a condition of a licence*" that is susceptible to appeal under section 23B GA 86.

8.5 Scottish Hydro Electric Transmission Plc ("**SHE-T**") challenges GEMA's approach to the revenue collection cash-flow risk relating to TNUoS (Ground 4, Section 7, §§7.1-7.37). This challenge is ill-founded: any cash-flow risk is remunerated elsewhere in the price control, and to the extent there is any shortfall (which SHE-T does not show and which GEMA does not accept), it would in any event be 'immaterial'. GEMA's approach was, moreover, fully consulted on and SHE-T is wrong to claim otherwise.

B. GEMA'S DECISION-MAKING PROCESS

9. GEMA developed its costs assessment process in a way which built on its experiences of the RIIO-GD1 price control, its other previous price controls (e.g. RIIO-ED1), and price controls set by other regulators (e.g. Ofwat's water price control, "**PR19**", which has run in parallel with the development of the RIIO-2 price control).

10. In developing its framework for finance issues and TNUoS, GEMA engaged in a thorough and transparent process of consultation and discussion with GDNs and other stakeholders. An overview of that process is provided in the First Witness Statement of Akshay Kaul (see, in particular, section D). In summary, GEMA's decision-making framework involved the following:

10.1 Framework Consultation (March 2018). Following the publication of an open letter in July 2017, GEMA consulted on the RIIO framework (i.e. the broader set of cross-sectoral rules and methodologies) in March 2018.

10.2 Finance sessions with the Energy Networks Association ('**ENA**') (2019 and 2020). GEMA ran a series of engagement sessions with energy network companies throughout its decision-making process, covering all of the cost of capital issues that have been raised by Appellants.

10.3 Framework Decision (July 2018). At this juncture, and in light of recommendations made by external consultants CEPA, GEMA made various substantive decisions (e.g. reducing the price control period from 8 years to 5).

10.4 Sector-Specific Methodology Consultation ("**SSMC**") (December 2018 to March 2019). During the SSMC, GEMA consulted on a range of methodological issues. This consultation also addressed interlinkages issues – i.e. matters thrown up by interrelationships between various components of the regulatory framework.

10.5 Sector-Specific Methodology Decision ("**SSMD**") (May 2019). In the SSMD, GEMA made decisions on many (although not all) matters which had been consulted on during the SSMC in relation to finance issues.

10.6 Submission of business plans (December 2019). Energy network companies provided business plans containing proposed expenditure and outputs for

RIIO-GD2, as well as incurred costs over GD1. Business plans were used by GEMA to inform its approach to Draft Determinations.

10.7 Draft Determinations ("**DDs**") and consultation (July 2020 to September 2020). GEMA set out its detailed proposals in DDs. These proposals were then subject to consultation. As a result of the consultation, various changes were made to GEMA's approach when it came to Final Determinations.

10.8 Final Determinations ("**FDs**") (December 2020). GEMA's FDs set out, inter alia, GEMA's final approach to finance and TNUoS.

10.9 Statutory consultation to licence modifications (December 2020). During the statutory consultation, GEMA sought to ensure that license amendments fully reflected the decisions made in SSMD and FDs. During this process, GEMA also sought to identify any technical errors in the modelling and FDs documents.

10.10 Decision on licence modifications, and publication of revised FD documents (February 2021).

C. LEGAL FRAMEWORK

11. This section sets out the legal framework and relevant principles in an appeal to the CMA against a licence modification decision by GEMA, as follows:

- GEMA's statutory duties;
- The statutory grounds of appeal;
- The standard of review to be applied by the CMA and the scope of GEMA's regulatory discretion; and
- Materiality.

GEMA's statutory duties

12. Sections 4AA(1) GA86 and 3A(1) EA89 establish GEMA's principal objective as follows:

> *"The principal objective of …[GEMA] in carrying out [its] functions under this Part is to protect the interests of existing and future consumers in relation to [gas conveyed through pipes/electricity conveyed by distribution systems or transmission systems]."*

13. This is further clarified in s.4AA(1A) GA86/ s.3A(1A) EA89, which states:

> *"Those interests of existing and future consumers are their interests taken as a whole, including— (a) their interests in the reduction of [gas/electricity]-supply emissions of targeted greenhouse gases; [...] (b) their interests in the security of the supply of [gas/electricity] to them; and (c) their interests in the fulfilment by the Authority, when carrying*

> *out its designated regulatory functions, of the as designated regulatory objectives."*

14. Sections 4AA(1B) GA86 and 3A(1B) of the EA89 impose a duty on GEMA in respect of the principal objective:

> *"[GEMA] shall carry out [its] functions under this Part in the manner which…[it] considers is best calculated to further the principal objective, wherever appropriate by promoting effective competition between persons engaged in, or in commercial activities connected with, the [shipping, transportation or supply of gas conveyed through pipes/generation, transmission, distribution or supply of electricity or the provision or use of electricity interconnectors]."*

15. Sections 4AA(1C) GA86 and 3A(1C) EA89 impose a further duty on GEMA to have regard to the interests of consumers. Those sections provide:

> *"Before deciding to carry out functions under this Part in a particular manner with a view to promoting competition as mentioned in subsection (1B), […] the Authority shall consider— (a) to what extent the interests referred to in subsection (1) of consumers would be protected by that manner of carrying out those functions; and (b) whether there is any other manner (whether or not it would promote competition as mentioned in subsection (1B)) in which […] the Authority … could carry out those functions which would better protect those interests."*

16. Particular regard must be had to the interests of certain specified groups of consumers. Sections 4AA(3) GA86 and 3A(3) EA89 provide:

> *(3) In performing the duties under subsections (1B), (1C) and (2) … the Authority shall have regard to the interests of–*
>
> *(a) individuals who are disabled or chronically sick;*
>
> *(b) individuals of pensionable age;*
>
> *(c) individuals with low incomes; and*
>
> *(d) individuals residing in rural areas;*
>
> *but that is not to be taken as implying that regard may not be had to the interests of other descriptions of consumer.*

17. Sections 4AA(6) GA86 and 3A(6) EA89 deal with the temporal scope of the concept of a "consumer" for the purposes of the obligations set out in ss.4AA GA86/3A EA89. It states, "*in subsections (1C), (3) and (4) references to consumers include both existing and future consumers*".

18. Further duties are imposed by s.4AA(2) GA86/ s.3A(2) EA89:

"In performing the duties under subsections (1B) and (1C), ... the Authority shall have regard to:

the need to secure that [so far as it is economical to meet them, all reasonable demands in Great Britain for gas conveyed through pipes are met/all reasonable demands for electricity are met];

the need to secure that licence holders are able to finance the activities which are the subject of obligations imposed by or under this Part [and other relevant legislation]; and

(c) the need to contribute to the achievement of sustainable development."

19. In carrying out functions pursuant to s.4AA GA86/ s.3A EA89, GEMA "may" also have regard to the interests of consumers in respect of water, gas or telecommunications. Sections 4AA(4) GA86 and 3A(4) EA89 provide:

"(4) The Secretary of State and the Authority may, in carrying out any function under this Part, have regard to–

(a) the interests of consumers in relation to [electricity conveyed by distribution systems or transmission systems (within the meaning of the Electricity Act 1989)/gas conveyed through pipes (within the meaning of the Gas Act 1986)]; and

(b) any interests of consumers in relation to–

(i) communications services and electronic communications apparatus, or

(ii) water services or sewerage services (within the meaning of the Water Industry Act 1991),

which are affected by the carrying out of that function."

20. Pursuant to s.4AA(5) GA86 and s.3A(5) EA89, subject to subsections (1B) and (2) and to GEMA's duty to carry out functions in a manner best calculated to further delivery of policy outcomes under s.132(2) of the Energy Act 2013, GEMA must carry out its respective functions in a manner which it considers is best calculated:

"(a) to promote efficiency and economy on the part of [licensees] and the efficient use of [gas conveyed through pipes/electricity conveyed by distribution systems or transmission systems];

(b) To protect the public from dangers arising from the [conveyance of gas through pipes or from the use of gas conveyed through pipes/generation, transmission, distribution or supply of electricity] or the provision of a smart meter communication service; and

(c)to secure a diverse and viable long-term energy supply,

> *and shall have regard, in carrying out those functions, to the effect on the environment of activities connected with the [conveyance of gas through pipes /generation, transmission, distribution or supply of electricity] or the provision of a smart meter communication service."*

21. As regards the exercise by GEMA of its statutory functions, s.4AA(5A) GA86 and s.3A(5A) EA89 provide:

> *"In carrying out their respective functions under this Part in accordance with the preceding provisions of this section the Secretary of State and the Authority must each have regard to—*
>
> *(a) the principles under which regulatory activities should be transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed; and*
>
> *(b) any other principles appearing to him or, as the case may be, it to represent the best regulatory practice."*

22. Further, paragraph 11(1) of Schedule 1 to the Utilities Act 2000 provides that GEMA *"has power to do anything which is calculated to facilitate, or is conducive or incidental to, the performance of its functions"*.

Statutory grounds of appeal

23. The potential grounds of appeal against licence modification decisions are set out in s.23D(4) GA86 and s.11E(4) EA89, which are identical. The CMA *"may allow the appeal <u>only to the extent</u> that it is <u>satisfied</u> that the decision appealed against was <u>wrong</u> on one or more of the following grounds"* (emphasis added). Those grounds are as follows:

    a) "that GEMA failed properly to have regard to any matter mentioned in subsection (2) [i.e., GEMA's relevant statutory duties]";

    b) "that GEMA failed to give the appropriate weight to any matter mentioned in subsection (2)";

    c) "that the decision was based, wholly or partly, on an error of fact";

    d) "that the modifications fail to achieve, in whole or in part, the effect stated by GEMA by virtue of [section 23(7)(b) GA86/ section 11A(7)(b) EA89]"; or

    e) "that the decision was wrong in law".

24. These grounds are exhaustive. In <u>SONI Limited v Northern Ireland Authority for Utility Regulation</u> (CMA, 10 November 2017), the CMA explained that "*[t]he test is whether the CMA is satisfied the regulator's decision was wrong on one or more of the statutory grounds and that the error was material"* and *"the test is not whether the decision under appeal was "unreasonable"* (§3.35).

25. Section 23D(5) GA86 and s.11E(5)EA89 provide: *"[t]o the extent that the CMA does not allow the appeal, it must confirm the decision appealed against."*

Standard of review and regulatory discretion

26. By s.11E(2) EA89 and s.23D(2) GA86, in determining an appeal the CMA must have regard, to the same extent as is required of GEMA, to the matters to which GEMA must have regard in carrying out its principal objective under s.3A EA89/s.4AA GA86; in the performance of its duties under those sections; and in the performance of its duties under ss.3B and 3C EA89/s.4AB and 4A GA86 (i.e. to guidance on social and environmental matters, and to health and safety).

27. Pursuant to s.11(3) EA89 and s.23D(3) GA86, in determining the appeal, the CMA may have regard to any matters to which GEMA was not able to have regard, save that the CMA must not have regard to matters which GEMA would not have been entitled to have regard in reaching its decision had it had the opportunity of doing so.

28. In the first appeal brought under s. 11C EA89, in British Gas at §3.26, the CMA adopted the reasoning of the Competition Commission in an earlier appeal under s.175 of the Energy Act 2004 in E.ON UK plc (CC, 10 July 2007):

> *"As a specialist appellate body charged with considering whether a decision of GEMA is wrong, the function of the CC is to provide accountability in relation to the substance of code modifications decisions. However, leaving to one side errors of law, it is not our role to substitute our judgment for that of GEMA simply on the basis that we would have taken a different view of the matter were we the energy regulator." (at §5.11)*

29. Therefore 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 of the matter if it had been the regulator (at §3.27 in British Gas) (see further *SONI Limited* at §3.36). The CMA is not to be regarded as a fully equipped regulatory body waiting in the wings - it is "*an appeal body and no more*": see *T-Mobile (UK) Ltd & Anor v Office of Communications* [2009] 1 WLR 1565, §31 (Jacobs LJ) (quoted with approval in *British Gas,* §3.36).

30. On the contrary, the CMA in British Gas at §3.28 adopted the further explanation given by the CC in relation to the statutory test (emphasis added):

> *"…our role is to determine whether GEMA's decision is wrong, because it failed properly to have regard to, or failed to give the appropriate weight to, the matters to which GEMA must have regard, or because GEMA has erred in law or fact. In our view, this test* **clearly admits of circumstances in which we might reach a different view from GEMA but in which it cannot be said that GEMA's decision is wrong on one of the statutory grounds**. *For example, GEMA may have taken a view as to the weight to be attributed to a factor which differs from the view we take, but which we do not consider to be inappropriate in the circumstances."*

31. In Firmus Energy (Distribution) Limited v Northern Ireland Authority for Utility Regulation (CMA, 26 June 2017), at §3.20 the CMA summarised the relevant

principles from the CC and CMA decisions in the E.ON and RIIO-ED1 Determinations as to when a decision is "wrong":

> *"(a) It is for the appellant to marshal and adduce all the evidence and material on which it relies to show that the regulator's decision was wrong.*
>
> *(b) An appeal is against the decision, not the reasons for the decision. Therefore, it is not enough for the appellant to identify some error of reasoning; the appeal can only succeed if the decision cannot stand in the light of that error.*
>
> *(c) Where the appellant contends that the regulator ought to have adopted an alternative price control measure, it is for the appellant to deploy all the evidence and material it considers will support that alternative.[50] It must show that its proposed alternative price control measure should be adopted.*
>
> *(d) Usually an appellant will succeed by demonstrating the flaws in the decision and the merits of an alternative solution. Also, the courts have not ruled out the possibility that there could be a case in which an appellant succeeds in so undermining the foundations of a decision that it cannot stand, without establishing what the alternative should be. In such a case, if there is no other basis for maintaining the decision, the CMA would be at liberty to conclude that the decision was wrong but that it could not say what decision should be substituted. Disposal of the appeal without substituting an alternative decision is not unknown, but is expected to be rare.*
>
> *(e) If the CMA is satisfied that the regulator's decision was correct, then the fact that the regulator's consultation process was deficient ought not to matter, unless that process was so deficient that the CMA cannot be assured that the regulator did indeed get it right.*
>
> *(f) Where a decision of the regulator requires an exercise of judgment, the regulator will have a margin of appreciation. The CMA should apply appropriate restraint and should not interfere with the regulator's exercise of judgment unless satisfied that it was wrong.*
>
> *(g) A regulator's assessment of the adequacy of the evidence and material before it will not be wrong unless it is outwith the range of reasonable conclusions.*
>
> *(h) If the CMA concludes that the decision can be supported on a basis other than that on which the regulator relied, then the appellant will not have shown that the decision was wrong and will fail."*

32. The CMA's starting point is the error the regulator is alleged to have made; it will not pre-empt the regulator's decision by considering whether it should have started from a

different place, as explained in *SONI Limited v Northern Ireland Authority for Utility Regulation* at §3.29:

> *"we consider that it is not appropriate for the CMA to start by considering an alternative approach and to say that if that approach is considered superior, then there is an error. The first question for the CMA is whether there has been an error in the regulator's approach, not whether am [sic] alternative approach might be better. The question of what alternative approach should be adopted is primarily relevant once an error has been identified."*

33. The type of error that GEMA is alleged to have made also affects the approach the CMA will take.

34. First, where GEMA's decision is alleged to include an error of fact, the CMA will determine whether GEMA was correct in its conclusions as to primary facts, or inferences that it drew from those facts. The CMA in *British Gas* at §3.30 adopted the CC's reliance on the Court of Appeal's decision in *Azzicurazioni Generali Spa v Arab Insurance Group* [2003] 1 WLR 577, which reasoned as follows (emphasis added):

> *"where the correctness of a finding of primary fact or of inference is in issue, it cannot be a matter of simple discretion how an appellate court approaches the matter. Once the appellant has shown a real prospect (justifying permission to appeal) that a finding or inference is wrong, the role of an appellate court is to determine whether or not this is so, giving full weight of course to the advantages enjoyed by any judge of first instance who has heard oral evidence. In the present case, therefore, I consider that (a) it is for us if necessary to make up our own mind about the correctness or otherwise of any findings of primary fact or inference from primary fact that the judge made or drew and which the claimants challenge, while (b) reminding ourselves that, so far as the appeal raises issues of judgment on unchallenged primary findings and inferences**, this court ought not to interfere unless it is satisfied that the judge's conclusion lay outside the bounds within which reasonable disagreement is possible**. In relation to (a) we must, as stated, bear in mind the important and well recognised reluctance of this court to interfere with a trial judge on any finding of primary fact based on the credibility or reliability of oral evidence."*

35. Further, the CMA in *SONI Limited* (§3.31) took into account the view of the CC in the *E.ON* decision (§5.16) that (emphasis added):

> ***"…the specialist regulator may well have an advantage over the CC in finding the relevant primary facts.*** *In some respects, the advantage may be less than that which the trial judge has over the Court of Appeal, because [the regulator's] decisions are not based on the evidence and cross examination of witnesses**. [The regulator] nevertheless has an advantage of experience, and will often have the benefit of having***

> ***conducted a consultation with the industry… For these reasons, the CC will be slow to impugn [the regulator's] findings of fact****"*.

36. Secondly, as is clear from the passages cited above, where the alleged error lies in the judgement GEMA has made about an unchallenged primary fact or inference, provided GEMA has not made an error of law, the CMA should not substitute its own judgement simply because it would have taken a different view had it been in the position of the regulator. In other words, there is a field of possible judgements in which GEMA may exercise its regulatory discretion lawfully, and reasonable people may disagree about the judgement which is ultimately made. *SONI Limited* summarised the correct approach at §3.32 and §3.36:

> *"As regards the exercise of discretion, we have taken into account that the CC and CMA have consistently applied the principle in regulatory appeals that the statutory test admits of circumstances in which we might reach a different view from the regulator, but in which it cannot be said that the regulator's decision was wrong on one of the statutory grounds. It is not the CMA's role to substitute our judgment for that of the regulator simply on the basis that we would have taken a different view of the matter, had we been the regulator….*
>
> *… we consider that there is an important difference between the CMA making up our own mind about the correctness or otherwise of any findings of primary fact, or inference from primary fact, made in the Price Control Decision, which is permissible, and the CMA substituting our judgment for that of the regulator simply on the basis that we would have taken a different view of the matter, had we been the regulator, which is not permissible."*

37. Thirdly, where the alleged error lies in GEMA's evaluation of a fact, as distinct from a finding of primary fact, the CMA will regard this as it would an exercise of regulatory discretion. The CMA in *British Gas* at §3.31 explained (emphasis added):

> *"We also agree that* ***where the errors relate to evaluations of fact*** *by GEMA rather than conclusions of primary fact then we should approach such evaluations in the same way that we approach the exercise of discretion."*

38. Fourthly, where an error of law is alleged, the CMA must make its own decision as to what was the correct conclusion, without showing deference to GEMA's reasoning or regulatory discretion.

39. Importantly, the CMA in *British Gas* rejected the submission by SSEPD that an appeal under the EA89 involved a rehearing, in particular that it required the CMA to form its own view on matters such as *"whether the weight given to certain considerations was appropriate or whether proper regard had been given to certain matters"* (§3.33). In doing so, SSEPD emphasised the expertise of the CMA and its power to substitute its own decision for that of GEMA in the event that an appeal is allowed, indicating that the statutory scheme intended appeals to be by way of

rehearing (§3.34). As a result, SSEPD submitted that the proper approach was an appeal "on the merits" involving a "rehearing" (§3.35), although not a rehearing where it is open to the CMA "*to decide matters afresh untrammelled by GEMA's decision*" (§3.36).

40. The CMA concluded (at §§3.42-3.44):

> *"We are accordingly not persuaded by SSEPD's argument that we are required by the statutory scheme to adopt the approach it put forward. The provisions of EA89 require the CMA to consider whether GEMA's decision was wrong by reference to the statutory grounds. We do not agree that the provisions require the CMA to substitute its decision for that of GEMA simply because it would have reached a different view without enquiring as to whether that decision was wrong. We consider that the approach we have taken has enabled the CMA to engage with the merits of the decision under appeal and to conclude whether it was right or wrong in accordance with the statutory requirements…*
>
> *Our view is therefore that the CMA should not substitute its views for GEMA's solely on the basis that it would have taken a different approach (eg on issues of the weight to be attached to particular considerations), but the standard of review goes further than the traditional heads 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 and we have done so.*
>
> *Our determination in this appeal reflects the application of a standard of review that is in line with the approach set out above. We consider that this approach is consistent with the approach taken by the CC in energy code appeals, and by the Courts in relation to appeals under the Communications Act 2003; it reflects the government's intention in implementing the relevant appeal provisions; and it accords with the submissions as to the standard of review put forward by the main parties in these appeals."*

41. Accordingly, the standard of review applied by the CMA is more intense than the approach taken by the courts in an application for judicial review, but falls short of a full rehearing or appeal on the merits. The CMA will take into account the merits of GEMA's decision, but the question for the CMA will be whether GEMA's decision was wrong on one of the statutory grounds and not whether the CMA would have made the same decision as GEMA, had it been in the regulator's position. The position is encapsulated as follows:

> *"[The CMA is] not only able, but required by EA89, to consider the merits of the decision under appeal, albeit by reference to the specific grounds of appeal laid down in the statute": **British Gas Trading v GEMA** [2015] at §3.24.*

42. Two further points bear emphasis in relation to the standard of review and regulatory discretion. First, the impact of uncertainty, and second, the comparability of other statutory appeal frameworks.

43. As to uncertainty, where a regulator is making decisions that address present and future uncertainties, the regulator enjoys a greater margin of appreciation. In *R v DG of Telecommunications* [1999] ECC 314 at §26, Lightman J held:

> *"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."*

44. Finally, as regards comparable appeal frameworks, many of the Notices of Appeal advance arguments with reference to the CMA's provisional decision in the water price control, "**PR19**", which has run in parallel with the development of the RIIO-2 price control, the CMA's final determination being published on 17 March 2021. As a result, it is helpful to set out briefly the CMA's distinct statutory functions in respect of a water price control referral.

45. Under the Water Industry Act 1991, following Ofwat's price control decision a regulated water company may make a request, and Ofwat's decision is then referred to the CMA for a re-determination, i.e. the CMA considers the matter afresh, under s.12 of the Water Industry Act 1991.

46. It follows that where the CMA makes a different decision to Ofwat in that context, it has not made any finding that Ofwat's original decision was "wrong" on any ground similar to s.23D GA86/ s.11E EA89; it has, rather, simply re-determined the price control itself, in accordance with its own application of the principles and statutory duties which apply under the Water Industry Act 1991.[6]

47. The nature of the CMA's review in the present context is fundamentally different from such a re-determination. The CMA itself acknowledged the difference in the appeal frameworks between energy and water sector appeals in its 30 October Response, although it still recognised the importance of according weight to regulatory judgement in re-determinations (§§8-9):

> *"The CMA's appeal framework in the energy sector seeks to correct wrong regulatory decisions, not to undertake a fresh review using its own regulatory judgment where more than one approach may be applied. This is different to the approach for re-determinations, applicable in other sectors such as the water sector, though even here the CMA would always exercise some restraint on issues of regulatory judgment."*

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[6] See Final PR19 decision at §§3.2ff (https://assets.publishing.service.gov.uk/media/60702370e90e076f5589bb8f/Final_Report_---_web_version_-_CMA.pdf)] [F1/01]

Materiality

48. Where the CMA finds that GEMA has made an error on one of the five statutory grounds of appeal, that error must have a material effect on the price control decision in order for the decision to be "wrong".

49. The following principles are relevant to materiality:[7]

    49.1 The materiality of an alleged error may not be capable of full assessment until after permission to appeal has been granted. Section 11E(4) EA89 and s. 23B(4) GA86 permit the CMA to decide not to allow an appeal where, after permission has been granted, it becomes apparent that the result of an error is immaterial.[8]

    49.2 Where the financial impact of the alleged error is low, this is an indication that the error is not material. The CC has made reference to "0.1%" as a size of error which was clearly not material and this has been referred to in subsequent cases, although it is not a "bright line" test.[9]

    49.3 Other factors relevant to materiality include whether the cost of addressing the error would be disproportionate to the value of the error; whether the error is likely to have an effect on future price controls; and whether the error relates to a matter of economic or regulatory principle.[10]

    49.4 Many decisions taken by regulators involve judgement and an estimation of what might happen in an uncertain context, and the CMA is not expected to impose its own judgement in place of that of the sector regulator provided that the regulator's response is reasonable.[11] In that sense, there may be examples where it is not a material error to choose one from a range of options for the price control, even where that decision might in itself have a material effect on the appellant.[12]

    49.5 Clear and obvious factual errors should be corrected even where the impact of the error is low value.[13]

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[7] See generally the CMA's Open Letter on Energy Licence Modification Appeal, 30 October 2019, §§3-11 [F1/16]

[8] CMA letter of 30 October 2019, §10. [F1/16]

[9] *Firmus Energy (Distribution) Limited v NIAUR* [2017] §3.24 [F1/27]

[10] *British Gas Trading Limited v GEMA* [2015] §3.61[F1/28], *Northern Powergrid (Northeast) Limited and Northern Powergrid (Yorkshire) plc v GEMA* [2015] §3.58 [F1/29]

[11] *British Gas Trading Limited v GEMA* [2015] §3.43[F1/28], *E.ON UK plc v GEMA* [2007] §5.11[F1/30] and *SONI Limited v NIAUR* [2017] §§3.29 and 3.36. [F1/31]

[12] *E.ON UK plc v GEMA* [2007] §5.12 [F1/30] , *Hutchison 3G UK Limited v Office of Communications* and *British Telecommunications plc v Office of Communications* [2009] §1.33 [F1/32] and *Firmus Energy (Distribution) Limited v NIAUR* [2017] §3.19 [F1/27]

[13] CMA's Open Letter on Energy Licence Modification Appeals, 30 October 2019, §5 [F1/16]

50. GEMA further submits that the test of materiality should be applied to each of the specific errors advanced by an Appellant. The important statutory safeguard would be subverted if it were open to Appellants to advance a series of individual errors each of which had a de minimis impact on the price control but which were alleged in the aggregate to have a material effect. The CMA's Open Letter on the Energy Licence Modification Appeals dated 30 October 2019 stated, *"what appears to be a large error may only arise due to the presentation of an aggregation of smaller and potentially immaterial errors"* (§5). The CMA must be satisfied with respect to each alleged error that it is sufficiently material to warrant further attention.

D. ALLOWED RETURN ON EQUITY

51. In setting the allowed return on equity, GEMA stated its purpose and benefits at FDs as follows:

> *"Purpose: Returns to equity investors remunerate their investment in network services and comprise a baseline allowance plus performance incentives.*
>
> *Benefits: Accurate remuneration for equity investors will secure network investment during RIIO-2 and help keep consumer charges in line with efficient costs."*[14]

52. The first witness statement of Mr Wilde and the witness statement of Mr Kaul explain in detail the background and context for GEMA's decision in setting the RIIO-2 price controls.

53. Essentially, GEMA used a three-step methodology to estimate the cost of equity and to set the allowed return on equity:

- Step 1 – the CAPM evidence;
- Step 2 – cross-checking the CAPM results;
- Step 3 – distinguishing between expected and allowed returns.

54. In the Framework Decision, GEMA decided to use the well-established CAPM to estimate the cost of equity. The CAPM allows investors' expected returns on investments in the market to be estimated by combining three parameters, namely: the RFR, equity beta (β_e), and TMR, in the following formula:

$$R_e = \mathrm{RFR} + \beta_e * (\mathrm{TMR} - \mathrm{RFR})$$

Where R_e= cost of equity, RFR= risk-free rate, β_e= equity beta and TMR=Total Market Returns

55. At FDs, GEMA's CAPM implied cost of equity mid-point was 4.55%, having previously been 4.3% at DDs, and following a working assumption of 4.8% after SSMD.

[14] FDs Finance Annex p.24 [F1/05]

56. At step 2, GEMA cross-checked the figure produced at step 1 using a range of appropriate cross-checks. At FDs, GEMA concluded that its cross-check results suggested a range of 3.8%-5.0%, with a mid-point of 4.4%. Nevertheless, GEMA decided to assess the cost of equity at 4.55%.

57. At step 3, GEMA then set a baseline allowed return on equity of 4.3%, reflecting 0.25% expected outperformance against 4.55%. GEMA's decision also provides for an *ex post* adjustment mechanism, to protect investors in the event that the expected outperformance of 0.25% does not materialise.

58. As explained in Mr Wilde's first witness statement at §11, GEMA's decisions in relation to steps 1 and 2, and step 3, are separate but interrelated. These submissions address the Appellants' complaints in respect of steps 1 and 2 (CAPM and cross-checks) in Section 0 below, and the Appellants' complaints in respect of step 3 (Expected outperformance) in Section 280 (the remaining sections G to I then address WWU's appeal on the cost of debt allowance and the tax clawback and SHE-T's appeal on TNUoS).

E. COST OF EQUITY, AIMING UP AND SUFFICIENCY OF RETURN

59. Estimating the cost of equity, using CAPM or otherwise, is an exercise in the unknown. It is an estimation of the future cost of equity of investing in energy network utilities and can never be truly known. It follows that each of the CAPM parameters considered below is inherently uncertain and not directly observable. The figure of 4.55% GEMA decided on at FDs – is the subject of the objections raised by the Appellants and addressed in subsequent sections i to iv. Then, at section v, we address the various arguments for setting the allowed return above the cost of equity ('aiming-up'). To conclude, section vi addresses the complaint that the overall baseline allowed return was insufficient.

60. GEMA's approach is grounded in economic and finance theory and regulatory precedent. GEMA does not, however, contend that there is any "perfect" evidence or basis on which to estimate CAPM. There is significant space for reasonable disagreement in selecting and giving weight to the available evidence. GEMA has at all times exercised its regulatory judgement in a way that is consistent with, and fulfils, its statutory duties.

61. GEMA does not accept any of the Appellants' contentions that it has erred in its decision in estimating the cost of equity at 4.55%. Many of the Appellants' arguments were raised prior to FDs and were carefully considered by GEMA. GEMA takes confidence from the cross-checks it has applied, which if anything support a *lower* figure than 4.55%. Despite that, in order to guard against the risk of estimating the cost of equity/Regulatory Expected Return ("**RER**") too low, with the consequent risk for investment and consumers, GEMA has taken a cautious approach.

Risk-Free Rate

Introduction and Overview

62. Each of the Appellants contends that GEMA erred in its approach to estimating the risk- free rate (the "**RFR**") at -1.58%[15]. The Appellants argue that GEMA's estimation of the RFR is too low, which in turn contributes to the overall alleged error of GEMA estimating the cost of equity too low.

63. The RFR is the rate of return an investor can expect on investment in a notional asset that carries no risk. It is a hypothetical number because no asset carries no risk at all. This much is common ground.

64. GEMA's approach to estimating the RFR drew upon regulatory practice and academic authority, including the 2018 report *Estimating the cost of capital for implementation of price controls by UK Regulators*, prepared for the UK Regulators Network ("**UKRN Report**").[16] The UKRN Report recommended that regulators use the zero-coupon yields on inflation-indexed gilts at their chosen horizon (Recommendation 4). GEMA's Framework Decision confirmed its decision to: (1) estimate the RFR by using current yields on long-run index-linked government bonds; and (2) use indexation to accommodate changes to the RFR during the course of RIIO-2.

65. In the SSMC, GEMA set out further details of its approach to indexation and its proposal to use long-tenor gilts for the RFR. This was generally supported. However, energy network companies objected to the use of RPI-linked gilts. GEMA addressed this objection in its SSMD, including the proposed alternative, namely nominal gilts. GEMA decided that these did not provide a better alternative because of the need to adjust for inflation risk premium.

66. In DDs, GEMA explained that: (1) indexation continued to offer more benefits than drawbacks, and it preferred a one-month averaging period rather than a longer averaging period; and (2) that real gilts rather than nominal gilts were simpler because they avoided the need for adjustment for inflation risk premium. It was only after DDs that the energy network companies sought further alternatives as a proxy for the RFR and proposed AAA-rated corporate bonds.

67. In FDs, GEMA rejected the use of AAA-rated corporate bonds and confirmed its decision to use RPI-linked gilts. It also confirmed a one-month averaging period for indexation. In order to engage with suggestions as to other potential proxies for the RFR, GEMA applied a cross-check to the RFR, based on the SONIA swap rate.

68. The central argument the Appellants now advance against GEMA's decision is the same as was raised during GEMA's decision-making process. They contend that GEMA has failed to take proper account of relevant evidence to inform its estimation of the RFR. The specific criticisms the Appellants make are as follows:

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[15] NGET and NGG NoAs 3.14ff; SHE-T NoA 4.3ff; SPT NoA 41; Cadent 4.29ff; NGN NoA 161ff; SGN NoA 210ff; WWU NoA B2ff.

[16] https://www.ukrn.org.uk/wp-content/uploads/2018/06/2018-CoE-Study.pdf [F1/18]

a) GEMA failed to take account of the shortcomings of using the yields on index-linked gilts ("ILGs") as a proxy for the RFR;

b) GEMA disregarded AAA-rated corporate bonds as a proxy for the RFR;

c) GEMA failed to consider the CMA's approach in the PR19 Provisional Findings;

d) The nominal gilt cross-check that GEMA applied was not robust and was misapplied;

e) The SONIA swap rate cross-check that GEMA applied was unsuitable;

f) Objections to GEMA's approach to indexation.

69. As is clear from the above, the Appellants' objections are to the way in which GEMA has exercised its discretion in respect of the evidence on how best to estimate the RFR, rather than challenging any conclusion of fact or factual inference. In assessing whether GEMA's decision discloses an appealable error, the CMA should accordingly bear firmly in mind the principles set out in section C above in relation to GEMA's margin of appreciation in matters of regulatory judgement, and the hurdle that the Appellants must overcome to show that GEMA's decision was "wrong" on one of the statutory grounds.

70. An account of GEMA's approach to RFR, and a response to the Appellants' arguments on this point, is contained in the second witness statement of Ms Friend (**Friend 2**).

Alleged failure to take into account shortcomings of ILGs

71. Several Appellants argue that the yields on 20-year RPI ILGs do not accurately reflect the RFR for investors. This is because non-government borrowers cannot access debt at the spot rate of ILGs (regardless of their credit rating). There is a difference between the rate at which the government can borrow, and the rate at which non-government investors can borrow, with the rate for the latter being higher than the rate for the former. This is referred to as a "convenience premium", and spot yields on ILGs must be adjusted to take account of this gap between corporate and sovereign risk-free financing rates.

72. The Appellants variously allege that *"GEMA was wrong to assume that ILG yields reflect the RFR for investors"* (NGET and NGG §3.34); that *"GEMA's decision to set the RFR solely based on the spot yield of ILGs is an error in principle as it has failed to take account for the significant convenience premium embedded in government bonds"* (SHE-T at §4.7); and that GEMA has acted inconsistently with or disregarded the key requirement of CAPM, which assumes that *"all relevant market participants can borrow as well as lend at the relevant rate"* (Cadent §1.35; also NGN §168(ii)).

73. These objections mischaracterise GEMA's position. GEMA has not taken the view that ILGs provide a perfect, error-free proxy for the RFR. In its Framework Decision in July 2018, GEMA clearly recognised that *"Any forecast of risk-free rates has the potential to be wrong"* (Friend 2 §18). GEMA's position is, rather, that ILGs provide

the closest proxy for estimating the RFR which, as the Appellants accept, is a hypothetical number.

74. GEMA nevertheless considered the Appellants' evidence that ILGs are distorted. It did not find the Appellants' arguments and evidence of a convenience premium requiring adjustment convincing (Friend 2 §24-5) and, based on academic evidence and regulatory precedent, took the view that the yields on ILGs are what they are and provide a reasonable proxy for the unobservable RFR (Friend 2 §§49-51). As far as possible, GEMA sought to use a measure that included the fewest risks and therefore required as little adjustment as possible to be considered a 'risk free rate': that was an entirely reasonable regulatory approach.

75. Cadent's suggestion (§4.35) (also made by WWU §B2.10) that in the past ILGs have been used with upward adjustments (a "dragging anchor") does not reflect more recent regulatory precedent, e.g. in the NATS decision[17], where the CMA relied solely on ILGs with no adjustment, consistent with GEMA's approach in RIIO-2. In addition, previous price controls have not indexed the RFR so some uplift was generally included to account for the risk of rates rising during the price control. With indexation, this is not a risk that requires such an adjustment in RIIO-2.

76. Furthermore, GEMA was conscious that in applying indexation for the RFR, the simplicity of the underlying series used was an important consideration. As was recognised by the CMA in the NATS decision (para 13.259), it is simpler to use ILGs than nominal bonds for a regulatory regime in which consumers (rather than companies) face inflation risk, given the need to somehow otherwise remove inflation risk premium from deflated nominal bonds. This consideration applies equally to the use of nominal gilts or other nominal bonds (such as AAA corporate bonds).

77. It is also important to note that GEMA chose to use <u>20-year</u> ILGs (a fact which is not mentioned by the Appellants). Regulators have not always considered the 20-year tenor to be the obvious or only choice for the RFR used in CAPM. The CMA NATS final report[18] drew on 10-year, 15-year and 20-year UK ILGs in setting the RFR. Table 13-15 of that report indicated that the difference between 10-year ILGs and 20-year ILGs was around 40 bps; GEMA's analysis for October 2020 is that the difference would have been 50 bps, so the choice of the 20-year tenor results in a more favourable RFR for energy network companies; see Friend 2 §52.

78. Up until the period after DDs when AAA-rated corporate bonds were suggested as an alternative (in relation to which, see below), the only alternative basis for estimating the RFR that was proposed by network companies was the yield on nominal gilts. GEMA considered and rejected this alternative basis because it required adjustment for inflation risk premium, which adjustment introduces more uncertainty and complexity (Friend 2 §53 and §26 regarding NG and SGN's previous price control

[17] https://assets.publishing.service.gov.uk/media/5f350e17e90e0732e0f31c2a/NATS_-_CAA_final_report_for_publication_August_2020_-----.pdf [F1/17]
[18] https://assets.publishing.service.gov.uk/media/5f350e17e90e0732e0f31c2a/NATS_-_CAA_final_report_for_publication_August_2020_-----.pdf [F1/17]

submissions). Therefore, nominal gilts do not provide an alternative that GEMA was "wrong" not to adopt. In any event, as noted in section C above, "*the first question for the CMA is whether there has been an error in the regulator's approach, not whether an alternative approach might be better*": *SONI Limited v Northern Ireland Authority for Utility Regulation*, §3.29.

79. As to the criticism that GEMA has acted inconsistently with CAPM theory, this is equally misplaced. There is long regulatory precedent for using ILGs to estimate the RFR (Friend 2 §12). It is the Appellants who seek to move away from 'standard' CAPM (Friend 2 §§39-41) in suggesting that a distinction should be drawn between lending and borrowing rates. GEMA does not accept that the practical application of the CAPM requires all participants to be able to issue debt at the estimated RFR, and GEMA also considers that this distinction is inappropriate without also considering whether marginal investors in regulated utility companies are net lenders or net borrowers.

80. At FDs, GEMA referred to Wright and Mason's paper commissioned by Ofwat in relation to PR19 (Friend 2 §40). Wright and Mason make clear that drawing a distinction between the lending and borrowing rates of the marginal investor in implementing the CAPM would depart from the 'standard CAPM' model used in regulatory practice, and any such departure must be done carefully rather than simply by upward adjustment. In any event, Wright and Mason considered that the marginal investor in the water sector was an institutional investor, acting on behalf of non-institutional savers. Therefore, they concluded that the marginal investor for water companies was a net lender, for whom the ILG rate was relevant.

81. GEMA applied the same consideration to energy companies. It considered that investors in energy companies are institutional investors, investing on behalf of pension funds and other long-term investors. They are net lenders for whom the return of a zero beta asset lies very close to the ILG yield and therefore ILG rates are highly relevant (Friend 2 §41). As such, GEMA concluded that ILGs provide an appropriate basis for estimating the RFR.

82. In summary, GEMA has not acted inconsistently with, or disregarded, key requirements of CAPM. The Appellants have advanced an argument that is contrary to well-established regulatory practice, to which GEMA has responded with reasoning justifying its approach and exercise of its regulatory judgement.

Alleged disregard of AAA-rated corporate bonds

83. Following DDs, for the first time the Appellants suggested that yields from AAA-rated corporate bonds should be used to estimate the RFR (Friend 2 §34). GEMA disagreed.

84. The Appellants contend that GEMA *"should have taken account of the evidence relating to AAA-rated corporate bond indices"* because they consider it better reflects the RFR for non-governmental corporates (SHE-T §4.16; see similarly, NGET §3.48; SPT §41; NGN §169(v); SGN §232; WWU §B2.12). SHE-T explains its reasoning further:

> *"The reason why AAA-rated corporate bonds represent a sensible starting point for an RFR proxy is because companies can borrow at corporate bond rates (in a way that they cannot at government bond rates, for the reasons explained above). Corporate bond rates contain elements of default and liquidity risk – but the highest-rated (i.e. lowest default risk) corporate bond is AAA, which has low default risk. These bonds therefore, once deflated by factors that specifically affect AAA bond yields (such as liquidity premia and default risk), easily allow for an estimation of an implied rate without these risks. Accordingly, data on AAA bond yields provides the best readily available information relevant for assessing the RFR." (NoA §4.16)*

85. SHE-T recognises that AAA-rated corporate bonds contain elements which require adjustment before they can be used to estimate the RFR. SHE-T expressly notes the need to adjust for default risk and liquidity premium risk. These distortions are key. The Appellants' argument misses the point when, for instance, SGN argues that *"GEMA rejects AAA bonds on the basis that they introduce distortions…However, all available RFR benchmarks are subject to some degree of distortions"* (§229). GEMA <u>accepts</u> that there is no perfect basis on which to measure the RFR, but has assessed which basis provides the measure that is least susceptible to distortion and is therefore closest to the RFR without requiring discretionary adjustments (which carry with them uncertainty and complexity).

86. GEMA rejected using the index of AAA-rated corporate bond yields that the Appellants and their advisors advocated prior to FDs because: (a) the use of indexation was a relevant consideration for GEMA because using a simpler input series is preferable when indexing, and (b) there are (at least) five elements which would require adjustment to this rate, namely: (i) default risk; (ii) illiquidity risk; (iii) term premium; (iv) complexity premium; (v) inflation risk premium (Friend 2 §§59-60). As a result, GEMA considered that AAA-rated corporate bonds introduced even more elements that would require adjustment than, e.g., nominal gilts, before an estimation of the RFR could be arrived at. Each adjustment carries with it uncertainty, complexity and discretion. GEMA had serious concerns about introducing unnecessary errors into the data, and at FD, was not aware of any final decision by any regulator in the UK or internationally using the Appellants' suggested approach. GEMA's preference for one unadjusted measure of RFR was, again, an entirely reasonable exercise of its regulatory discretion, motivated by the need to ensure transparency and accountability in its decision-making (Friend 2 §80).

GEMA failed to consider the CMA's approach in PR19 Provisional Findings

87. Several of the Appellants seek to identify an error in GEMA's estimation of the RFR by reference to the approach the CMA adopted in its PR19 PFs, and GEMA's response to this in its FDs. The Appellants allege variously that GEMA's characterisation of the CMA's PR19 PFs was *"misleading"* and *"selective"* (NGET and NGG §3.41); that GEMA *"chose to disregard the position adopted by the CMA"* and failed *"to follow the CMA's methodology"* (SHE-T §§4.22-23); and that it was *"inappropriate to place such extensive weight on historical precedent at the expense*

of taking into account the extensive consideration given to the issue [of ILGs] by the CMA in the PR19 Provisional Determination" (Cadent §4.46(c)) (see, similarly, NGN §168(viii)).

88. First, the allegation that the FDs are misleading or take a selective approach is wrong. The relevant passages are as follows:

> *"3.9 In September 2020, the CMA published its PR19 provisional findings ("CMA's PR19 PFs"), stating that:*
>
> *"[i]t is our assessment that ILGs closely but imperfectly match the key requirements of the RFR [risk-free rate] within the CAPM model.".*
>
> *3.10 The quoted text suggests that the use of ILGs is an acceptable basis upon which to estimate the RFR. In other words, using ILGs is not necessarily wrong, in the CMA's view.*
>
> *3.11 The CMA noted arguments by Oxera as to why the ILG might have a so-called 'convenience yield', which will be unobservable, and so argues that the government can borrow at rates substantially lower than "even higher-rated non-government market participants". Following Oxera, the CMA suggest that an index of AAA-rated corporate bonds is an alternative measure of the RFR."*

89. GEMA accordingly expressly noted Oxera's argument and the CMA's response, while also noting that the CMA did not go as far as to suggest that using ILGs is wrong in principle. As explained in GEMA's witness statement evidence, GEMA did not consider that the CMA's expressed view in PR19 PFs was decisive of this issue, nor that GEMA's decision to use ILGs was rendered wrong as a result of the CMA's different approach (Friend 2 §§45-7). That was an accurate interpretation of the effect of the CMA's provisional decision in PR19.

90. Second, GEMA's approach to the CMA's PR19 PFs, namely to consider the decision as part of the overall evidence in its FDs but to decide not to follow the use of AAA-rated corporate bonds and to rely on ILGs to set the RFR, was reasonable and in any event a decision that was open to GEMA, as a regulator taking a different decision for a different sector, under a different statutory scheme.

91. As set out in paragraphs 44-47 above, in PR19 PFs, under s. 12 of the Water Industry Act 1991, the CMA's role was to reconsider and re-take the price control decision. The CMA was not required to accord Ofwat's regulatory discretion the same level of deference as in the present appeals, where the CMA is not seeking to stand in GEMA's shoes. GEMA's regulatory judgement, including its discretion not to follow the CMA's approach in PR19, should be respected. GEMA's view was that Ofwat/ the CMA's PR19 decision on this point was not wholly comparable with the decision GEMA was taking in RIIO-2. In particular, whereas Ofwat/the CMA were setting the RFR for a 5-year period, GEMA was proposing that allowances during RIIO-2 would be updated to reflect changes in ILGs through indexation (Friend 2 §46).

92. Third, it is not the case that GEMA has adopted an erroneous approach to precedent by relying upon earlier decisions using ILGs to estimate the RFR rather than following the CMA's more recent approach in PR19 PFs. Decisions under the GA 1986 and/or EA 1989 remain the most important analogous precedents in RIIO-2, in particular bearing in mind the different regulatory discretion and degree of deference for regulatory judgement under the relevant statutory schemes. The GA 1986 / EA 1989 precedents provide clear support for regulatory use of ILGs as the basis for estimating the RFR. GEMA's decision to place weight on these precedents (alongside its other reasons for preferring the use of ILGs), rather than simply following the CMA's approach in the PR19 PFs, was a reasonable and lawful exercise of regulatory judgement.

The nominal gilt cross-check that GEMA applied was not robust and was misapplied

93. NGET and NGG object to GEMA's position that, once yields on 20-year nominal gilts are deflated to CPIH real, i.e. once the necessary adjustments are made to take account of inflation, a very similar RFR is produced to that based on 20-year ILG yields, and that this provides a helpful cross-check confirming the RFR based on ILGs (NoA §§3.66-3.71). The complaint appears to be that GEMA did not provide sufficient information and/or analysis as to how it arrived at this position (NGET at §3.69).

94. Even if that complaint were a good one, it would not establish that GEMA's conclusion was "wrong". As the CMA has recognised, it is not enough for an appellant to identify some error or absence of reasoning, since an appeal can only succeed if the decision itself cannot stand. In any event, in its witness evidence, GEMA has shown that, using Oxera's recommended method in its most recent report, when nominal gilts are adjusted for inflation risk premium, they produce a very similar RFR to ILGs (Friend 2 §§78-79). Thus, far from demonstrating a flaw in GEMA's approach, the nominal gilts cross-check (which GEMA has applied according to the method suggested by Oxera for adjusting for inflation risk premium) provides *support* for GEMA's RFR based on ILGs.

The SONIA swap rate cross-check that GEMA applied was unsuitable

95. The Appellants object to GEMA's use of the SONIA swap rate to cross-check its estimate of the RFR, on various grounds. They contend that the SONIA swap rate is of *"limited relevance"* (NGET), is *"unconventional"* (SHE-T §1.35), and *"suffers from a number of serious distortions"* (NGN §169(ii)) and *"severe data quality issues"* (WWU §B2.8).

96. Three points bear emphasis and are set out below.

97. First, the reason GEMA implemented this cross-check was in *response* to the increased debate about potential alternatives to using ILGs (Friend 2 §42). Therefore, NGET's suggestion that because the SONIA swap rate had not previously been considered a proxy for the RFR, GEMA was *"wrong...to introduce a new approach in the FD without consultation"* (§3.75) is misplaced. GEMA was seeking to respond to the network companies' views that alternatives for estimating the RFR should be

considered. Moreover, it is apparent that the Appellants and Oxera have themselves previously advocated the use of swap rates for determining the RFR, in previous price controls (Friend 2 §69).

98. Second, the Appellants challenge the utility of the SONIA swap rate for multiple reasons, particularly because of the illiquidity of SONIA swap rate tenors longer than five years. These objections do not withstand scrutiny for the reasons set out in GEMA's witness evidence, and in particular when considered in the context of distortions and data quality issues with other available cross-checks (Friend 2 §§65-68; §§72-3; §75). Moreover, the SONIA swap rate was only used as a cross-check, not as a proxy for the RFR, which was based on ILG yields, consistently with established regulatory practice.

99. Third, as set out at (Friend 2 §§76-79), if the SONIA swap rates are adjusted downwards for inflation risk premium, they provide an alternative RFR that is lower than that based on ILGs. The fact that GEMA chose not to adjust the RFR on the basis of this cross-check renders the Appellants' objections to its utility largely obsolete: even if the SONIA cross-check constituted an error (which GEMA does not accept, and which the Appellants have not demonstrated), it would not be a *material* error. (In passing, GEMA would also note that this supports the view more generally that GEMA has not adopted evidence with a "downward bias" and has in fact based its decision on a balance of evidence across the board).

Objections to GEMA's approach to indexation

100. NGET and NGG contend that GEMA *"wrongly suggests that the shortcomings of ILGs as a proxy for the RFR are temporary and that indexing the RFR via the AIP will correct for them"* (NoAs §3.80)[19]. This is incorrect. The argument is simply a re-packaging of the objections already addressed above in relation to the use of ILGs. GEMA's decision did not rely upon indexation to resolve all possible imperfections with using ILGs as a proxy for the RFR. However, indexation provided a reason for GEMA's view that the risks inherent in its estimation of the RFR could be mitigated, because at least unpredictable events in future could be accounted for through indexation (Friend 2 §83).

101. Some Appellants express other concerns, including: (i) that GEMA should adopt a longer trailing average rather than a one-month average for indexation (Cadent NoA §§4.48-9; NGET NoA §3.43); and (ii) that GEMA should use 20-year inflation assumptions for converting yields into CPI real yields, rather than 4-5 year forecasts. GEMA considered both these issues but on balance decided to use data that it thought better reflected current market conditions (Friend 2 §§88-9) and most widely available data (Friend 2 §§90-91). These points amount to no more than trivial disagreements with elements of GEMA's regulatory judgement, and cannot found a successful appeal on the statutory grounds.

[19] Similarly, SPT §41(5).

Conclusion on RFR

102. For all the reasons given above, none of the Appellants' objections to GEMA's decision on the RFR withstand scrutiny or provide a basis for a successful statutory appeal.

TMR

Introduction and Overview

103. Each of the Appellants contend that GEMA has estimated the Total Market Return ("**TMR**") for the allowed return on equity too low in RIIO-2. This section responds to the Appellants' arguments and a further detailed response is set out in section H of the witness statement of Mr McCloskey ("**McCloskey**").

104. TMR is a measure of the average equity return that investors expect to receive for investing within the market. TMR has been the subject of extensive consideration by the CMA, particularly in the <u>*NIE, NATS*</u> and <u>*PR19*</u> appeals (McCloskey §§307-309).

105. In its Framework Consultation and Decision, GEMA noted and proposed to adopt the UKRN Report's recommendations in respect of setting the TMR. GEMA considered a variety of evidence, and in SSMC set out its preferred methodology to rely upon long run outturn data:

> *"Both the DDM and expert forecasts indicate that we are currently in a period of low returns, and we are mindful that, at this moment, the long run outturn may be upwardly biased. However, we are also mindful of the benefit to investors and consumers of predictability and stability in regulatory policy and judgements. Therefore, we propose to maintain our approach of placing most weight on the average of long run returns, as the most objective measure of investor expectations" (SSMC §3.80)*

106. In SSMD, GEMA explained its position as follows:

> *"In general, our proposed methodology divided opinion, particularly our proposal to focus on long-run outturn averages of market returns as the best single objective estimate of investors' expectations. Citizens Advice and Centrica raised concerns that our focus on long-run averages is upwardly biased, given that other measures, including our cross-checks using the Dividend Growth Model and expert forecasts, point towards much lower values. On the other hand, network companies continued to support our approach to focus on long-run outturn averages, but continued to disagree with how we have interpreted available data, while raising concerns about which data we should focus on." (SSMD §3.51)*

107. Applying its methodology, GEMA assumed "…[a] TMR range of 6.25% to 6.75% CPIH-real as a working assumption" which GEMA believed was "conservative in light of the range of reasonable evidence" (SSMD §3.104).

108. At DDs, GEMA did not consider that the submissions it had received on TMR addressed or improved the analysis it presented at SSMD (§3.20).

109. At FDs, GEMA took into account responses to DDs and the CMA's work in *NATS* and *PR19* appeals. GEMA chose a TMR range of 6.25% to 6.75% (CPIH real), with a mid-point of 6.5%[20]. That is consistent with CMA's work in *NATS* and *PR19* and precisely at the mid-point of the range of 6% to 7% adopted by the CMA in the *NATS* decision (McCloskey §322).

110. By their complaints on this ground, the Appellants raise narrow, esoteric points, all of which concern matters of regulatory judgement, in a context where it is common ground that TMR is, as a measure of investors' ex ante expectations of equity returns, unobservable (see, e.g. NGET §3.152). In such circumstances, it is again clear that the CMA should be very slow to interfere with GEMA's regulatory judgement, in accordance with the principles set out in section C above.

111. The Appellants contend that GEMA's decision in setting the TMR was wrong in the following ways:

    a) GEMA was wrong to rely on a CED/CPI historical inflation series and disregard the CED/RPI series (the "**Inflation Complaint**")[21];

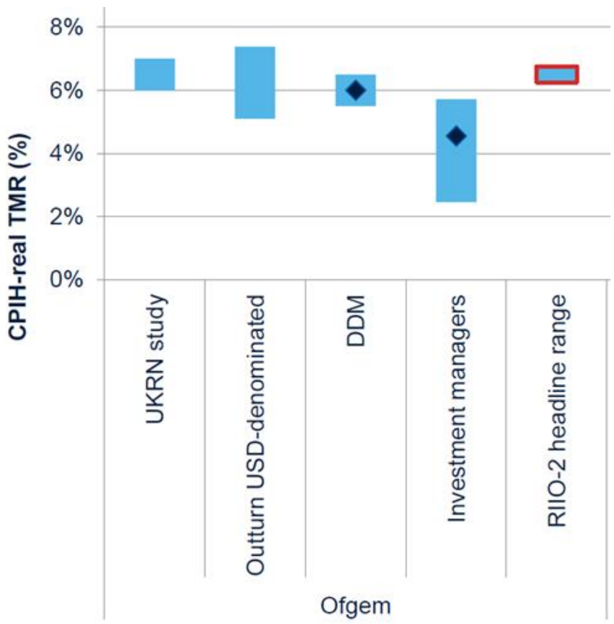
    b) GEMA used a flawed averaging methodology (the "**Averaging Complaint**")[22];

    c) GEMA used downwards-biased nominal return source data (the "**Source Data Complaint**")[23];

    d) GEMA's cross-check was irrelevant and wrongly applied (the "**Cross-Check Complaint**")[24].

112. None of these narrow objections withstand scrutiny. Moreover, the following table is instructive in placing GEMA's decision in its proper context:

[20] FDs Finance Annex §3.86 [F1/05]
[21] NGET §3.152; SHE-T §4.31(a); SPT §42; Cadent 4.53(a); NGN §37; SGN §160; WWU B3.5
[22] NGET §3.179; SHE-T §4.31(b); Cadent §4.53(b); SGN §172; NGN §39; SGN 172; WWU B3.6
[23] NGET §3.197
[24] NGET §3.207; Cadent §4.75ff



113. The table, referred to in more detail in McCloskey §§316-317, provides a high-level overview of the evidence base which underpinned GEMA's decision on TMR. As is clear, GEMA considered more than one approach to setting the range and ultimately made a cautious choice to set it at the upper end. It is striking that the Appellants have not sought to frame their challenge by reference to this "big picture" view of the evidence and instead focus upon the intricacies of inflation series, available data and averaging methods, all of which are issues about which there is some uncertainty, but about which GEMA is plainly entitled to exercise its regulatory judgement.

The Inflation Complaint

114. The Appellants' focus is solely on the data that informs the first bar in the table above ("UKRN Study"). As the table shows, that data produces the most favourable TMR range for the Appellants. Nevertheless, the Appellants maintain that the range should have been even higher, and was downwards-biased because GEMA interpreted historical returns data on the basis of the CED/CPI data series rather than the CED/RPI data series of inflation.

115. It is common ground that there is no "perfect" measure of inflation for this purpose (NGET at §3.153; McCloskey §327). However, GEMA sought to use "the best available measures of inflation" (FDs Finance Annex §3.87 [F1/05}).

116. The Appellants contend that:

a) the CPI dataset is unreliable[25] and the RPI dataset should not have been disregarded[26];

[25] NGET §3.16; SHE-T §4.33; SPT §42(4); Cadent §4.57; NGN §37; SGN §161
[26] NGET §3.170; SHE-T §4.33; SPT §42(1); NGN §37

b) GEMA's approach ignored and/or differs from that of the CMA in PR19 PFs[27]; and

c) GEMA failed to make a balanced assessment of the available evidence, over-relying and/or solely relying on the CED/CPI dataset[28].

117. These objections amount to disagreements with GEMA's exercise of its regulatory judgement and disclose no appealable error.

118. First, GEMA used the evidence which was, in its expert view, the best evidence available to it. GEMA relied upon the UKRN Report's recommendation to use CPI,[29] having considered the comparative advantages and disadvantages of CPI and RPI indices of inflation[30]. The Appellants have provided no evidence that adequately addresses the problems with the CED/RPI data series (McCloskey §327). While the Appellants[31] have raised detailed complaints about the reliability of the CED/CPI data series, those complaints largely ignore the issues that exist with the RPI data series, and do not explain why it is said that GEMA acted unreasonably and unlawfully in choosing one set of imperfect data over another. There is no perfect data series but GEMA's judgement is that the CED/CPI series is more reliable than the CED/RPI series.

119. Further and in any event, as the CMA found in its PR19 PFs, outturn inflation data produced using the CED/RPI data series is in fact lower than that using the CED/CPI series, by approximately 0.2-0.3% (McCloskey §328):

CMA estimates of real returns, 1900 to 2019

		Inflation series	
	Holding period	*CED/CPI*	*CED/RPI*
Arithmetic mean	1 year	7.0%	6.7%
Geometric mean	120 years	5.2%	5.0%
	10 years	6.8%	6.6%
Blume (1974)	20 years	6.7%	6.4%
JKM (2005) unbiased	10 years	6.9%	6.6%
estimator	20 years	6.7%	6.5%
	10 years	6.6%	6.3%
JKM (2005) MSE	20 years	6.1%	5.9%
	10 years	6.6%	6.4%
Overlapping	20 years	6.7%	6.4%
	10 years	6.8%	6.5%
Non-overlapping	20 years	7.2%	6.8%

119.1 Source: CMA analysis

120. As Mr McCloskey explains at §328, in arguing that the RPI data series would have produced a higher TMR, the Appellants make an additional (unarticulated) leap from the CED/RPI historical data series (as shown in the table above) to RPI data reflecting investors' current expectations for future inflation. Only when backwards-looking CED/RPI and forwards-looking RPI data are combined is a higher TMR achieved. These are two distinct steps, and the second step – the use of RPI data to inform future

[27] NGET §3.168; SHE-T §4.37; SPT §42(3); Cadent §4.65; NGN §37
[28] NGET §3.174; SPT §42(4); Cadent §4.59; SGN §170
[29] https://www.ukrn.org.uk/wp-content/uploads/2018/06/2018-CoE-Study.pdf#page=8 [F1/18]
[30] https://www.ukrn.org.uk/wp-content/uploads/2018/06/2018-CoE-Study.pdf#page=109 [F1/18]
[31] See, e.g. NGET and NGG at §§3.154-178

inflation predictions – is unreliable. The Appellants have put forward no evidence to suggest otherwise.

121. Second, GEMA's decision is supported by the CMA's approach in PR19 PFs. GEMA expressly quoted the relevant passage from PR19 PFs in its FDs and commented as follows (§§3.96-8):

> *"Taking all the evidence in the round, we consider that a reasonable TMR range is 5.25% to 6.25% (RPI-real)…We note that this range is comfortably at the top end of investors' current expectations regarding market returns over the next few years. This range is slightly above the 5-6% range used by the CMA in its recent CAA/NATS decision…*
>
> *3.97 The highlighted text suggests that both ranges are acceptable estimates of TMR, and that a 5-6% range is not necessarily wrong in the CMA's view. We agree with the CMA that a TMR range of 5.25 to 6.25% (RPI-real) is comfortably at the top end of investors' current expectations.*
>
> *3.98 We continue to believe that CMA's range from the provisional findings for the NATS Appeal, of 5-6% (RPI-real) better reflects the available evidence on TMR and is in line with the conclusions of the UKRN Cost of Capital Report (2018). Our final view reflects the broad range of TMR evidence and places less weight on estimations that rely on outturn or expected RPI. Our final view is that we should interpret and weight the analysis in line with our DD proposals."*

122. The Appellants are wrong to suggest that, because the CMA provisionally decided to take into account RPI inflation data as well as the CPI data series[32], and set a "slightly" higher TMR range for the purposes of PR19 than GEMA has set, GEMA's decision in RIIO-2 is necessarily flawed. The important differences between the CMA's role in PR19 and its appellate role in the present context have already been addressed above, at paragraphs 44-47.

123. 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. There is no justification for doing so on the basis of a "slight" difference, especially when GEMA's mid-point of 6.5% is identical to the CMA's decision in *NATS* and where GEMA's range overlaps considerably with the CMA's *PR19* range.

124. Third, the objection that GEMA failed to make a balanced assessment of the available evidence, and in particular that it was wrong to heavily or solely rely on the CED/CPI dataset, mischaracterises the approach GEMA has taken throughout RIIO-2. GEMA expressly stated that it wished to *"avoid over-reliance on any one measure"* (FD §3.87) and, to this end, it considered a number of deflation methods (McCloskey

[32] PR19 PFs (29 September 2020), p§9.160; NGET and NGG §3.176; SHE-T §4.36 [F1/02]

§334; SSMC Figure 9[33]). It is the Appellants, not GEMA, who take a selective approach to the evidence base regarding TMR, as illustrated by the table referred to above in paragraph 112.

Averaging Complaint

125. An arithmetic average is the simple average of annual returns from a given period. In contrast, a geometric average calculates the compounded annual return from a given period. GEMA applied a geometric average and an uplift when calculating returns for the purpose of estimating the TMR, as explained in FDs (§3.88).

126. The Appellants argue that this was an error for the following reasons:

a) A geometric average is a non-standard approach, whereas an arithmetic average is well-supported by regulatory precedent and in the literature[34];

b) GEMA used a geometric averaging method with insufficient uplift, resulting in a downwards-biased approach[35];

c) GEMA failed to consider alternative averaging approaches proposed to it[36];

d) GEMA was wrong to use a holding period assumption of solely 10 years or more[37].

127. These allegations are either wrong, or simply amount to disagreements with GEMA's exercise of its regulatory discretion. They disclose no appealable error.

128. First, GEMA chose a geometric averaging method for two reasons. As explained in DDs and FDs, most investors focus on the geometric return over the investment horizon and, if the holding period for an investment is more than a year, the arithmetic average is an upwards-biased measure of the true expected return[38] (McCloskey §338). GEMA's reasons for adopting a geometric averaging method and uplift is supported by the academic literature (Blume (1979), as cited in DDs[39]). It is not the case that GEMA has adopted an approach that is without any recommended basis, such that no reasonable regulator would adopt it. By contrast, GEMA noted in the SSMD[40] (§3.83) that adjusting geometric means upwards is established precedent by practitioners and regulators, providing the following examples in support: Barclays

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[33] https://www.ofgem.gov.uk/system/files/docs/2018/12/riio-2_finance_annex.pdf#page=28 [F1/04]

[34] SHE-T §4.45

[35] NGET §3.180; Cadent §4.71; NGN §39

[36] NGET §3.182; SPT §43(a); Cadent §4.73; NGN §39; SGN §182

[37] NGET §3.191; SPT 43(2)

[38] That arithmetic averages over a one year holding period are upwardly biased was confirmed by the CMA in PF19 PFs: https://assets.publishing.service.gov.uk/media/5f72f3d2e90e0740cf4eb0a9/Water_provisional_determinations_report_all_-_September_2020_---_web_-.pdf#page=550 at §9.176. [F1/02]

[39] DDs Finance Annex §3.15 [F1/06]

[40] https://www.ofgem.gov.uk/system/files/docs/2019/05/riio-2_sector_specific_methodology_decision_-_finance.pdf#page=37 [F1/03]

Equity Gilt Study; Smithers & Co[41]; and Triumph of the Optimists (Dimson Marsh Staunton).

129. Second, it is telling that, although they complain that GEMA's uplift was insufficient, the Appellants have not provided evidence suggesting that GEMA has in fact embedded an uplift that is too low (McCloskey §339). As the CMA explained in *Firmus Energy*, referred to in section C above: "*It is for the appellant to marshal and adduce all the evidence and material on which it relies to show that the regulator's decision was wrong*".

130. Further and in any event, GEMA's uplift of approximately 1.3-1.5% is higher than the uplift applied by practitioners[42] (JP Morgan, for example, have used 0.82%) and is consistent with the UKRN Report[43] to use a smaller uplift when focusing on long horizons; it does not *"hinge on"* the PwC analysis, as the Appellants have suggested[44] (McCloskey §340). The uplift that GEMA applied was well within the bounds of lawful regulatory judgement (see FDs §3.88), and the Appellants have failed to demonstrate otherwise.

131. Third, where alternative averaging methods have been proposed (other than arithmetic averaging), GEMA notes that these can yield very similar (or lower) TMR values than GEMA's mid-point of 6.5%. For example, the CMA's PR19 analysis shows CED/CPI values of 6.1%, 6.6% and 6.7%.[45] For this reason, even if there was any identifiable error in GEMA's exercise of regulatory judgement in this respect), adopting alternative averaging methods instead would have had no material impact on GEMA's decision.

132. Fourth, GEMA considered that longer holding periods were consistent with its long-term view of other parameters in the price control and, in particular, the fact that the RFR was set with reference to yields on ILGs over 20 years (FDs at §3.89; see submissions on RFR at paragraphs 62ff. above). Both consistency across CAPM parameters and considering returns over a relatively long time-horizon are approaches supported by the CMA in its PR19 PFs[46]. The CMA's own TMR analysis shows that lower estimates of TMR are derived for longer holding periods of 20 years than for 10 years. The UKRN Report also advised the use of longer time periods to estimate CAPM parameters where that was feasible:

> *Recommendation 2 (Horizon): On balance, we are in favour of choosing a fairly long horizon, for example, 10 years, in estimating the CAPM-WACC. But we would argue that, more important than the choice of*

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[41] https://www.ofgem.gov.uk/ofgem-publications/50794/2198-jointregscoc.pdf [F1/19]
[42] Note that finance practitioners make very little or no use of arithmetic averaging.
[43] https://www.ukrn.org.uk/wp-content/uploads/2018/06/2018-CoE-Study.pdf#page=125 [F1/18]
[44] SGN §184-8.
[45] https://assets.publishing.service.gov.uk/media/5f72f3d2e90e0740cf4eb0a9/Water_provisional_determinations_report_all_-_September_2020_---_web_-.pdf#page=551 Table 9-3 [F1/02]
[46] https://assets.publishing.service.gov.uk/media/5f72f3d2e90e0740cf4eb0a9/Water_provisional_determinations_report_all_-_September_2020_---_web_-.pdf#page=549 §9.177 [F1/02]

horizon per se is that all components of the CAPM-WACC are estimated using a methodology that is consistent with the chosen horizon.

To illustrate the importance of consistency, consider the case that regulators choose a 10-year horizon. Then the appropriate estimate of the risk-free rate and cost of debt should be derived from yields on bonds with maturity of ten years (see Recommendations 4, 8 and 9), the estimate of the Expected Market Return should be based on the properties of an appropriate return at a 10-year horizon (see Recommendation 5), and the estimates of equity and/or asset beta should represent the best econometric estimates that best capture the relationship between individual stock returns and the market return over a ten year horizon (see Recommendation 6).[47]

Source Data Complaint

133. NGET and NGG raise two further objections: (1) GEMA should not have used data starting in 1900[48]; and (2) GEMA should not have used data relying on returns data from the top 100 companies[49]. GEMA used the best available evidence for the UK market, which is generally agreed to be the DMS dataset from 1900 onwards[50]. Data prior to 1900 is less comprehensive, such that US evidence must be relied upon rather than UK evidence. Similarly, there is no good reason to discard any information from 1900 onwards, as it is generally considered reliable (McCloskey §§349-352). Thus, NGET and NGG's complaints in this regard do not disclose any error, let alone a material error.

Cross-check Complaint

134. The Appellants allege that GEMA's TMR cross-check using US dollars was flawed and was an irrelevant consideration[51]. They allege that because this involved measuring in US dollars and deflating returns by the US inflation rate, it made for an irrelevant proxy for expected returns in the UK.

135. Mr McCloskey's witness statement explains how this objection appears to contradict the earlier submission[52] by NG that capital is "internationally mobile", suggesting that there could be comparisons on risk-adjusted equity returns across markets (McCloskey §355). GEMA's view is that this cross-check is useful, given issues with UK measured inflation; by measuring UK returns on a US dollar basis, reliance on UK measured inflation is avoided. NG's submission and the argument that capital

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47 UKRN 2018 Section 4.1 pp 29-30 [F1/18]
48 NGET §3.198
49 NGET §3.202
50 See, for instance, SGN NoA at §154: *"DMS is widely accepted as the most reliable source of UK and international stock market data."*
51 NGET §3.208; SHE-T §4.125; SPT §42(5); Cadent §4.77; SGN §170
52 See AoN report "Is the UK an averagely lucky country" within "NGET NGG" folder here: https://www.ofgem.gov.uk/system/files/docs/2019/05/responses_f_-_r.zip See also PJ1_067 [F1/20]

should be internationally mobile supports GEMA's decision to derive confidence from this cross-check[53]. Investors holding US Dollars will have a powerful impact on the availability of capital and the cost of that capital for the UK market. That does not require an investor to relocate to the UK (as appears to be NG's interpretation §3.209). As GEMA explained in the SSMC and the FDs, this is a useful cross-check if an investor has the choice of obtaining UK returns in GBP or USD, which was, and is, the case[54]. This was highlighted in the UKRN Report[55]. Further, GEMA noted at SSMD that there has always been non-UK recognition in TMR evidence and previous UK price controls have reflected this.[56]

136. The same points can be made in response to SHE-T's objection[57] to GEMA's rationale on Purchasing Power Parity theory and the comparability of UK returns when measured on a pound and US dollar basis. These complaints are misguided: indeed, NG's advisor AoN[58] has gone further than GEMA, to argue that:

> *"the global numeraire [is] usually taken as the USD"*
>
> *"Another reason for looking at real USD returns is that there are huge uncertainties in the inflation data… for the UK.."*
>
> *"We believe that real USD returns are therefore likely to be more reliable than local currency real returns"*

137. Some of the Appellants make further (brief) complaints regarding TMR cross-checks, including that: (1) international evidence on TMR is instructive and suggests that GEMA's TMR range is understated[59]; (2) GEMA wrongly relied upon evidence from DGM and investment manager forecasts as TMR cross-checks[60]; and (3) historical ex ante approaches *"would have revealed the errors made by GEMA"*.[61]

138. Regarding (1), GEMA does not consider that international evidence for select countries is informative, as such an approach risks cherry-picking and does not have regulatory precedent (McCloskey §357). As to (2), GEMA recognised the potential for DGM and investment manager forecasts[62] to be subjective, and as a result placed limited weight upon them[63]. Regarding (3), the CMA's own historical ex ante

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[53] FDs Finance Annex §3.91 [F1/05]
[54] SSMC §3.68 [F1/04]; FDs §3.91 [F1/05]
[55] UKRN 2018 p D-109, D-110 and D-117 [F1/18]
[56] https://www.ofgem.gov.uk/system/files/docs/2018/12/riio-2_finance_annex.pdf#page=85 See 'non-UK focus' of -0.38% in Figure 17 and supporting text. [F1/04]
[57] NoA §4.125
[58] See AoN report "Is the UK an averagely lucky country" within "NGET NGG" folder here: https://www.ofgem.gov.uk/system/files/docs/2019/05/responses_f_-_r.zip [F1/20] See also PJ1_067
[59] Cadent §4.77; SGN §170.
[60] Cadent §4.74-7; NGN §200
[61] Cadent NoA §4.78
[62] https://www.ofgem.gov.uk/system/files/docs/2020/07/draft_determinations_-_finance.pdf#page=62 DDs 3.106 [F1/06]
[63] https://www.ofgem.gov.uk/system/files/docs/2020/07/draft_determinations_-_finance.pdf#page=62 at p.197, p.198, p.201 [F1/06]

estimates in the PR19 PFs[64] estimated *"a CPI-real average of 5.05% (geometric)"* which is in line with GEMA's decision in RIIO-2. None of these complaints therefore discloses any error in GEMA's approach to cross-checking the TMR. In fact, all three topics lead to numbers that support GEMA's decision.

Conclusion on TMR

139. For all the reasons above, it is clear that GEMA exercised its regulatory judgement lawfully in respect of setting the TMR range; indeed, it sought to take a cautious approach and set the range at the higher level of investors' expectations. The Appellants have not shown any basis for overturning GEMA's decision on any of the statutory grounds.

Equity Beta

140. Each of the Appellants allege that GEMA erred in its assessment of the notional equity beta of an efficient energy network used for the purpose of setting the allowed return on equity in RIIO-2. This section responds to the Appellants' arguments and a further detailed response is set out in McCloskey, section G.

141. As explained below, the alleged "errors" raised by the Appellants: (i) concern matters of regulatory judgement with which the CMA should be slow to interfere; and (ii) in many cases have no material impact on the RIIO-2 allowed return on equity unless combined with other alleged errors.

Introduction and Overview

142. Equity beta is one of the factors used in the CAPM for estimating the notional cost of equity of an efficient energy network company. All things being equal, the higher the equity beta specified in the CAPM equation, the higher the estimated cost of equity.

143. As explained at McCloskey, §213, equity beta is the measure of systematic risk of a particular stock relative to the stock market as a whole. Thus, an equity beta of 1 suggests systematic risk equal to overall market risk; equity beta above 1 suggests greater systematic risk (more volatile returns) than the wider market; equity beta below 1 suggests lower systematic risk (less volatile returns) than the wider market.

144. For listed (publicly traded) companies, equity beta can be directly observed and estimated by undertaking a statistical analysis of the co-variance between returns on the stock of the company in question and the returns on a wider market index – e.g. the FTSE 100 – over a period of time: see McCloskey, §209. Multiple statistical techniques can be used to model such co-variance. The most commonly used is the "ordinary least squares" ("**OLS**") method; but many experts are now using the generalised autoregressive conditional heteroskedasticity ("**GARCH**") modelling technique, as it better reflects the characteristics of financial data: (McCloskey, §212).

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64 §9.203 [F1/02}
https://assets.publishing.service.gov.uk/media/5f72f3d2e90e0740cf4eb0a9/Water_provisional_determinations_report_all_-_September_2020_---_web_-.pdf#page=555 [F1/02]

Notably, GEMA received advice from a Cambridge econometrician (Dr Donald Robertson) that OLS may overestimate the true beta.[65] Building on his previous beta work, Dr Robertson has provided updated estimates for equity beta and unlevered beta using various estimation techniques and sensitivities.[66] His work continues to provide support for GEMA's decisions in FDs.[67] For companies that are not publicly traded, the equity beta cannot be directly observed or estimated using statistical techniques. For these companies, any estimate of the equity beta will necessarily be based on one or more proxies – namely, the observed equity betas of other publicly traded stock(s) with similar characteristics to the company of interest: see McCloskey, §210.

145. The observed equity beta of any publicly traded company will be affected by (i) its level of gearing – i.e. debt as a proportion of enterprise value and (ii) its debt beta – i.e. its systematic risk of default on debt. Accordingly, when using publicly traded proxies to estimate the equity beta of a non-listed company, it is common practice to account for gearing and debt beta, to bring these into line with the position of the non-listed company in question. As explained at McCloskey, §§207-211, this can done by:

145.1 "Unlevering" the observed equity betas of the proxy company or companies to arrive at a measure of the systematic risk (volatility of returns) of the stock in question assuming 100% equity financing and no debt. The "**unlevered beta**" so derived is also referred to as an "**asset beta**".[68] "Unlevering" is achieved applying the following formula:

$$\beta_a = g * \beta_d + (1 - g) * \beta_e$$

Where g= gearing, β_a = asset beta, β_d= debt beta and β_e= equity beta

145.2 Then, "Re-levering" the asset beta of the proxy company or companies using gearing and debt beta assumptions. This "re-levering" is achieved applying the following (re-arrangement of the previous) formula:

$$\beta_e = \frac{\beta_a - g * \beta_d}{(1 - g)}$$

Where g= gearing, β_a = asset beta, β_d= debt beta and β_e= equity beta

Ofgem's estimate of the notional equity beta

146. No "pure play" energy company is publicly traded. Therefore, GEMA could not directly observe a "pure play" equity beta using stock market data. GEMA, therefore, necessarily had to estimate the equity beta of those energy companies over the RIIO-2

65 In December 2018, GEMA stated that: *"Dr Robertson argues: simulations show that if the real world has GARCH-like properties, then estimation over the short run using OLS, will probably overestimate the true beta."* https://www.ofgem.gov.uk/system/files/docs/2018/12/riio-2_finance_annex.pdf#page=35 [F1/04]

66 See [**DR1**] and [**DR1/1**] (DR_BETA_REPORT_18.04.2021) [F1/21]

67 Ibid. See esp. pages 15 and 16.

68 The phrase 'unlevered beta' commonly refers to the case where debt beta is zero.

price control period using the best available publicly traded stocks ('**proxy stocks**' or '**proxies**').

147. Further, in setting the RIIO-2 allowed return on equity, GEMA was concerned to ensure the financeability of an efficient "pure play" energy company on a forward-looking basis over the RIIO-2 price control period – and, therefore, sought to estimate the forward-looking equity beta of such a company (the "**notional equity beta**"). This may be the same as, or different from, the actual equity beta of a pure-play energy company over a past period - depending on the actual gearing and actual debt beta of that company as compared with the notional gearing and debt beta assessed on a forward-looking basis.

148. Thus, in estimating the notional equity beta for an efficient "pure play" energy company over the RIIO-2 period, GEMA had to make judgements as to:

148.1 Suitable publicly traded proxies for the "pure play" energy companies that are the subject of RIIO-2 – i.e. listed companies that could reasonably be expected to carry a similar level of systematic risk;

148.2 The statistical methods used to calculate the observed equity beta ('**raw equity beta'**) for the relevant proxies;

148.3 The assumptions as to the actual gearing and actual debt beta to be used to "unlever" the observed equity betas of the proxy companies; and

148.4 The efficient level of gearing and debt beta over the RIIO-2 period (to be applied when "re-levering" the unlevered beta of the proxy stocks to arrive at the notional equity beta).

149. GEMA's approach to each of these judgements is described at FD, Finance Annex, §§3.24-3.80; see also McCloskey, §§222-249. GEMA assessed the notional equity beta of a "pure play" energy company at 0.759 based on (i) an "unlevered beta" of 0.311, (ii) a debt beta of 0.075 and (iii) notional gearing of 60%: see FD, Finance Annex, Table 9 and §§3.67 and 3.74.

150. None of the Appellants challenge GEMA's assessment of notional gearing. This Section addresses the challenges made by all Appellants to the "unlevered beta" estimate (of 0.311) used by GEMA to set the notional equity beta.

151. As explained at McCloskey, §§250-252, in arriving at that "unlevered beta" estimate for a "pure play" energy company, GEMA considered:

151.1 A wide range of potential publicly traded proxies for an efficient UK "pure play" energy network company, including (i) the two publicly traded UK companies that have the construction and maintenance of energy networks as a substantial component of their business (SSE plc and National Grid plc), (ii) the three publicly traded UK companies that have the construction and maintenance of water networks as a substantial component of their business (Pennon Group plc, Severn Trent Water and United Utilities) and (iii) publicly traded European companies that have the construction and maintenance of energy networks as the sole or a substantial component of their business.

151.2 Estimates of observed equity betas for SSE, National Grid, Pennon, Severn Trent Water and United Utilities:

a) based on both OLS and GARCH methods;

b) over various estimation windows (An 'estimation window' is a single sample of data with a defined beginning and end – for example, a 2-year estimation window means a single sample of data from, say, 1 January 2018 to 31 December 2020);

c) based on various averaging periods of OLS data. Beta estimates vary over time. It is often considered helpful to report the 'average' beta over multiple estimation windows – for example, a 1-year average of a 2-year estimation window is the average beta for each 2-year window ending 1st January 2020, 2nd January 2020, 3rd January 2020 and so on, until the last day of the year 31st December 2020;[69] and

d) using both the "market value" and the "book value" of the proxy company's net debt for the purposes of "unlevering" the observed equity betas of the proxies.

152. GEMA's assessment of the unlevered beta for a UK "pure play" energy company:

152.1 Placed limited weight on the observed equity betas of publicly traded European companies. In order to rely on these observations, GEMA would have to account for (or ignore) differences in systematic risk between the UK and the European jurisdictions in question – such as differences in regulatory, political and macro-economic risk: McCloskey, §§241-243. GEMA was concerned that the scope for error risked distorting the European observations to the point of removing all evidential value: McCloskey, §245.

152.2 Placed limited weight on the observed equity beta for SSE, which was substantially higher than those of National Grid, Pennon, Severn Trent Water and United Utilities on an OLS analysis for all estimation windows and all averaging periods: see FD, Finance Annex, Table 10. GEMA considered SSE's higher observed betas are likely to be attributable to the relatively higher proportion of non-energy network business conducted by the publicly traded SSE entity (e.g. electricity generation and supply). Such unregulated, non-energy network businesses can be expected to carry a higher level of systematic risk than a regulated energy network business – thereby biasing SSE's observed beta upwards and rendering it a poor proxy for a "pure play" energy network: see McCloskey, §235.

152.3 Placed some weight on the observed equity betas of each of National Grid, Pennon, Severn Trent Water and United Utilities – placing greater weight on National Grid's observed betas than on those of the water companies. GEMA did not apply a mathematical weighting to the observed equity betas for these

[69] Note that a 1-year average of a 2-year estimation window will capture three years' worth of data but the result will be weighted heavily towards the final two years of data. Mr McCloskey explains this and other issues with common beta estimation practices: see McCloskey, §§260-281.

companies, but made a judgement in the round, taking account of all relevant evidence: McCloskey, §§236-240 & 282-291.

153. GEMA's point estimate of 0.311 unlevered beta for the efficient "pure play" energy company was:

153.1 Higher than the OLS unlevered beta estimates for National Grid for a 10-year estimation window using a market value of net debt gearing assumption based on the values shown at FD, Finance Annex, Table 10, where GEMA presents three numbers: a spot value of 0.31; a 2-year average of 0.29; and a 5-year average of 0.30 see;

153.2 Higher than the GARCH unlevered beta estimate (0.306) for National Grid for a 20-year estimation window: see DD, Finance Annex, Table 15;

153.3 Higher than the OLS unlevered beta estimates for the two most "pure play" water companies, Severn Trent and United Utilities, over the vast majority of observations windows and averaging periods, whether using the book value or market value of net debt: see FD, Finance Annex, Table 10; and

153.4 Consistent with the GARCH unlevered beta estimate for National Grid for a 10-year estimation window (0.312): see DD, Finance Annex, Table 15.

154. GEMA's judgement as to the unlevered beta for the efficient UK "pure play" energy company had regard to all the evidence, was balanced and reasonable and is unimpeachable in these appeals.

155. In the following three sub-sections, GEMA addresses the Appellants' challenges to GEMA's judgement as to: (i) the appropriate publicly traded proxies for the efficient "pure play" energy company' (ii) the appropriate application of statistical techniques (in particular, the size of the data sample used); and (iii) the appropriate gearing assumption for unlevering observed equity betas for proxy companies. As will be evident, a number of the alleged "errors" in GEMA's judgement have no material impact on the assessed unlevered beta – and, therefore, the notional equity beta and allowed return on equity – unless combined with other alleged "errors".

Complaints concerning Ofgem's choice of proxies

156. The Appellants make the following complaints regarding GEMA's choice of publicly traded proxy companies to estimate the unlevered beta of the efficient UK energy network company:

156.1 GEMA placed excessive weight on the observed betas of the UK water companies and insufficient weight on the observed equity betas of National Grid (the "**Water Company Issue**"). In this regard, the Appellants contend that the systematic risks of UK energy companies are likely to be higher than the systematic risks of UK water network companies: Cadent, §4.90; NGET NoA, §§3.103-3.109 & 3.120-3.122; NGG, §§3.103-3.109 & 3.120-3.122; NGN, §§185(v); SGN, §200(i) & (ii); SHE-T, §§4.55-4.58; SPT, §46; WWU, §§B4.6-B4.8;

156.2 GEMA placed insufficient weight on the observed betas of publicly traded European energy companies; alternatively, placed weight on an incorrect sample of observed betas for European energy companies (the "**European Comparator Issue**"). The Appellants contend that the observed unlevered betas of an appropriate sample of European energy companies is higher than the observed betas for National Grid and the UK water companies: Cadent, §4.92; NGET, §§3.117-3.119; NGG, §§3.117-3.119; NGN, §§185(ii)& (iii); SGN, §207; SHE-T, §§4.59-4.62; SPT, §45(4); WWU, §B4.9;

156.3 GEMA placed insufficient weight on a de-composition analysis of National Grid plc's beta between (i) its UK energy business and (ii) its US energy business (the "**NG Decomposition Issue**"). The Appellants contend that such analysis shows that the unlevered beta of the UK energy business is higher than the unlevered beta of the US energy business and, therefore, higher than the overall National Grid group beta used by GEMA: Cadent, §4.91; NGET, §§3.110-3.114; NGG, §§3.110-3.114; NGN, 185(vi); SGN, §200(iii);

156.4 GEMA placed insufficient weight on observed unlevered beta for SSE plc (the "**SSE Issue**"): NGET, §§3.115-3.116; NGG, §§3.115-3.116;

156.5 GEMA's use of a single estimate of the notional equity beta failed to recognise the higher systematic risks faced by gas network companies relative to electricity network companies (notably, increased risks of asset stranding in the light of the UK government's "Net Zero" agenda) – which risks, the Appellants contend, ought to have led GEMA to recognise a higher notional equity beta for gas companies than for electricity companies (the "**Gas Network Risks Issue**"). The relevant Appellants point to analysis carried out by KPMG which allegedly shows that the (publicly traded) Italian and Spanish gas network companies had higher observed betas than electricity network companies in the same jurisdiction: NGN, §§184, 185(i) & (iv); SGN, §§201-205 & 206(i).

157. The <u>Water Company Issue</u> appears to arise out of the misapprehension that GEMA attributed "equal weights" to the observed unlevered betas of National Grid and the UK water companies when estimating the notional equity beta: see, e.g. SHE-T, §4.55. This is incorrect. As explained above, GEMA did not apply a mathematical weighting to the beta observations for the UK proxy companies; nor did it select the mid-point of all beta observations for those companies. Instead, it made a judgement having regard to evidence from those four proxies in the round.

158. In reaching that judgement, GEMA did place greater weight on the unlevered beta observations for National Grid – placing particular weight on observations using large samples of data (10-year estimation windows and averaging periods). This is acknowledged by some Appellants: e.g. SPT, §44. It should be noted that GEMA's unlevered beta point estimate of 0.311 is higher than the United Utilities' unlevered beta estimates for all estimation windows and averaging periods and higher than the Severn Trent Water's unlevered beta estimates for all but three estimation windows and averaging periods – consistent with less weight being placed on these observations: see FD Finance Annex, Table 10; McCloskey, §239.

159. In any event, the Water Company Issue has no material impact on the allowed return on equity if the CMA accepts that GEMA was right to place greater weight on observations of beta over large samples: see §167-168 below.

160. As to the European Comparator Issue, there is no basis for interfering with GEMA's judgement in placing limited weight on the evidence from European energy companies:

160.1 As explained above, multiple types of risk might be expected to differ between the UK and European jurisdictions (political risk, regulatory risk, macroeconomic risk etc.) and multiple adjustments to the European data may therefore be required to provide a suitable proxy for the systematic risk of a UK "pure play" energy company. Each such adjustment carries its own margin for error, the cumulative effect of which risks distorting the overall outcome so as to deprive it of all probative value: McCloskey, §251.

160.2 The observations from European energy networks support an unlevered beta either above or below GEMA's 0.311 point estimate, depending on the sample of companies chosen. The sample of European companies preferred by CEPA, GEMA's consultants, excludes European companies with a high proportion of unregulated, non-network business (which can be expected to have a higher beta than a regulated network business) and implies an unlevered beta below GEMA's 0.311 point estimate: McCloskey, §§241-242 & 243, bullet 1.

160.3 Given the inherent difficulties in making beta comparisons across jurisdictions, GEMA was entirely justified in relying on UK beta observations rather than making a speculative adjudication on the relative merits of different European samples and how these would translate into the UK context.

161. As to the National Grid Decomposition Issue, again there is no basis for interfering with GEMA's judgement in giving this limited weight:

161.1 De-composition analysis is complex and requires a large number of judgements, each of which carries a margin for error, the cumulative effect of which risks distorting the overall outcome so as to deprive it of all probative value: McCloskey, §244.

161.2 The results of the National Grid de-composition analysis conducted by both Frontier and CEPA suggests that the observed beta of National Grid's UK business is sometimes higher and sometimes lower than the beta of the US business: McCloskey, §§243, bullet 2 & 300-302.

161.3 As with the European Comparators Issue, GEMA is entirely justified in avoiding a speculative decision on the relative merits of different sample periods.

162. As to the SSE Issue, GEMA's judgement to give the SSE observed betas no weight is unimpeachable given:

162.1 The Appellants' own advisors (Oxera) suggest that SSE is excluded, because "since the beginning of 2020, SSE's beta diverged from the other networks, suggesting that part of the risk profile is not yet aligned with that of the other networks. Therefore, we decided to exclude SSE from the sample of UK energy companies".[70]

162.2 The greater proportion of unregulated, non-network activities carried out by the publicly traded SSE entity: McCloskey, §235;

162.3 The expectation that unlevered beta will be higher for unregulated, non-network activities than it will be for the efficient "pure play" energy company for which GEMA seeks to estimate a notional equity beta: McCloskey, §235; and

162.4 The fact that observed unlevered betas for SSE were very substantially higher than those of National Grid and the UK water companies across all estimation windows and averaging periods – which, in the circumstances, can reasonably be inferred to be due to the higher proportion of unregulated business carried out by SSE: FD, Finance Annex, Table 10.

163. As to the <u>Gas Networks Risks Issue</u>, in the FD, GEMA carefully considered the qualitative evidence as to the relative systematic risks of gas and electricity networks - and found it inconclusive: McCloskey, §§246-249. In any event, GEMA considered that an assessed unlevered beta weighted towards long term (10-year) estimates of National Grid's beta would mitigate concerns about risk differences between electricity and gas – as it would incorporate risks associated with National Grid's gas transmission and gas distribution businesses: McCloskey, §249. This was an entirely reasonable judgement on the evidence before GEMA and there is no basis for the CMA to interfere with it.

164. The quantitative evidence of alleged differences in the observed betas of the Italian and Spanish gas and electricity companies relied upon by Cadent, NGN and SGN in their Notices of Appeal was not drawn to GEMA's attention at the DD stage: McCloskey, §296. In any event, the Italian and Spanish evidence is of limited probative value and would not have had a material impact on GEMA's assessment of the notional equity beta for a UK gas network because:

164.1 The Italian and Spanish gas companies have a greater proportion of unregulated business than the Italian and Spanish electricity companies. An alternative plausible interpretation of the evidence is that higher betas for the Italian and Spanish gas companies are being driven by the higher unregulated share of the business – and not higher systematic risks associated with gas networks: McCloskey, §295;

164.2 The relative betas of the Italian and Spanish gas companies vs the Italian and Spanish electricity companies vary depending on the sample period selected –

[70] https://www.northerngasnetworks.co.uk/wp-content/uploads/2020/09/CoE-Oxera.pdf#page=33 [F1/22]

and higher gas company betas appear to be driven in particular by the inclusion of Covid-19 data: McCloskey, §297;

164.3 There are difficulties in relying on data from non-UK jurisdictions where regulatory, political, macroeconomic etc. risks can be expected to differ: see §160 above;

164.4 Other European evidence – notably from Belgium – suggest higher observed betas for electricity than for gas: McCloskey, §297.

165. In summary, such quantitative European evidence as exists is inconclusive and it would be speculative to conclude that UK gas network betas are systematically higher than UK electricity network betas on this basis.

Complaints concerning Ofgem's application of statistical methods

166. The Appellants make the following complaints regarding GEMA's application of statistical techniques:

166.1 GEMA has placed excessive weight on observed betas over 10-year estimation windows and averaging periods – which is particularly problematic in respect of water companies, where there is alleged to be a structural break in the relevant data in September 2014 (the "**Sample Period Issue**"): Cadent, §4.95(a); NGN, §186(iii); SGN, §208(ii); SHE-T, §4.65; SPT, §45(1)-(3); WWU, §B4.10;

166.2 GEMA has placed excessive reliance on GARCH estimates of observed betas relative to the OLS estimates (the "**GARCH Issue**"): Cadent, §4.95(e); NGN, §186(iv); SGN, §208(iv);

166.3 GEMA erred in failing to exclude observations from the Covid-19 period from its estimates of beta; alternatively, it erred in failing to require appropriate adjustments to the observations during the Covid-19 period (the "**Covid 19 Data Issue**"): Cadent, §4.95(c); NGN, §186(i); SGN, §208(i);

166.4 GEMA's OLS estimates relied on rolling averages of betas, which tend to bias the observed beta downwards (the "**Rolling Average Issue**"): Cadent, §4.95(b); NGN, §186(ii); SGN, §208(v).

167. As to the <u>Sample Period Issue</u>, McCloskey, §267-279, explains in detail the various types of error that can be avoided by relying on larger (longer term) samples of data. The Appellants appear to agree with GEMA's preference for relying on larger samples provided that there is no "structural break" in the data: see, e.g. SGN, §208(ii) and KPMG §8.3.6.[71] As explained at McCloskey, §281, GEMA does not consider that any structural breaks in data wholly undermine the utility of any given sample, but accepts that careful interpretation is required where data contains structural breaks.

[71] "*We agree with the principle that long-term estimation windows are preferable to shorter windows*." KPMG, Estimating the cost of Equity for RIIO GD-2, Report prepared for Cadent Gas Limited, paragraph 8.3.6 page 104 [PJ1/058]

168. In any event, the concern about structural breaks has no material impact on the unlevered beta estimate used by GEMA to set the notional equity beta and allowed return on equity because:

 168.1 The only relevant structural break identified by the Appellants is in the 10-year data for the UK water companies: see, again, SGN, §208(ii).

 168.2 GEMA's unlevered beta estimate of 0.311 is in line with 10-year estimates for the National Grid beta, in which no structural breaks are identified by the Appellants' NoAs.

 168.3 GEMA's unlevered beta estimate is above the vast majority of 2- and 5-year unlevered beta observations for Severn Trent Water and United Utilities – FD, Finance Annex, Table 10. The Appellants do not argue there are structural breaks in this data.. As noted above, this is consistent with GEMA placing greater weight on National Grid's observed beta than on the relevant observed beta for the UK water companies.

 168.4 GEMA's unlevered beta estimate is below the 2- and 5-year unlevered beta observations for Pennon – but that Pennon data must be interpreted with caution given its high proportion of unregulated, non-water network business.

169. Similarly, the GARCH Issue has no material impact on GEMA's estimate of the unlevered beta or its assessment of the notional equity beta or the allowed return on equity. GEMA's unlevered beta estimate of 0.311 is consistent with long term (10-year) observations of National Grid's beta using OLS techniques and above the majority of both long- and short-term observations of Severn Trent Water's and United Utilities' beta using OLS techniques. GARCH estimates are either consistent with that, or lower, as discussed at §153 above.

170. As to the Covid-19 Data Issue, GEMA was not wrong to include data that included the Covid-19 periods, because these periods are an example of systematic risk and are therefore valuable to any estimation of equity beta. Further, GEMA addressed this issue during consultation[72] and said the following in FDs, (Finance Annex, page158[73]):

 170.1 "There seems no sound rationale to exclude some periods, such as the GFC [Global Financial Crisis] or COVID-19, as suggested by Frontier, particularly if exclusions reflect data alone, as appears to be the case, including for Frontier's [suggestion] to pay "attention more to the pre-COVID19 [and post

[72] See, for example the SSMC where GEMA stated "*we disagree with the argument that we should not use beta estimates for the period 2011 to 2014. This period may be no less valuable - in fact, it may be more valuable because we can better understand how investors perceive risk in network utilities during periods of economic uncertainty or financial turbulence*". https://www.ofgem.gov.uk/system/files/docs/2018/12/riio-2_finance_annex.pdf#page=37 [F1/04]
[73] https://www.ofgem.gov.uk/system/files/docs/2021/02/final_determinations_-_finance_annex_revised_002.pdf#page=158 [F1/05]

GFC] period". Doing so without firm rationale could introduce cherry-picking risks."

171. As to the Rolling Average Issue, this is a new issue, not raised by the Appellants in response to DDs. Mr McCloskey explains in his statement that there may be problems with averaging OLS estimates, giving an illustration of this using two small samples of OLS data: McCloskey, §§269-273. The important point is that GEMA performed GARCH estimation[74] in order to address precisely this type of mathematical issue, because it is frequently encountered during OLS estimation.

Complaints concerning assumptions about actual gearing

172. The Appellants maintain that GEMA erred in using the market value of net debt to unlever observed equity betas for National Grid and the UK water companies and contend that GEMA ought to have relied on the book value of net debt for unlevering: Cadent, §4.95(d)NGN, §186(iv); SGN, §208(iii); SPT, §47.

173. As explained at McCloskey, §278, GEMA did not reach any conclusion in the FD on whether the market value or the book value of net debt is to be preferred. However, the concern about use of market value of net debt, even if justified, has no material impact on GEMA's estimate of unlevered beta, notional equity beta or allowed return on equity, as long term (10-year) estimates of unlevered beta for National Grid and the water companies are similar regardless of whether market value or book value of net debt used for unlevering: see FD, Finance Annex, Table 10.

174. Indeed, as explained at McCloskey, §218, the CMA's predecessor (the Competition Commission ("**CC**")) considered gross debt gearing to be a "justifiable" (NIE, 2014[75]) basis for beta estimation. On a gross debt basis, unlevered beta estimates would be materially lower (by approximately 0.04, which is worth 0.8% for the cost of equity, see McCloskey, §238) than GEMA presented in its FD, Finance Annex, Table 10.

Conclusion on equity beta

175. In the NIE appeal in 2014 the CC estimated an asset beta[76] of 0.33 (§13.176) which is lower than GEMA's asset beta of 0.349 – the CC's decision was based on the same 5 UK proxy companies that GEMA used for RIIO-T2 and GD2. Further, the CC determined that a gross debt approach to de-levering is justifiable (NIE, 2014 §13.178).

176. The Appellants have not identified any material error in GEMA's assessment of the notional equity beta of an efficient energy network. The alleged "errors" identified by

[74] https://www.ofgem.gov.uk/system/files/docs/2020/07/draft_determinations_-_finance.pdf#page=46 [F1/06]

[75] https://assets.publishing.service.gov.uk/media/535a5768ed915d0fdb000003/NIE_Final_determination.pdf#page=395 [F1/23]

[76] https://assets.publishing.service.gov.uk/media/535a5768ed915d0fdb000003/NIE_Final_determination.pdf#page=395 *"…we estimate a rolling asset beta for a utility portfolio of 0.33 assuming a debt beta of 0.05"* [F1/23]

the Appellants are in reality disputes about the exercise of GEMA's regulatory judgement.

Cross-checks

Introduction and Overview

177. Cross-checks comprise step 2 in GEMA's equity methodology. This section responds to the Appellants' arguments in relation to the step 2 cross-checks and a further detailed response is set out in McCloskey, section D. Four initial points bear emphasis in relation to GEMA's use of cross-checks.

178. First, there has been broad support among stakeholders throughout the consultation process for the use of cross-checks to check the CAPM[77]. It is revealing that the NoAs demonstrate no clear or united front in respect of the objections the Appellants wish to raise, and often raise bare allegations without providing any evidence to dispute GEMA's decision.

179. Second, the nature and purpose of cross-checks must be kept firmly in mind. Cross-checks are not a substitute for the calculation of CAPM at step 1 in GEMA's methodology[78]. They are intended to provide a "sense-check"[79] that the implied cost of equity calculated in step 1 is in approximately the right range, and thereby reduce some of the uncertainty that exists in identifying this figure. Given that cross-checks are not intended to be (and are never used as) primary evidence for the CAPM implied cost of equity, it follows that the measures used for cross-checking may involve different types of asset, which in turn are exposed to different risk profiles and gearing levels (McCloskey §19). Such differences do not necessarily deprive the cross-check of any useful value, but will require a judgement by the regulator as to how much weight to accord to the particular cross-check, taking into account the extent of those differences. GEMA made precisely this point at 3.120 of FDs:

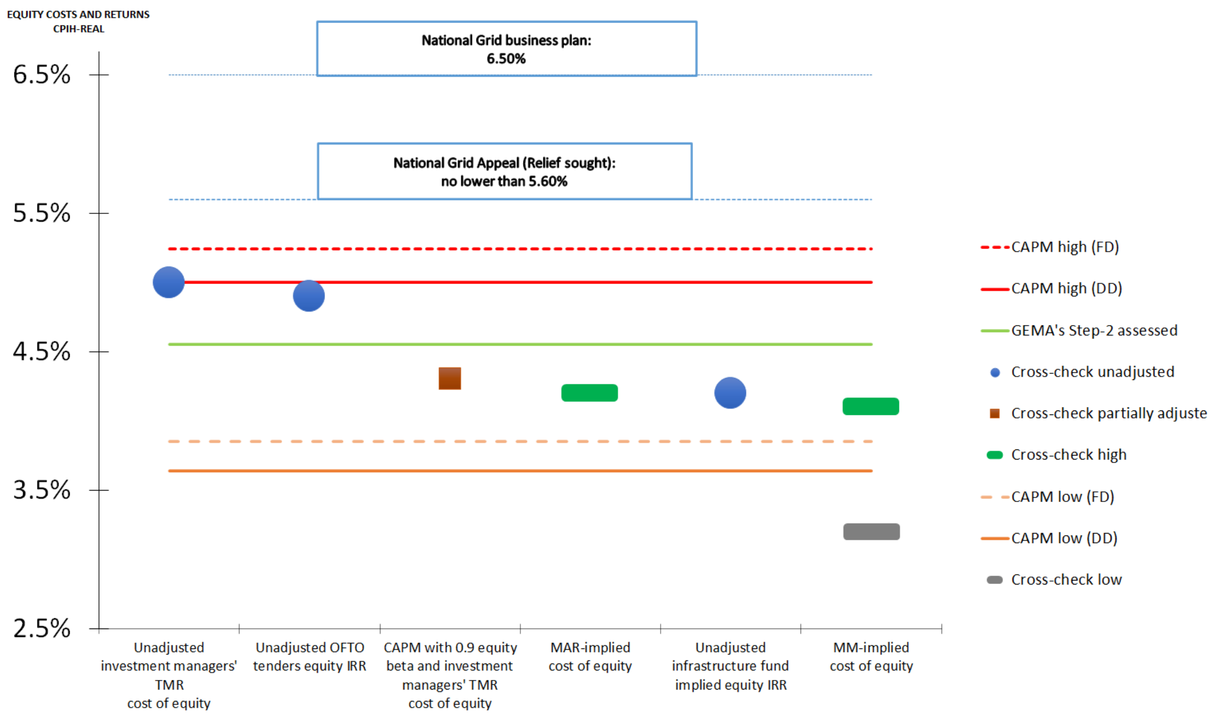
> "Some stakeholders consider that explicit adjustments in Step 2 may involve the exercise of too much discretion by Ofgem. We agree that cross-checks should be interpreted carefully and weighted appropriately, but we disagree that no weight can be placed on them at all, or that they are wholly irrelevant, particularly given the large underlying quantum of investor monies (eg £6.5bn in OFTOs, £20bn in infrastructure funds and approximately £58bn in listed equity.)."

[77] NGET and NGG §3.248
[78] NGET and NGG's allegation that GEMA used cross-checks as "primary evidence" resulting in the Step 2 equity range "over-riding" the Step 1 equity range is misconceived (§3.292-3.299). Cross-checks, at step 2, were always secondary, in sequence and effect, to Step 1. NGET and NGG appear to suggest that no adjustments can ever be made at step 2 (see FD Finance Annex at §3.120 [F1/05]). In any event, this is inconsistent with NGET and NGG's own position, whereby they advanced alternative cross-checks (§3.248).
[79] Framework Consultation §7.33.6 [F1/10]

180. To the extent that the Appellants' objections in their NoAs seek simply to point out differences between energy network companies and the type of assets used in cross-checks, this is wholly insufficient as the basis of an appeal against GEMA's decision.

181. Third, the ultimate use to which GEMA has put the evidence gathered from cross-checks in its decision at step 2 is fundamentally important. In the decision which the Appellants seek to challenge, no cross-check supported a cost of equity above 5% CPIH-real, and the strongest evidence supported the lower end of the range, with the result that GEMA decided to narrow the range from 3.85% - 5.24% to 3.8% - 5% (with more discretion being applied at the top of the range than the bottom, because of the strong evidence from the cross-checks). This resulted in a mid-point of 4.40%. However, GEMA then increased the implied cost of equity by 0.15%, resulting in a figure of 4.55%. As a result, even if the alleged cross-check errors had any substance (which they do not), they would not be material, and GEMA's decision on the cost of equity (4.55%) remains robust.

182. Fourth, the Appellants' challenges to GEMA's cross-checks have highlighted several areas of common ground between their consultants and GEMA, lending support to GEMA's view in step 3 on "aiming-up" and expected outperformance. It is clear from consideration of GEMA's cross-checks that GEMA has acted conservatively (in favour of network companies) in: estimating the cost of equity (which is in reality likely to be lower than 4.55%); and in respect of expected outperformance (which is likely to be higher than 0.25%). The table below, which is set out in McCloskey §25, illustrates the support that GEMA's cross-checks provide for a *lower* cost of equity (and the extent to which, for instance, NG's position is out of step with all of that evidence).



182.1

Background to GEMA's decision

183. Cross-checks are a well-established feature of regulatory decision-making (McCloskey §§15-17). In its Framework Consultation, GEMA stated its intention to apply cross-checks to its CAPM parameters, with reference to Market Asset Ratios ("**MARs**") and Offshore Transmission Owner ("**OFTO**") tenders. This was confirmed in GEMA's Framework Decision.

184. In its SSMC, GEMA included two further cross-checks, namely investment managers' TMR forecasts and infrastructure discount rates. On this basis, GEMA concluded that:

> *"On the basis of these cross-checks, we consider that the conclusion of step 2 is to narrow the CPIH CAPM implied range, from the values presented in Table 13 (3.87-5.08%), to 4.0-5.0% in CPIH terms. We give weight to the forward-looking UK equity market returns when increasing the lower end to 4% real CPIH, and to the infrastructure fund and OFTO data for the 5% real CPIH upper end." (SSMC Finance Annex §3.147 [F1/04])*

185. In the SSMD, Ofgem noted support from stakeholders for cross-checks, but also observed that:

> "*network companies raised issues with how we have interpreted the data, arguing that different inputs give different results and that some cross-checks are either not relevant or are not appropriate for RIIO-2 (mainly due to risk differences)*" (SSMD Finance Annex §3.190 [F1/03])

186. In DDs, GEMA presented the results from six cross-checks as follows:

Table 24: Summary evidence on four cross-checks and a cross-check hybrid

Cross-check	Nominal	CPIH-real	Source
Modigliani-Miller cost of equity inference (WACC cross-check)	5.3% to 6.2%	3.2% to 4.1%	Real values as per Table 21 for NG, PNN, SVT and UU. Nominal value derived using 2.02% CPIH assumption, for example: (1+3.2%) * (1+2.02%) – 1 = 5.3%
MAR-implied cost of equity	<= 6.31%	<= 4.2%	Real value implied in paragraphs 3.76 to 3.85. Nominal value derived using 2.02% CPIH assumption. (1+4.2%) * (1+2.02%) – 1 = 6.31%
Unadjusted OFTO implied equity IRR	7.00%	4.9%	Nominal value as per Figure 12. CPIH-real derived using 2.02% CPIH assumption. (1+7.0%) / (1+2.02%) – 1 = 4.9%
Unadjusted investment managers (TMR) cost of equity	7.10%	5.0%	Nominal value as per Table 23. CPIH-real derived using 2.02% CPIH assumption. (1+7.10%) / (1+2.02%) – 1 = 5.0%
Unadjusted infrastructure fund implied equity IRR	6.30%	4.2%	Nominal value as displayed in Figure 13. CPIH-real derived using 2.02% CPIH assumption. (1+6.30%) / (1+2.02%) – 1 = 4.2%
CAPM with 0.9 equity beta & investment managers' TMR	6.44%	4.3%	Real value calculated using risk-free rate of -1.48% and real TMR of 5.0%. Nominal value derived using 2.02% CPIH assumption. (1+4.3%) * (1+2.02%) – 1 = 6.44%

Source: Ofgem analysis

187. From these results, GEMA noted that cross-checks provided *"greater support for the lower half of the CAPM-implied range and [we] consider that the strongest evidence indicates a mid-point cost of equity near or below 4.2%"* (DD Finance Annex p.65 [F1/06]).

188. At FDs, GEMA summarised the evidence from its cross-checks as follows:

> *"We note that equity returns above 5% are not supported by any of the six crosschecks we presented at DDs. This could imply that some element(s) of step 1, for example, re-gearing, ex-post TMR or some estimates of unlevered beta (ie those based on a small sample of data), may not perfectly reflect expected returns….*
>
> *In contrast, the bottom end of the CAPM range is better supported: three other cross-check presented at DDs imply CPIH-real returns at or below 4.2%: Modigliani Miller (MM); Market-to-Asset Ratios (MARs); and, infrastructure funds." (FD Finance Annex §3.113 and §3.116 [F1/05])*

189. Nevertheless, GEMA concluded that:

> *"Even though these cross-checks in combination generally support a lower cost of equity than is implied by the Step 1 mid-point, after consideration of stakeholder responses, we have decided not to adjust the Step 1 mid-point in Step 2... For FDs, we have decided to narrow the range, (from 3.85%-5.24% to 3.8%-5.0%), using more discretion to adjust the high end than the low end, as per our rationale in paragraphs 3.113 to 3.118 above. The range 3.8%-5.0% has a mid-point of 4.4%.*

However, we have decided to assess the cost of equity at 4.55% which is 0.15% higher than the mid-point we could draw from Step 2." (FD Finance Annex §3.121 [F1/05])

The Modigliani-Miller ("MM") cross-check

190. As explained in McCloskey §27, MM theory posits that the Weighted Average Cost of Capital ("**WACC**") (and therefore the Allowed Return on Capital, 'AROC') should remain constant, even when gearing increases. Regulators, however, *can* estimate the WACC/AROC such that it does vary with gearing. In doing so, however, MM theory is violated. If a regulator's 'notional' gearing is higher than actual gearing, this violation leads to greater equity returns than would be justified under MM theory.

191. In the present case, this approach to MM theory has led to higher estimates of WACC/AROC, to the Appellants' benefit. Despite GEMA's (and network company) evidence suggesting that observed gearing tends to be around 50% for energy network companies, GEMA set a notional gearing level of 60% (McCloskey §33 and Figure 2). This 10% difference between observed and notional gearing provides space for additional profits above the CAPM-WACC, resulting in materially higher equity returns for network companies of 0.3% than would otherwise be the case in an MM compliant world (McCloskey §41).

192. Four of the Appellants object to the use of the MM cross-check, contending as follows:

a) "GEMA's application of the Modigliani-Miller cross-check is wrong in principle. This is because the Modigliani-Miller theory is also wrong because it has used the regulatory concept of the "allowed cost of debt"…Using the allowed cost of debt is the approximate equivalent of having a default premium of 2.6%, which is inconsistent with the Modigliani-Miller theory assumption that the default premium and transaction costs are both zero." [80]

b) "As shown in Oxera's replication of GEMA's analysis, the 're-geared' estimations yield a higher WACC, with the difference being considerably greater than zero. This shows that GEMA's analysis violates the MM theory."[81]

c) MM is "not fit for purpose as a result of GEMA's approach to gearing assumptions and a failure to take account of the impact of gearing on debt beta."[82]

193. The Appellants do not develop these arguments in any detail, and it is notable that four Appellants raise no objection at all to the MM cross-check[83]. Among those who do challenge it, the common theme is to contend that GEMA's approach to gearing

[80] NGET and NGG §§3.253-6.
[81] SHE-T §4.109-4.113.
[82] Cadent §4.102(e).
[83] SPT, NGN, SGN and WWU do not object.

(on beta, WACC and AROC) is wrong and that this results in an inconsistency with MM theory.

194. GEMA makes three observations on these objections.

195. First, GEMA's reliance upon MM theory is grounded in well-established precedent. Far from a theoretical inconsistency rendering the MM cross-check *"meaningless"* as NGET and NGG suggest (NoA §3.255), GEMA consciously accepted that the regulatory model it adopted was not a strict application of MM theory. Indeed, in accepting that the WACC/AROC varies with gearing, GEMA expressly recognised that its model contrasts with MM theory (McCloskey Figure 2).

196. This approach to applying MM theory in the regulatory context, and the approach to gearing, is nevertheless well-established. For instance, in *Bristol Water* (2010), the CMA explained its approach as follows (emphasis added):

> *"We assume that the cost of equity and debt increase but tax payments reduce as gearing increases. Our assumption on the cost of equity is that it is determined by the CAPM and that gearing affects equity beta and hence the cost of equity through the Miller formula –* ***these assumptions appear relatively uncontroversial as they are common to most regulatory calculations of WACC and were used by the advisers to both Ofwat and Bristol Water****. Our assumption on the cost of debt was that higher gearing resulted in new debt being issued at a higher spread over gilts – to give effect to this assumption, we assumed five tranches of debt with difference spreads over gilts. We believe that this gives a reasonable representation of how the cost of debt might increase with higher gearing…" (Annex 2 §2)*

197. The CMA has articulated concerns about MM theory being violated, but it has done so because of the potential for regulators to over-estimate the cost of equity for regulated companies. Thus, in the *Heathrow Airport Ltd and Gatwick Airport Ltd* (2007), the CC noted that (emphasis added):

> *"[i]n the regulated sectors, the trend in recent years has been for firms to inject more debt into their capital structures on the apparent assumption that higher levels of gearing represent more efficient financing…* ***Given this starting point, we do not accept the argument that higher levels of gearing produce a higher cost of capital. We do not believe that this is a credible characterisation of the returns that investors require at different levels of gearing and it is largely for this reason that we consider it appropriate to use a non-zero debt beta in our calculations****, despite the difficulties that we face in estimating the value of the debt beta with precision. Assuming a debt beta of zero when increasing gearing over-rewards equity by implying that all additional exposure to systematic risk which gearing brings accrues only to equity" (§§89-90)*

198. More recently, in the *NATS* (March 2020) Provisional Findings, the CMA concluded that:

> *"Our concerns start from the analytical finding that the cost of capital increases by around 0.5% as a result of the assumed higher gearing of NERL (60%) relative to gearing assumption based on the gearing of comparators (30%), which is not consistent with either finance theory or with our understanding of how actual financing models work". (§§4, Appendix D)*

199. Most recently, in the *PR19* (September 2020) Provisional Findings, the CMA noted:

> *"We accept the broad tenets of the Disputing Companies' interpretation of the Modigliani-Miller theory, specifically that increased per-unit returns earned by shareholders in a highly-geared structure come with associated and offsetting risks to those returns. **We also accept that**, as rising gearing leads to increasingly expensive equity being replaced with lower-cost debt, the assumption which is most consistent with the generally accepted approach to the cost of capital is that **the WACC should be broadly unaffected by gearing**" (§§9.605)*

200. It follows that: (1) MM theory is a useful and meaningful cross-check, which has been used by the CMA in multiple regulatory appeals; and (2) GEMA's re-gearing of beta from 50% to 60% is in accordance with common practice notwithstanding that it results in a breach of MM theory and a risk of over-remuneration (to the benefit of the Appellants).

201. Second, GEMA's approach to gearing in fact derives support from work undertaken by Oxera, one of the advisers to the Appellants. Oxera's report[84] uses alternative values for RFR, TMR and the cost of debt (namely, spot rates rather than embedded debt) but ultimately the conclusion is the same: the WACC does not remain constant across gearing levels and, furthermore, Oxera concludes that there is an increase in the WACC/AROC (of 7 bps for NG) between observed and notional gearing: (McCloskey §39).

202. Third, the MM cross-check is of particular relevance and utility in the present context given that it applies directly to, and is built upon data from, listed energy network companies. It uses data about the risk profiles of the relevant energy network companies rather than requiring major assumptions to be made about risk: (McCloskey §40). The fewer the assumptions made about risk, the more objective the evidence that the cross-check is capable of providing.

203. While the Appellants object to the MM cross-check failing to capture risk adequately, GEMA's view is that it was unnecessary for it to make any adjustments in this regard. For instance, Cadent (§4.102(e)) relies on the report of its consultant KPMG, which complains that GEMA has failed to factor in how *"the systematic risk migrates from equity to debt holders"* and the resulting increase in debt beta as gearing increases (§11.3.38). Yet this is precisely what GEMA and Oxera have done: where both use

[84] §§WWU appeal, Oxera cost of Equity report, "E1.pdf" page 94 Table A1.2 [WWU ref E1]

the observed gearing, alongside different debt beta estimates, of utility network companies (including NG). The relevant risk has been captured because the MM cross-check is applied directly using the publicly traded network companies (including NG) alongside different debt beta estimates. The fact that the Appellants take issue with the debt beta repeats arguments in relation to step 1 of GEMA's CAPM methodology, and does not address any flaw in the utility or relevance of the evidence used in the MM cross-check itself: (McCloskey §39).

204. In sum, the Appellants fail to provide any serious challenge to GEMA's application of the MM cross-check. GEMA's approach to that cross-check is grounded in economic theory that is well-established with regulators and the CMA, and GEMA has adopted an approach to gearing that is reasonable (and is indeed supported by at least one of the Appellants' own consultants).

Market-to-Asset-Ratios ("MAR") cross-check

205. Evidence from MARs refers to the ratio between the price paid for network assets and the underlying asset value, i.e. how much of a premium is being paid for an asset in relation to its fundamental value (the Regulatory Asset Value). MAR evidence is based on public share prices and the sales of private network companies.

206. The Appellants object to the use of MARs for the following reasons:

a) "Market valuations incorporate a lot of noise (in that they can reflect movements unrelated to the fundamental value of the asset) and elements that are not enduring and/or not explainable";[85]

b) "The reliability…is further questioned by the need to value non-regulated businesses and/or regulated businesses in other jurisdictions that may be owned by listed entities…which requires careful analysis" (the fact that National Grid has US operations is cited);[86]

c) "GEMA's MAR analysis is flawed as it fails to recognise the role that factors beyond expected outperformance and allowed returns may have on equity valuations. As shown in Oxera's analysis and acknowledged by GEMA itself, factors not related to price control…can more than explain MAR premia of the listed UK water companies";[87]

d) "GEMA's conclusion that the MARs of the two listed water firms supports its CoE range is flawed because it has failed to account for the fact that market valuations of listed water companies may be explained by expectation of a higher return in the future, rather than Ofwat's allowed CoE";[88]

[85] NGET and NGG §3.283 and §3.284, and §3.291; NGN §260
[86] NGET and NGG §3.283 and §3.284; SHE-T §4.115; SPT §48; SGN §368
[87] SHE-T 14.115; SGN §368
[88] SHE-T 4.115; SPT §48

e) "GEMA's argument that share price movements of National Grid and SSE following the CMA's PR19 Provisional Findings indicate higher returns expected by investors is flawed";[89]

f) "MAR data is unreliable because it is driven by a wide range of factors and is also subject to a significant degree of interpretation error";[90]

g) "Market-to-asset rations…[do not] reflect the risk profile of a gas distribution network"[91].

207. All these concerns have been recognised by GEMA and captured in its appreciation of the fact that *"interpreting MAR premiums is subject to uncertainty"* and that the *"inferences reflect assumptions and period chosen"*[92]. Indeed, Mr McCloskey's statement agrees that MARs are not perfect because of the need to make assumptions on behalf of the purchasing investor. However, MAR evidence does not necessarily require <u>analytical</u> assumptions to be made, and as such can provide a powerful directional cross-check. In its most simple form, a sustained MAR above 1.0 indicates that investors expect returns to exceed their costs – no analysis is necessary to obtain a simple directional indication.

208. GEMA's conclusion was that *"MARs for the UK utility stocks is a strong piece of evidence."*[93] Nothing in the NoAs establishes that GEMA was wrong to take the view it did. Two particular points illustrate why.

209. <u>First</u>, whatever uncertainties there are in MAR data, the premia paid for assets in the utilities sector are such that, even factoring in for short-term fluctuations in the market, difficulties of valuations between jurisdictions, and/or differences between gas, water and electricity sectors (or indeed, any of the other uncertainties listed by the Appellants), the overall position is beyond doubt. Assets of utility companies are sold at a premium, and that premium is significant. The point is illustrated by National Grid plc's recent announcement to purchase Western Power Distribution (the "**WPD Purchase**"). National Grid's own analysis confirms the purchase of WPD reflects a <u>61% premium</u>, i.e. WPD was purchased for approximately 161% of its regulatory asset value. Whatever uncertainties exist in MAR data, they undoubtedly support GEMA's view that there is strong evidence showing that assets of utility companies are sold at a premium, and that the premium is significant.

210. As explained in McCloskey, in the first witness statement of Mr Wilde and in the witness statement of Mr Kaul, in light of the WPD Purchase, the Appellants' contention that GEMA's MAR-implied cost of equity is too low because of various uncertainties and difficulties of interpretation with the data cannot withstand scrutiny. The WPD Purchase was announced after GEMA took the decision under challenge. The statements of Mr Kaul and Mr McCloskey and the first witness statement of Mr

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89 SHE-T 14.115
90 SHE-T §4.116; Cadent §4.102
91 NGN §213; SGN §369
92 DD Finance Annex §3.138 [F1/06]
93 FDs 3.117. [F1/05]

Wilde confirm their view that, had this information been available to it, GEMA would have given considerable weight to this evidence in supporting the decision to set the cost of equity at 4.55% and the RAR at 4.3% (Kaul §§123-129, McCloskey §57, Wilde 1 §59). GEMA was evidently correct to state that expected outperformance of 0.25% *"is a fraction of the outperformance that is reasonably derived from MAR evidence".*[94]

211. The CMA is able to, and should, take the WPD Purchase into account in this appeal. As set out in section C above, paragraph 27, pursuant to s.11(3) of the EA 1989 and s.23D(3) of the GA 1986, in determining this appeal, the CMA may have regard to any matters to which GEMA was not able to have regard, save that the CMA must not have regard to matters which GEMA would not have been entitled to have regard in reaching its decision had it had the opportunity of doing so.

212. GEMA was plainly entitled to have regard to MAR data, and would have been entitled to have regard to data from the WPD Purchase had it taken place. MAR data has been relied on in previous appeals and decisions of the CC and CMA (see McCloskey §50). Indeed, it is notable that NGET and NGG stop short of suggesting that GEMA should not use the MAR cross-check at all: their argument is that it should only inform the lower end of the plausible cost of equity range (NoAs at §3.283).

213. On the contrary, however, this compelling recent evidence of the high premia paid for energy assets should be taken into account by the CMA in considering whether GEMA was wrong in using the MAR cross-check. In GEMA's submission, no reasonable regulator could omit to take such evidence into account.

214. Second, it is notable that Oxera[95] supported the use of the MAR cross-check in the context of the CMA's PR19 appeal: the relevant report is published on NGN's website and was prepared for the ENA, the Appellants' representative body. In that report, Oxera adopts a similar approach to interpretation of MAR data to GEMA in RIIO-2 (as set out in McCloskey §49). Indeed, there appears to be considerable common ground between GEMA and the Appellants, none of whom have contended that GEMA made any mathematical error in its use of MAR data and/or adopted a flawed theoretical approach (McCloskey WS §56).

215. Oxera's report to the CMA in the PR19 re-determinations suggests that the premia paid on relevant assets are useful for capturing investors' views and are driven by two factors: outperformance and the difference between allowed returns on equity and the cost of equity. On the basis of this analysis, Oxera argued that the premium paid on relevant assets was entirely explained by outperformance (in order to contend that the cost of equity and allowed return on equity had not been set too high by Ofwat). This supports GEMA's use of MAR data: first, it provides a benchmark cost of equity for

[94] Ofgem, Consultation – RIIO-2 Draft Determinations – Finance Annex, paragraph 3.138. [F1/06]
[95] "What explains the equity market valuations of listed water companies?" Oxera, May 2020, Prepared for the Energy Networks Association
https://www.northerngasnetworks.co.uk/wp-content/uploads/2020/09/Oxera-2020-%E2%80%98What-explains-the-equity-market-valuations-of-listed-water-companies%E2%80%99-20-May-1.pdf [F1/24]

the water sector which can inform a judgement for the energy sector (regardless of whether that is lower, higher or similar) and, second, it provides general support for GEMA's approach to MAR, as outlined in GEMA's DD, §3.76 to 3.85.

216. Like Oxera, GEMA considered MAR to be a valuable source of data for cross-checking the cost of equity and allowed return on equity. Also like Oxera, GEMA identified the same two factors as being the drivers and explanatory forces behind the premia paid on assets; GEMA named this the "joint hypothesis problem"[96]. In doing so, GEMA sought to make the point that the premia paid on assets provide information about both the cost of equity and expected outperformance at the same time (McCloskey §53).

217. For these reasons, and those explained in McCloskey (in particular §43 through to §60), the Appellants' criticisms of GEMA's use of MAR data are misplaced and should be rejected.

Other cross-checks

OFTO-implied Equity IRRs

218. GEMA cross-checked the CAPM implied cost of equity against returns bid by investors in market transactions for offshore transmission owner ("**OFTO**") assets, which suggested an implied cost of equity of 4.9% (see McCloskey §87).

219. The Appellants' objections to this are as follows[97]:

a) OFTO returns may include elements of a bidder's valuation that are unrelated to the cost of equity;

b) The risk profiles of OFTOs are fundamentally different to those of regulated utilities;

c) Information to validate or allow analysis of the bid returns is not publicly available;

d) OFTO data is "short-term", with Internal Rates of Return ("IRR") only available since 2011 when GEMA started managing the competitive tender process.

220. The first objection is misplaced. GEMA recognises that returns on investor bids could reflect elements other than the cost of equity (see McCloskey §92). However, in practice, and drawing on its experience as the regulator responsible for managing the competitive tender process, GEMA considered that elements such as tax structures, expected outperformance, and revenues after the contracted period, are unlikely to have a material impact. Contrary to NG's suggestion, OFTO data does not require "untangling" in order to provide a useful cost of equity cross-check (see McCloskey §92). OFTO competitive tenders incentivise bidders to estimate future costs

[96] DD §3.80 and Table 22: https://www.ofgem.gov.uk/system/files/docs/2020/07/draft_determinations_-_finance.pdf#page=57 [F1/06]

[97] NGET and NGG §3.285 and §3.291; SHE-T §4.119; SPT §48(4); Cadent §4.102; NGN §213(i).

accurately and there is rigorous due diligence of bidders' cost and tax assumptions (see McCloskey §94). The risk of being undercut by other bidders acts as a disincentive to bidders to inflate cost projections to allow for future outperformance and higher equity returns above the equity IRR (see McCloskey §96). In light of its experience of the tendering process, GEMA's view that returns on OFTO bids could provide it with useful evidence was a reasonable regulatory judgement.

221. The Appellants' second objection was considered and addressed by GEMA and by Mr McCloskey (see McCloskey §86 to §99). Again, this point merely amounts to a disagreement with GEMA's exercise of its regulatory judgement. In FDs at §3.115, GEMA explained (emphasis added):

> *"As we discussed in the SSMD, we remain convinced that OFTO-implied equity internal rates of return (IRRs), of 4.9% in DDs, provide useful information on expected returns for deploying capital in UK energy assets**. We noted that this cross-check embeds a much higher level of leverage (generally 80-90%) and some risk differences**. Stakeholders generally agree that higher levels of leverage should increase expected equity returns. **In our view, the gearing effect could overshadow the underlying risk difference, so it appears reasonable to infer a high end of 5% based on this cross-check**."*

222. NGET complains that *"GEMA assumes these [gearing levels and risk profiles of OFTOs] will roughly cancel each other out, but does not substantiate this assumption"*. However, NGET itself fails to present any evidence to suggest that GEMA's inference was flawed (NoA 3.285). In the extract above GEMA observes that (a) there are differences in risk (with which NG agrees) and (b) cites the generally accepted proposition that higher levels of leverage increase expected equity returns, and draws a reasonable inference that the former will be counteracted by the latter to a certain extent. NGET has not sought to provide any evidence that suggests GEMA was wrong to draw that inference.

223. The third objection is baseless, in circumstances where GEMA consulted on this issue, sharing an appropriate level of information with network companies and other stakeholders, whilst having regard to the need to protect sensitive information received in the tendering process, having regard to obligations owed to those who took part in the tendering processes (see McCloskey §99).

224. NGET and NGG alone raise the fourth objection, alleging that allowing short-term data to influence the range for the cost of equity is inconsistent with GEMA's policy to seek a "long-horizon approach" to setting the cost of capital. GEMA considers that, since: (1) OFTO investments are long-horizon in nature and therefore not dissimilar to RIIO-2 investments; and (2) the values derived from OFTO data have been stable for almost five years, as shown in GEMA's DD (Finance Annex §3.88, Figure 12), this data could be used consistently with its overall approach. Further, the data was used as a cross-check only, and not as primary evidence upon which GEMA estimated the cost of equity.

Infrastructure funds

225. The Appellants allege that GEMA was wrong to cross-check the implied cost of equity against the discount rates in 14 infrastructure funds. The Appellants complain that this *"involves deploying non-comparable and unreliable data"* and was then *"compounded by GEMA applying conceptually wrong manipulations to the data"* (NGET and NGG NoAs §3.256). The specific objections are as follows:

   a) Only the discount rate that fund managers use to discount cash flow in order to inform the valuation of the assets in their portfolio provides a relevant basis for a cost of equity cross-check;[98]

   b) GEMA did not provide verifiable sources for the discount rates it used;[99]

   c) GEMA's analysis is based on a mixture of equity and debt instruments, and the funds do not exclusively hold regulated utilities, with the result that the risk profile of the funds are likely to be lower than energy networks;[100]

   d) GEMA used an IRR that was deflated with reference to market premium/expected outperformance, which was an incorrect assumption about fund managers' expectations and failed to adjust for differences in risk in energy networks.[101]

226. None of these objections have any merit.

227. First, in allegedly identifying three bases for a discount rate, NG does not demonstrate any failure on GEMA's behalf. The discount rates that GEMA used are all from published fund accounts which are subject to common accounting rules including IFRS 10. NG has not shown that GEMA's approach is materially affected by differences in the basis of the fund discount rates. Any differences between the concepts used by individual funds will have no material impact on GEMA's interpretation of this cross-check.

228. Second, GEMA did provide verifiable sources for the discount rates it used. In its SSMD, an annex was provided giving additional detail on the infrastructure fund discount rates used in the cross check.[102] The discount rates GEMA used were all from verifiable public sources. Indeed, Cadent's own advisor (KPMG) provided a review of the discount rates that GEMA had used, as shown in GEMA's SSMD.[103]

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98 NGET and NGG §3.258-60

99 NGET and NGG §3.261

100 NGET and NGG §3.262-3; SHE-T §4.117; NGN §213

101 NGET and NGG §3.264; SHE-T §4.117; SPT §48; Cadent §4.102

102 https://www.ofgem.gov.uk/system/files/docs/2019/05/riio2_sector_specific_methodology_decision_-_finance.pdf#page=150 [F1/03]

103 https://www.ofgem.gov.uk/system/files/docs/2019/05/riio-2_sector_specific_methodology_decision_-_finance.pdf#page=136 [F1/03]

229. Third, in any event, as explained at McCloskey §105, the existence of risk differences between energy network companies and infrastructure funds does not necessarily mean that systematic risk will be materially different. Furthermore, one of the *"analytical improvements"* GEMA made to the data it used and explained at DDs was to derive weighted and simple averages "*to help isolate fund-specific or idiosyncratic issues"*[104].

230. Fourth, the Appellants mischaracterise GEMA's approach to IRRs when they allege that GEMA (incorrectly) reduced the discount rate on an assumption that fund managers *"would consider expected outperformance of assets as a reduction to the discount rate in the valuation calculations"* (NGET and NGG at §3.264). Discount rates and the premium to Net Asset Value (NAV) are combined to infer the IRR: the discount rate is used to derive an IRR, using the formula set out in DDs (§3.95, Finance Annex).

231. In addition to the fact that the Appellants' objections fail to demonstrate any flaw in GEMA's approach, it was in any event a reasonable and lawful use of GEMA's regulatory discretion to make use of discount data from infrastructure funds. GEMA noted the different asset and risk characteristics of these funds, but identified discount rates and the premium to NAV as potentially useful sources of data for cross-checking its cost of equity figure, noting in particular that *"the combined value (share price * shares) of the funds is approximately £20bn as at 31 March 2020, signalling strong investor appetite for infrastructure investments"* [105].

Investment managers' TMR

232. The Appellants[106] complain about GEMA's use of professional forecasts from investment managers and advisors to cross-check the implied cost of equity on the following grounds:

232.1 This is a cross-check of the TMR parameter in the cost of equity calculation, and is therefore not appropriate for cross-checking the cost of equity as a whole;

232.2 It uses evidence of subjective stated preference, rather than revealed preference, and aims to provide prudent estimates of future returns which means it is likely downwards-biased;

232.3 GEMA's dataset was incomplete, cutting off at December 2019 even though more recent forecasts have been published and/or failed to exclude an outlier data point, thereby lowering the result of this cross-check;

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104 https://www.ofgem.gov.uk/system/files/docs/2020/07/draft_determinations_-_finance.pdf#page=62 at §3.94 [F1/06]

105 https://www.ofgem.gov.uk/system/files/docs/2020/07/draft_determinations_-_finance.pdf#page=62 at §3.96 [F1/06]

106 NGET and NGN §§3.287-93; SHE-T §4.120; Cadent §4.102; NGN §213

232.4 It is likely to reflect short-run market sentiment which is likely to underestimate the cost of equity in the current market environment and give more volatile results from one price control to the next.

233. NGET and NGG admit that their position is not that this cross-check should *"necessarily be excluded"* but argue that *"in the current capital market environment with high liquidity and high valuation, [it] should be considered only to inform the lower end of the plausible COE range, and even then only imperfectly"* (NoA §3.282). It is clear, then, that the Appellants accept that utility may be derived from this cross-check; they simply favour its selective use.

234. There is no basis for GEMA to exercise its regulatory judgement in such a selective way either as a matter of economic or finance theory, or given its obligations to balance the interests of all consumers fairly. The specific criticisms the Appellants make are without merit, and fail to show any error of GEMA's exercise of its regulatory discretion, for the following reasons.

235. <u>First</u>, GEMA was alive to the fact that this is, primarily, a TMR cross-check[107]. It conducted two distinct cross-checks, one for TMR and one for cost of equity (see McCloskey §114). In the latter, it used an equity beta of 0.9 so as to remain independent of its own beta (using values in line with the Appellants' submissions) and TMR estimates (McCloskey §114).

236. <u>Second</u>, network companies' concerns about the reliability of investment manager data were found not to be *"supported by tangible evidence"*[108]. Further, it is notable that the Appellants have not provided evidence in their NoAs with higher values for comparison with the figures presented by GEMA at SSMD or DD. As the CMA stated in *Firmus Energy (Distribution) Limited*, quoted in section C above: "*It is for the appellant to marshal and adduce all the evidence and material on which it relies to show that the regulator's decision was wrong*". The absence of any such evidence is telling.

237. <u>Third</u>, the fact that GEMA's dataset did not go beyond December 2019 would not have had any material impact (GEMA's dataset contains 11 observations, meaning that it would have needed significant further, and materially different, data to call into question GEMA's FD inferences). Again, NG's vague reference to later *"forecasts which point towards higher values"* (NGET and NGG NoA §3.288) is inadequate to demonstrate an appealable error in GEMA's dataset. Equally, the complaint (e.g.by SHE-T at §4.121) that GEMA failed to exclude Schroders data is misguided. GEMA

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107 https://www.ofgem.gov.uk/system/files/docs/2019/05/riio-2_sector_specific_methodology_decision_-_finance.pdf#page=39 [F1/03]

108 As addressed by GEMA during consultation: see here: https://www.ofgem.gov.uk/system/files/docs/2019/05/riio-2_sector_specific_methodology_decision_-_finance.pdf#page=39 [F1/03] and here: https://www.ofgem.gov.uk/system/files/docs/2019/05/riio-2_sector_specific_methodology_decision_-_finance.pdf#page=123[F1/03]

considered this point at DDs and concluded that excluding Schroders did not materially impact the result of the cross-check[109].

238. Fourth, GEMA recognised expressly in DDs and FDs that investment manager forecasts suffer from the drawback that estimates can quickly change[110]. However, it did not view this as fatal to the cross-check supporting a reasonable inference of 5% at the high end of the cost of equity range, as this was a decidedly cautious inference to draw from the combined effect of all the cross-checks GEMA considered, of which Investment managers' TMR was only one. Further and contrary to NGET and NGG's suggestion (NoAs §3.291), adopting this cross-check was not inconsistent with GEMA's approach to calculating the cost of capital with a 'long-horizon approach'. Investment managers' TMR forecasts data is used as a cross-check, and not primary evidence. In any case, both are long horizon of 10-20 years.

Rejected cross-checks

239. Several of the Appellants challenge GEMA's decision not to take into account cross-checks proposed by energy network companies, which they allege would support a higher upper bound for the cost of equity[111]. GEMA recalls the CMA's observation in *SONI Limited v Northern Ireland Authority for Utility Regulation*, quoted at paragraph 32 above, that the appropriate focus in an appeal is whether there is an error in the regulator's approach, and not whether some alternative approach might be better. GEMA's position is that it considered the alternatives proposed by energy network companies, and where it chose not to apply a particular cross-check, it did so on reasonable grounds and its choices fell well within the scope of its regulatory discretion.

Dividend Discount Model ("DDM") and Dividend Growth Model ("DGM") cross-check

240. NGET, NGG and SHE-T contend that GEMA was wrong to disregard a DDM/DGM cross-check, and that in DDs and FDs, GEMA did not engage with stakeholders' proposals[112]. These objections are without foundation. The proposed DDM/DGM models are highly subjective, and for this reason were dismissed by GEMA[113]. At FDs, GEMA considered that energy network companies' arguments about cross-checks "repeat previous submissions"[114]. Further, there is extensive CMA precedent

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109 §3.91-2.
110 https://www.ofgem.gov.uk/system/files/docs/2021/02/final_determinations_-_finance_annex_revised_002.pdf#page=52; and [F1/05] https://www.ofgem.gov.uk/system/files/docs/2020/07/draft_determinations_-_finance.pdf#page=62 [F1/06]
111 NGET and NGG at §3.267; SHE-T §4.122; Cadent §4.104; NGN 213.
112 NGET and NGG 3.269; SHE-T §4.122.
113 https://www.ofgem.gov.uk/system/files/docs/2019/05/riio-2_sector_specific_methodology_decision_-_finance.pdf#page=64 at §3.244 [F1/03]
114 https://www.ofgem.gov.uk/system/files/docs/2021/02/final_determinations_-_finance_annex_revised_002.pdf at §3.106 [F1/05]

to support GEMA's view. As noted by CMA in its PR19 PFs, DDM/DGM is "*...wholly dependent on assumptions and produces a broad range...*". [115]

Profitability levels

241. NGET and NGG allege that GEMA should have had regard to and applied evidence of companies' long-term profitability[116]. This cross-check was not raised before the NoAs in any meaningful way. Based on work by Frontier, NGET and NGG suggest that a 20-year average of returns on equity for the FTSE All Share and the S&P 500 indices suggests that the average has been over 8% (CPIH-real). The use of data on past profitability defeats the purpose of a price control. It would embed out- or under-performance into baseline returns risking a double count (as explained by McCloskey §119)). No reasonable regulator would take such an approach.

Asset Risk Premium-Debt Risk Premium (ARP-DRP) cross check

242. Several Appellants allege that the ARP-DRP cross-check was a valid and useful alternative that GEMA should have applied[117]. GEMA did consider this possibility at SSMD, DDs and FDs (McCloskey §122). In the first instance, it remains unclear to GEMA the extent to which ARP-DRP would produce a materially different implied cost of equity (McCloskey §122).

243. Even if the ARP-DRP cross check did produce a different cost of equity (and GEMA were persuaded by such evidence), GEMA's concern (expressed in DDs and FDs) is that the ARP-DRP cross-check relies upon figures generated from regulatory precedent (i.e. GEMA's previous decisions for the allowed return etc.), which is not helpful for looking to set a price control based on contemporaneous market evidence. It is reasonable for a regulator setting price controls for today and the next five years not to rely exclusively on regulatory precedent from ten years earlier. The decision to exclude ARP-DRP evidence as a cross-check was a question of regulatory judgement, which GEMA exercised lawfully.

Materiality

244. To the extent that any of the above alleged errors (which are denied) are established, GEMA submits that they were not material, and that its decision was therefore not "wrong" under s. 11E(4) EA 1989 and/or s. 23D(4) GA 1986. This is for two reasons in particular:

245. First, as GEMA explained in the FDs:

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115 https://assets.publishing.service.gov.uk/media/5f72f3d2e90e0740cf4eb0a9/Water_provisional_determinations_report_all_-_September_2020_---_web_-.pdf#page=556 [F1/02]

116 NGET and NGG §3.273

117 NGET and NGG §3.277; SHE-T §4.105; Cadent §4.104.

> *"A cross-check, by definition, is a method of providing assurance and a directional indication to compare with the primary estimation approach."*[118]

246. The function of cross-checks is precisely that: to cross-check GEMA's equity methodology. Cross-checks do not constitute primary evidence and GEMA has not treated them as such (contrary to NGET and NGG's suggestion at §3.293). As a result of this methodological limitation, there is simply no room for cross-checks to have a "material" effect on a decision so as to render it "wrong".

247. Further or alternatively, when GEMA took the decision, the consideration it gave to evidence from its cross-checks was explained as follows:

> *"Even though these cross-checks in combination generally support a lower cost of equity than is implied by the Step 1 mid-point, after consideration of stakeholder responses, we have decided not to adjust the Step 1 mid-point in Step 2. At the DD stage we considered that we had sufficient evidence to choose a value for cost of equity which was below the mid-point of the range. Stakeholders made representations to us that our market cross-checks were not as strong as we believed and that using a lower value was not a justified use of regulatory discretion. For FDs,* ***we have decided to narrow the range, (from 3.85%-5.24% to 3.8%-5.0%), using more discretion to adjust the high end than the low end****, as per our rationale in paragraphs 3.113 to 3.118 above. The range 3.8%-5.0% has a mid-point of 4.4%.* ***However, we have decided to assess the cost of equity at 4.55% which is 0.15% higher than the mid-point we could draw from Step 2****." (FDs §3.121)*

248. Therefore, GEMA's cross-check evidence led it to reduce the upper boundary of the range for cost of equity from 5.24% to 5%. However, this 0.24% reduction was in large part set off by GEMA raising the cost of equity by 0.15% above the mid-point of the cross-check range.

249. SGN articulates the impact of cross-checks as follows (emphasis added):

> *"The first step in GEMA's CAPM analysis estimated a range of equity of 3.85% to 5.24% (midpoint of 4.55%). GEMA then carried out cross-checks (including comparison with returns sought by offshore transmission owners, and the use of market asset ratios) to consider whether adjustments to its range were required: "The Step 2 cross-checks suggest that the expected return is lower than the CAPM-implied value from Step 1. Based on Step 2 evidence, we tighten the range to 3.8% to 5.0% implying a mid-point of 4.4% however we select a value of 4.55%."* ***GEMA thus reiterated its original position on the point estimate effectively nullifying the impact of the cross-checks****."* [119]

[118] https://www.ofgem.gov.uk/system/files/docs/2021/02/final_determinations_-_finance_annex_revised_002.pdf#page=150 [F1/05]
[119] SGN §274

250. Any weight GEMA gave to the cross-checks in adjusting the upper end of the range was in practice rendered immaterial by the 0.15% uplift.

Conclusion on cross-checks

251. For all the reasons above, none of the Appellants' arguments disclose any appealable error in relation to GEMA's use of cross-checks. Further, once the nature of cross-checks and their impact on GEMA's decision is properly appreciated, the effect of any errors would, in the event they were established, be immaterial.

Aiming-up

Introduction and Overview

252. At Step 1 of its analysis, GEMA's estimated the CAPM-implied cost of equity of the efficient energy company between 3.85% and 5.24% - based on a series of judgements regarding the RFR, equity beta, TMR and notional gearing of the efficient energy company: see FD, Finance Annex, Table 11. At Step 2, GEMA cross-checked its Step 1 estimate using direct market evidence – see §§177ff above – which supported a narrowed cost of equity range between 3.8% and 5.0%: FD, Finance Annex, §3.121.

253. For the purposes of setting allowed returns, GEMA necessarily had to settle on a particular point estimate for the notional cost of equity. In this context, "aiming up" refers to a point estimate above the mid-point of a given cost of equity range although we note that the phrase "aiming up" is deployed in various different contexts with different meanings accordingly. This is to be contrasted with "aiming straight", being the selection of the mid-point of the range; or "aiming down", being the selection of point estimate below the mid-point.

254. As the true cost of equity of the notional efficient energy company cannot be known and must be estimated, there is no single "correct" point estimate – as some of the Appellants acknowledge: see, e.g. WWU, §B5.2. Instead, GEMA must apply its judgement having due regard to the available evidence.

255. For RIIO-2, GEMA based allowed returns (prior to expected out-performance adjustments) on a notional cost of equity of 4.55% - which is:

255.1 At the mid-point of the CAPM-implied cost of equity. Thus, GEMA has "aimed straight" in relation to Step 1 cost of equity range;

255.2 Above the mid-point of the range of notional cost of equity implied by market-based cross-checks. Thus, GEMA's selection of 4.55% for the assessed cost of equity could be described as "consistent with aiming up" relative to the Step 2 cost of equity.

256. In arriving at that point estimate, GEMA considered a range of disparate arguments in favour of "aiming up" within the CAPM-implied range (and for individual CAPM parameters) made by the licensees during the RIIO-2 consultation. Licensees variously contended that is was necessary and appropriate to "aim up" in order to (i) be consistent with regulatory precedent, (ii) account for asymmetric incentives in the

price control package, (iii) account for asymmetric gas stranding risk, (iv) mitigate the risk of under-estimating the true cost of equity and resulting risk of under-investment in energy networks leading to material consumer detriment (reduced quality of service; black outs etc) and (v) incentivise more investment in energy networks to meet Net Zero targets.

257. GEMA addressed these arguments and explained its selection of the 4.55% point estimate at FD, Finance Annex, §§3.176-3.186: see also Kaul, §79 to §83 and Wilde 1, §§93-103. In summary, GEMA took a balanced judgement on the evidence before it having regard, in particular, to the risk that 4.55% might underestimate or over-estimate the true cost of equity of the efficient energy company and the negative consequences of under- and over-estimating the true cost of equity. Specifically:

257.1 GEMA recognised that setting an allowed return on equity that underestimates the true cost of equity of the efficient energy company <u>risks</u> undermining marginal decisions to invest, potentially leading to long term under-investment and consumer harm: Wilde 1, §108.3.

257.2 GEMA was not, however, convinced that the risk of under-investment and consumer harm flowing from an allowed return on equity marginally below the true cost of equity are as high as suggested by some studies, notably that of Professor Dobbs: FD, Finance Annex, §3.181. In this regard, GEMA noted that (i) if there were a strong link between under-estimating the true cost of equity and under-investment, one would expect a similarly strong link between over-estimating the cost of equity and over-investment, (ii) there is good reason to believe that GEMA had over-estimated the true cost of equity in its allowed returns on equity for RIIO-1, but (iii) there is no evidence of over-investment in RIIO-1 (instead most energy companies underspent their allowances) suggesting that (iv) the link between allowed returns on equity and degree of investment may not be especially strong. See Kaul, §84; Wilde 1, §110.

257.3 In any event, 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 of the efficient energy company at the outset of RIIO-2: Wilde 1, §§59-66, 108.3-108.5 & 111. As explained by Mr Wilde, market-to-asset ratios ("**MAR**") are particularly telling in this regard. For example, National Grid's announcement in March 2021 (after publication of the RIIO-2 FDs) that it had agreed to pay a premium of 61% over asset value for the acquisition of WPD strongly indicates that investors require lower returns on equity than those allowed under the RIIO-2 settlement: Wilde 1, §59.

257.4 Indexation of the allowed return on equity – by annually updating ILGs to set the RFR – gave GEMA a relatively high degree of confidence that the allowed return on equity would not fall out of line with the true cost of equity over the course of RIIO-2: Wilde 1, §111.

257.5 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 in future price controls and may in extremis justify adjustments to allowed returns in RIIO-2: see Kaul, §83.3.

257.6 GEMA considered that multiple aspects of the RIIO-2 settlement – other than the allowed return on equity – provide strong incentives for investment in maintaining or improving the quality of service, such as Output Delivery Incentives ("**ODIs**"), licence obligations and quality of service obligations: FD, Finance Annex, §§3.181; Wilde 1, §108.2.

257.7 Other aspects of the RIIO-2 settlement, notably uncertainty mechanisms ("**UMs**"), could be deployed to increase allowances to support strategic investment or innovation – in particular, in relation to Net Zero targets - at any point in RIIO-2 where a sufficiently good case is made out.

258. Each of the Appellants contends that GEMA erred in selecting a point estimate for the cost of equity that "aims straight" within the Step 1 CAPM-implied cost of equity range. The following arguments are common to all or most Appellants and are addressed in turn below:

258.1 GEMA is wrong to suggest that it has "aimed up" by selecting a point estimate above the mid-point of the Step 2 cost of equity range because the Step 2 cross-checks were themselves unreliable: Cadent, §§4.150-4.154; NGN, §213; SGN, §275; SHE-T, §§§4.86-4.91; SPT, §39; WWU, §§B5.13-B5.14;

258.2 GEMA ought to have "aimed up" for uncertainty – in particular:

a) GEMA has failed to have due regard to the fact that other regulators, including the CMA in PR19 and the New Zealand Commerce Commission, have routinely "aimed up" in selecting a point estimate for the cost of equity: Cadent, §4.145; NGET, §§3.332-3.346; NGG, §§3.332-3.346; SHE-T, §§4.83-4.85; SPT, §35.

b) GEMA has misunderstood and mischaracterised the principle of "aiming up" by describing it as allowing a "*material premium above the cost of capital*" at FD, Finance Annex, §3.183: Cadent, §4.114; NGET, §3.359; NGG, §3.359; NGN, §211(ii); SGN, §§252-253; SHE-T, §4.82; WWU, §§B5.6-B5.7;

c) Related to (ii) above, GEMA failed to appreciate that "aiming up" is necessary as a matter of principle because the consequences of over-estimation of the costs of equity (higher consumer bills) are less serious than the consequences of under-estimation (disabling efficient investment, capital exit risk, reduced quality of service and, ultimately, system failures such as blackouts): Cadent, §§4.111-4.117; NGET, §§3.355 & 3.365-3.368; NGN, §§211(i)-(iv); SGN, §248-251 & 254; SHE-T, §§4.92-4.97; SPT, §§36-37; WWU, §B5.7;

d) Related to (iii) above, GEMA erred in finding that ODIs, licence obligations and UMs contained in RIIO-2 create sufficient incentives to secure appropriate investment in energy networks over the long term: Cadent, §§4.119-4.121; NGET, §3.358; NGN, §211(v); SGN, §§255-256; SPT, §38(1); WWU, §B5.8;

258.3 GEMA ought to have "aimed up" for asymmetry. In particular:

e) GEMA has failed to appreciate that "aiming up"' is necessary where price control settlement involves asymmetric risks – i.e. where investors risk losing more than they stand to gain: NGET, §§3.353-3.354; SPT, §38(2).

f) GEMA has failed to recognise a 'gas stranding risk' - a number of the Appellants suggest that investment, in gas networks in particular, presents substantial asymmetric risks given the real risk of gas network asset stranding in light of the UK "Net Zero" agenda: Cadent, §§4.123-4.134; NGN, §212; SGN, §§261-268 & 270-271; WWU, §4.41.

Whether GEMA did, in fact, aim up

259. This is an arid linguistic quibble. GEMA was clear about how it arrived at its point estimate for the notional cost of equity and how that estimate relates to the cost of equity ranges derived at both Step 1 (CAPM) and Step 2 (market-based cross-checks).

260. Whether GEMA can properly be described as "aiming up" in the circumstances is irrelevant. The real question is whether GEMA's point estimate represents an exercise of judgement that is balanced and reasonable in all the circumstances. It plainly does. In particular, GEMA was fully cognisant of the risks of the expected return on equity (including the baseline allowed return on equity and expected outperformance) falling below the true cost of equity.

261. GEMA considers that companies can expect to earn returns above their cost of equity for three primary reasons. First, a 4.55% cost of equity is a conservative reading of the body of evidence from GEMA's Step 1 and Step 2. Second, expected outperformance is likely to be higher than 0.25% based on the body of evidence that GEMA assembled, and by accounting for only 0.25% GEMA has therefore again been conservative in favour of the network companies. The Appellants have attempted to mischaracterize the debate in narrow terms, as only being about the cost of equity range and the baseline allowed return. The consumer welfare that companies focus on only arises when the *expected return* is lower than the *expected cost of equity*. Third, GEMA's inclusion of an ex-post true-up mechanism secures that companies are protected if 0.25% of expected outperformance does not materialize – this is a one-way upwards only adjustment, again in favour of the network companies.

"Aiming up" for regulatory precedent

262. As regards regulatory precedent, GEMA acknowledged that it was common for regulators to "aim up" within their CAPM-implied range for the cost of equity: see FD, Finance Annex, §3.182. However, there is no general rule that "aiming up" is required and GEMA has itself "aimed up", "aimed down" or "aimed straight" in its cost of equity point estimates in past price controls: Wilde 1, §§84-90. Other regulators have also "aimed straight" or "aimed down" depending on the circumstances: Wilde 1, §§72-83, 96 & 104.

263. The absence of any general rule on where, within a reasonable range, the allowed cost of equity point estimate should fall was recently acknowledged by the CMA in NERL PFs, §12.262:

> *"It is [then] a* ***matter of judgement*** *whether the evidence for different points within the range should be given more weight, and therefore whether the level [for the allowed return] should ultimately be towards the top end* ***or the bottom end of the range." [emphasis added]***

264. In the absence of any rule requiring "aiming up", the question is whether GEMA has properly and reasonably exercised its regulatory judgement in selecting the point estimate for the baseline allowed return; a tally of the price controls in which the regulator has or has not "aimed up" on the cost of equity is ultimately uninformative in this regard. Nor should the CMA's preference for "aiming up" in PR19 (where it was required to reach a re-determination of the water price control settlement) inform its approach to this appeal (where its role is to <u>review</u> GEMA's decision on the merits, but not to stand in GEMA's shoes or to conduct a full re-hearing of the evidence): see paragraphs 44-47 above.

265. Contrary to the Appellants' assertions, GEMA well understood the principle of "aiming up" and the arguments in favour of it. In particular, GEMA understood and appreciated the basic "societal welfare" argument[120] in favour of "aiming up" that (i) long term under-investment due to the expected return on equity (including the allowed return on equity) being set too low and falling below the true cost of equity is a more serious negative consequence than (ii) higher than necessary consumer bills due to cost of equity being set too high: FD, Finance Annex, §3.181; Wilde 1, §108.1. The references to returns "*materially exceeding the costs of capital*" at FD, Finance Annex, §3.183 refer to the risk of materially exceeding the true costs of capital through indiscriminate "aiming up" regardless of context and the surrounding circumstances.

266. However, as explained in Wilde 1, §§108-114, this argument for "aiming up" does not imply that any regulator setting a price control should always select a point estimate for the notional cost of equity above the mid-point of <u>any</u> estimated range. Instead, the merits of "aiming up" will logically depend on:

266.1 The regulator's level of confidence in the robustness of the cost of equity assessment – i.e. what it assesses as the risk of a particular point estimate being an under-estimate of the true cost of equity;

266.2 The regulator's level of confidence that the expected return on equity would be above the assessed cost of equity; and

266.3 The regulator's assessment of the level of risk of under-investment in all the circumstances.

[120] See Wilde 1, §108.1.

267. These are matters of regulatory judgement. GEMA duly considered each matter and reached conclusions that are entirely reasonable and should not be interfered with in this appeal. As explained above:

267.1 GEMA is very confident – based on market cross-checks, in particular, MARs – that 4.55% is unlikely to be an underestimate of the true costs of equity. Any inadvertent under-estimate of the true cost of equity can be observed in share prices and adjusted for in this or future price controls;

267.2 GEMA's view is that companies have reasonable expectations of outperforming the allowed return on equity by at least 0.25%– i.e. of achieving actual equity returns for their shareholders at least 0.25%in excess of the 4.3% returns accounted for in the RIIO-2 revenue allowances. If they do not achieve 0.25%, companies will benefit from the expected outperformance ex post mechanism, so that returns are adjusted upwards (by up to 0.25%) accordingly; and

267.3 GEMA considers that the risks of short to medium term under-investment are substantially addressed by other incentive mechanisms in the RIIO-2 settlement (e.g. ODIs, quality of services obligations). In any event, the link between underestimating the true cost of equity and long-term under-investment in networks is over-stated given the lack of observed over-investment in RIIO-1 (when the allowed return on equity likely over-estimated the true cost of equity).

268. As to the argument summarised at §258.2d) above, contrary to the Appellants' assertions, GEMA did not consider that ODIs, licence obligations etc. remove any role for the allowed return on equity in incentivising appropriate long-term investment. The FD Finance Annex, §3.181 refers to these incentive mechanisms as matters that give GEMA a substantial degree of confidence that incentives to invest would not be undermined in the short to medium term. GEMA also had due regard to the need to secure appropriate long term investment, but did not consider that it justified a baseline allowed return onequity above 4.55% in these circumstances. Further, in the event that the point estimate did prove too low to secure long-term investment, this could be readily observed in MARs and addressed through the cost of equity estimate in the next price control process – or, in extremis, in adjustments to RIIO-2 itself.

"Aiming up" for asymmetric risk

269. As to the argument summarized at §258.3e) above, GEMA accepts, in principle, that material net asymmetric risk in a price control settlement would warrant a degree of "aiming up" on the allowed return on equity. However, GEMA did not consider that the RIIO-2 settlement did present so a sufficiently material net asymmetric risk to licensees: FD, Finance Annex, §3.179; Wilde 1, §98-99. This represents both a factual conclusion and an exercise of judgement by GEMA. Its view was entirely reasonable and, indeed, supported by responses to DDs (FD, Finance Annex, §3.179). There is no basis for the CMA to interfere with that assessment.

270. As to the argument at §258.3f) above, the 'stranding risk' referred to is the risk that declining use of the gas network is so severe as to prevent gas network companies from recovering both historic and future capital investment from consumers. However, the relevant Appellants (Cadent, NGN, SGN & WWU) themselves have not sought to mitigate this risk by seeking increases in capital depreciation allowances for RIIO-2.

271. By contrast, NGGT did propose such accelerated depreciation to account for stranding risk. GEMA accepted NGGT's argument for accelerated depreciation (including backlog depreciation).[121] Thus, GEMA acted rapidly to increase the speed that NGGT's RAV was repaid to its investors. GEMA showed a similar willingness to manage this risk when setting the accelerated depreciation policy for gas distribution RIIO-1 in 2011.[122] Indeed, GEMA noted in its 2011 finance decision that "…*network operators accepted this proposal as a good way of reducing the risk of lower utilisation in the future*…".[123] Reflecting this, it is also telling that NGGT's Notice of Appeal does not refer to any 'gas stranding' risk. Further, in support of NGGT's appeal, Darren Pettifer (NGG_DP1, §177(a)) argues:

> *"For NGG, there has been a growing perception in the investment market that there is an uncertain future for gas networks given Net Zero and the push to decarbonise heat. We do not agree with this, and have set out a vision that our networks can be used for transporting hydrogen and be used for other purposes such as storing carbon, however this future will involve different investment to today and the perception is still driving increased uncertainty and perception of risk for investors."*

272. GEMA considers such provision for accelerated depreciation to be a more appropriate way to manage gas asset stranding risk than increasing allowed returns on equity, which would lead to higher consumer charges. In particular, GEMA is concerned to ensure that gas network companies have appropriate incentives to manage gas asset stranding risks with GEMA's cooperation; such incentives would be undermined if companies were allowed higher returns on their regulatory asset base (militating in favour of keeping their regulatory asset base high/slowing depreciation). GEMA's policy judgement in this regard is explained at Wilde 1, §§100-103. It is entirely reasonable and unimpeachable in this appeal.

[121] https://www.ofgem.gov.uk/system/files/docs/2020/07/draft_determinations_-_finance.pdf#page=144 §10-1 to 10.12 [F1/06]

[122] https://www.ofgem.gov.uk/sites/default/files/docs/2011/03/gd1decisionfinance_0.pdf#page=16 [F1/25]

[123] Ibid § 2.47

Other individual complaints

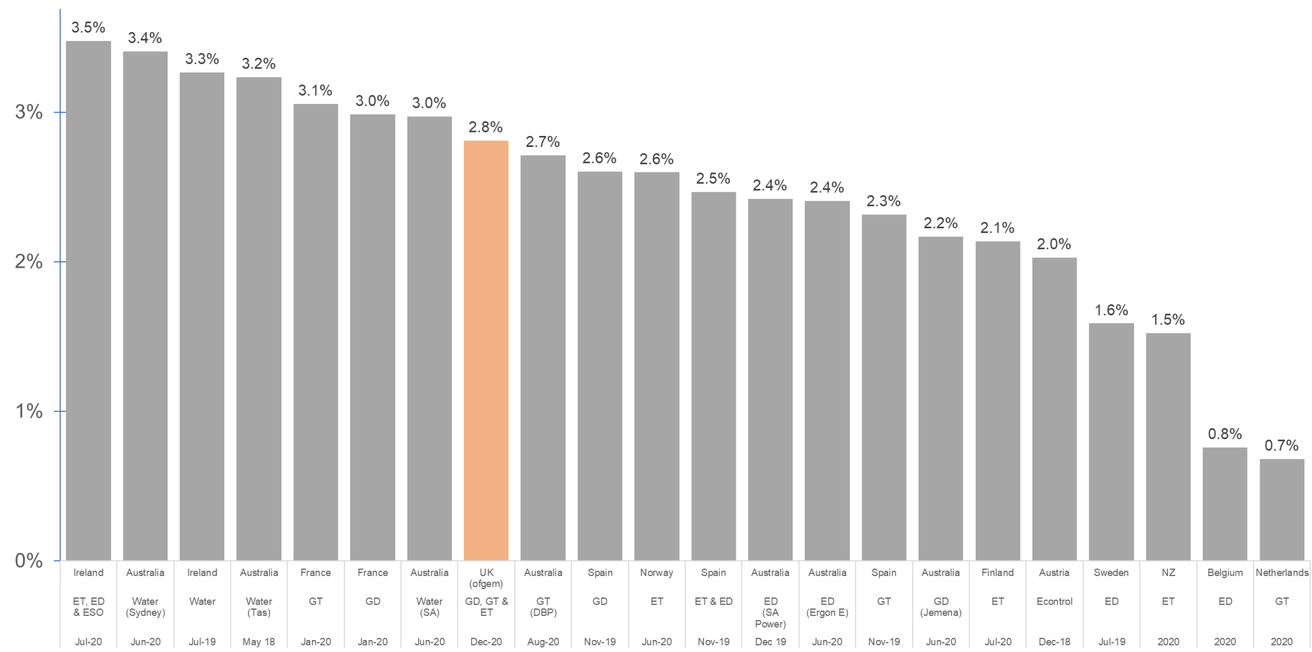
273. Individual Appellants make the following additional arguments in relation to GEMA's selection of the 4.55% point estimate for the cost of equity of the notional company:

273.1 GEMA's decision not to "aim up" within the Step 1 CAPM-implied cost of equity range was unduly influenced by considerations of political risk: Cadent, §4.122. This is pure speculation with no basis in the text of the RIIO-2 documentation or in any other evidence. It is simply wrong, as explained at Wilde 1, §§143-144.

273.2 GEMA's decision not to "aim up" within the Step 1 CAPM-implied cost of equity range was unduly influenced by energy companies' out-performance in RIIO-1: NGET, §3.360. To the extent that this is intended to suggest that GEMA deliberately under-estimated the notional cost of equity in RIIO-2 to account for out-performance in RIIO-1, this is baseless. However, companies' out-performance in RIIO-1 did affect GEMA's assessment of the strength of the link between under (over) estimating the true cost of equity and under (over) investment in networks: see Kaul, §§84; Wilde 1, §110.

273.3 GEMA has failed to have due regard to the higher regulatory returns on equity available in other jurisdictions and the fact that "aiming up" is required in these circumstances to secure investment in the GB energy sector: SPT, §35. However, a brief look at tangible evidence indicates GEMA erred on the side of caution compared to other jurisdictions. The figure below shows that regulators in other countries typically allow returns on capital *below* the level that GEMA allows for RIIO-2: see Wilde 1, §130.

Figure 1: Allowed returns on capital: proposals and decisions internationally



Source: WACC_Allowances_by_Country v920

273.4 GEMA ought to have "aimed up" in light of increased political and regulatory risk not captured in historic beta observations used for the purposes of the CAPM: SHE-T, §§4.98-4.100. This appears to be an argument for "aiming up" on the estimate of an individual CAPM parameter, namely equity beta. GEMA explained why the question of "aiming up" could only properly be considered when setting the overall allowed return on equity – and should not be considered at the level of individual parameters in Framework Consultation[124] page 126: see also Wilde 1, §120. GEMA's judgement in this regard is entirely reasonable and there is no basis for the CMA to interfere on appeal.

Conclusion on aiming-up

274. The decision as to where within the CAPM-implied range to set the point estimate for the cost of equity is a matter for regulatory judgement. "Aiming up" within the range cannot be required in all cases – and regardless of, for example, the conservatism of assumptions used in estimating the range and/or the regulator's confidence in the robustness of its estimates.

275. Having duly considered the arguments in favour of "aiming up" as well as all other relevant matters, GEMA concluded that 4.55% was highly unlikely to be an under-estimate of the true cost of equity of the efficient energy company and 4.3% allowed return on equity when combined with actual expected outperformance was highly unlikely to under-provide equity investors. There is no basis for the CMA to interfere with that judgement.

Conclusions - overall sufficiency of return (including equity financeability)

276. Each of the Appellants contends that the combined effect of GEMA's alleged errors in (i) the application of the CAPM (Step 1), (ii) the application of cost of equity cross-checks (Step 2) and (iii) the selection of a cost of equity point estimate is a RIIO-2 allowed return on equity that is too low and/or fails to set an appropriate balance of risk and return and/or impairs the equity financeability of the gas and electricity network companies and/or fails appropriately to incentivise the efficient investment in networks that will be required to deliver the UK government's Net Zero agenda: see, e.g. Cadent, §§4.161; NGET, §§3.329-3.398; NGG, §§3.392-3.398; NGN, §§216-217; SGN, §§277-278; SHE-T, §§1.49 & 3.4; SPT, §§49-52; WWU, §§B1.9-B1.11.

277. The RIIO-2 allowed return on equity is the outcome of multiple individual, but interconnected, decisions taken by GEMA exercising its regulatory judgement having due regard to all relevant considerations, including its principal objectives and general duties and the submissions made and evidence presented to it during extensive consultation.

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124 https://www.ofgem.gov.uk/system/files/docs/2018/03/riio2_march_consultation_document_final_v1.pdf#page=126 [F1/10]

278. In addition, certain Appellants contend that GEMA further erred in setting the allowed return on equity by:

278.1 Failing to apply an assessment of equity financeability as a cross-check on the allowed return on equity: see, e.g. Cadent, §§4.138-4.140; SGN, §283; and/or

278.2 Carrying out a financeability assessment that (i) was overall focused on debt financeability and (ii) was only passed based on a number of unjustified assumptions regarding the characteristics of the notional energy company (such as gearing, proportion of index-linked debt and dividend yields): Cadent, §§4.141-4.143; NGET, §§3.399-3.402; NGG, §§3.399-3.402; SGN, §285. In this regard, Cadent and SGN in particular rely on a Financeability report from KPMG: see Cadent, §4.143; SGN, §283.

279. GEMA's assessment of the financeability of the notional efficient energy company is set out at FD, Finance Annex, Section 5 and further elaborated in Wilde 1, §§147-186. It will be evident from those passages that each of the arguments summarised at §278 above is no more than a disagreement with GEMA's exercise of regulatory judgement in relation to matters with respect to which reasonable people may differ. In particular:

279.1 GEMA took the reasonable view 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 for a notional efficient operator to finance its activities; while other market-based cross-checks (as described in Section E (iv) above) are significantly more informative on the estimated notional cost of equity: see Wilde 1 , §§167-169. This is in line with standard regulatory practice, including GEMA's own approach to financeability assessment in the past;

279.2 The assumptions as to the relevant characteristics of the notional efficient energy company used by GEMA to assess financeability are reasonable and supported by evidence: Wilde1 , §§170-180. The fact that KPMG has arrived at a different assessment on the basis of alternative assumptions does not disclose any appealable error.

280. Overall, the arguments raised by the Appellants do not justify the CMA interfering with GEMA's allowed return on equity on grounds of financeability.

F. EXPECTED OUTPERFORMANCE

Introduction and overview

281. All eight Appellants contend that GEMA was wrong to make a downwards adjustment of 0.25% to the allowed return on equity to reflect investors' expectations of outperformance.

282. It is no surprise that licensees should seek to challenge the first use of a novel regulatory tool. However well-grounded in the evidence; however strongly rooted in

economic theory and regulatory principle; however compelling its justification; there is little to lose and much to be gained from such a challenge.

283. At its essence, this is a dispute about a limited category of evidence. This is the evidence of outperformance of regulated companies across price controls, across sectors, and over time. That evidence is clear and compelling. GEMA has acted on that evidence, in accordance with its statutory duties and its principal objective. It has decided, in the exercise of its expert regulatory judgement, to adjust the allowed return on equity by reference to the weight of evidence of investor expectations of outperformance.

284. 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. Those issues are complex but ultimately irrelevant to the question before the CMA, which is whether GEMA's decision "*lay outside the bounds within which reasonable disagreement is possible*": *British Gas Trading Limited* (CMA, 29 September 2015), §3.30.[125] GEMA respectfully submits that this decision lay well within those bounds.

285. Tellingly, even as the Appellants seek to challenge this decision by arguing that GEMA has overstated the prospects for outperformance, the parent company of the First and Second Appellants ("National Grid") has announced its acquisition of Western Power Distribution ("WPD") at a 61% premium to RAV: see Wilde 1 §181 and Kaul §§122 to §§126.It seems that even the Appellants consider substantial outperformance to be all but guaranteed under the RIIO-2 framework.

286. The Appellants contend, in summary, that the outperformance adjustment is wrong in principle, unnecessary, and harmful (because it will undermine incentives and/or jeopardise equity and possibly debt financeability). These arguments are without merit. In summary, and as set out further below:

286.1 The principled distinction between expected returns and allowed returns is strongly grounded in economic evidence. The weight of this evidence supports the view that information asymmetry is a structural feature of price controls and a degree of outperformance based on information asymmetry cannot be excluded. GEMA's decision to make a modest adjustment to allowed returns is a rational and considered response to the evidence and in any event is well within the bounds of the regulator's judgement.

286.2 The risk of harm is low because the impact on incentives is minimal, and the ex-post adjustment will avoid any risk of undermining the incentive to invest or of jeopardising financeability.

Background and GEMA's decision

287. GEMA's decision is rooted in a detailed study commissioned by the UK Regulators Network ("UKRN") in 2018 on cost of capital (the "UKRN Report").[126] The UKRN

[125] The CMA cited with approval the decision of the Competition Commission in *E.ON UK plc* (CC, 10 July 2007).
[126] UKRN Report, 2018. [F1/18]

Report concluded that there was a distinction between the regulator's best estimate of the cost of capital, the regulator's allowed return; and the level of return which is expected by investors (which comprises the allowed return plus any outperformance on regulatory targets).[127] Part of the gap between expected and allowed returns was termed the "informational wedge".[128]

288. The UKRN Report concluded that *"there have been a number of problems in implementation of regulation that have stemmed from a conflation of these quite distinct concepts."*[129] In particular, there have been very high returns on regulated capital, and market valuations of certain regulated companies indicate significant premia over the value of their regulatory asset bases. In some cases, the UKRN Report noted that this premia has exceeded RAV by 40% (of course, the acquisition of WPD at 61% premium over RAV was yet to be announced). For the period 1998-2016, the UKRN Report noted that the average premia on regulated firms was 24% above RAV.[130] This is strongly suggestive of information asymmetry, which the UKRN Report described as a structural feature of price-cap regulation in the UK, where the prospects of additional returns during a price control provide an incentive to reduce costs or improve performance.[131]

289. In light of this evidence of systemic outperformance and structural information asymmetry, three authors of the UKRN Report recommended that (i) regulators should collect data on outperformance; and (ii) expected outperformance be factored into regulators' decisions when setting the allowed return. The fourth author, Phil Burns, agreed with the evidence of premia being paid on regulated companies. However, in his view, an adjustment for expected outperformance would not benefit consumers and may even be detrimental, relative to the current regime.[132]

290. GEMA consulted on the proposal to implement a distinction between expected and allowed returns in the Framework Consultation, as suggested in the UKRN Report. In the Framework Decision, GEMA noted that most stakeholders did not comment on the proposal to distinguish between expected and allowed returns. GEMA decided to implement that distinction.[133]

291. In the SSMC in December 2018, GEMA proposed to adjust the allowed return by reference to positive or negative investor expectations. GEMA published a dataset on outperformance from previous price controls both within and outside the energy sector, as well as published equity research indicating that outperformance was expected for future price controls.[134] GEMA decided to adopt a conservative approach by suggesting an allowed return on equity which was within the bounds of the cost of

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[127] UKRN Report, 2018, pp6, 64-66.[F1/18]
[128] UKRN Report, p.7.[F1/18
[129] UKRN Report, 2018, p.6 §1.2. [F1/18]
[130] UKRN Report, 2018, pp12-1 [F1/18]
[131] UKRN Report, p.7. [F1/18] [F1/18]
[132] UKRN Report, 2018, pp16, 80-88. [F1/18]
[133] Framework Decision §§6.36, 6.43. [F1/12]
[134] SSMC §§3.160-3.161 and Appendix 4. [F1/04]

equity evidence generally.[135] GEMA identified a working assumption of 4.5% CPIH expected equity return with 0.5% expected outperformance, i.e. the proposed working assumption for the allowed equity return was 4.0% CPIH real.[136]

292. In the SSMD in May 2019, GEMA explained that respondents to the consultation had generally accepted the in-principle distinction between allowed returns and expected returns, but argued that no deduction should be made for expected outperformance (i.e. the expected and allowed returns should be equal).[137] While all network companies opposed the idea of an adjustment for outperformance, Centrica argued that the proposed approach was too conservative and that the working assumption should be an adjustment greater than 0.5%.[138] In light of these responses, GEMA decided to implement the distinction between expected and allowed returns but proposed that the quantum of expected outperformance would be revisited at DDs.[139]

293. At DDs in July 2020, GEMA published three detailed excel models which had informed its assessment of expected outperformance.[140] GEMA's analysis of MARs in the water sector following Ofwat's PR19 final determination showed significant premia over RAV (in excess of 20%, post PR19's cost of equity allowance of 4.3% CPIH real).[141] Independent advice obtained from CEPA and published alongside the DDs was to similar effect.[142] That analysis demonstrated that the premia paid in the water sector indicate investor expectations of outperformance at approximately 3.7% for 20 years. Given the similarities between water and energy, this MAR analysis was a strong piece of evidence for the energy sector in terms of the cost of equity. GEMA's analysis of MARs in the energy sector indicated premia in the 10-20% range for energy companies.[143] GEMA concluded that *"expected outperformance of 0.25% is a fraction of the outperformance that is reasonably derived from MAR evidence"*.[144]

294. At DDs, GEMA noted that network companies continued to oppose an adjustment for expected outperformance and that they considered that totex underspending in previous price controls may not be repeated in RIIO-2.[145] The network companies generally considered a 0.5% adjustment excessive. However, the independent analysis published by the RIIO-2 Challenge Group noted the limited evidence in support of the network companies' universal rejection of the 0.5% outperformance, and noted the significant outperformance in RIIO-1.[146] Similarly, HMK Advisory noted in its report

135 SSMC §§3.162, 3.169-170. [F1/04]
136 SSMC §§3.166m 3.172-173. [F1/04]
137 SSMD Core Document, §12.55. [F1/08]
138 SSMD Core Document, §12.55. [F1/08]
139 SSMD Core Document, §12.57. [F1/08]
140 DD Finance Annex, Table 22, Figure 16 and Figure 18 [F1/06]
141 DD Finance Annex §3.77-3.79 [F1/06]
142 DD Technical Annex [F1/07]
143 DD Finance Annex §3.135-138[F1/06]
144 DD Finance Annex §3.138. [F1/06]
145 DD Finance Annex, §3.109. [F1/06]
146 DD Finance Annex §3.110 and Figure 14; see also analysis by Centrica at §3.112 and Figure 15. [F1/06]

for Citizens Advice that past levels of outperformance would support an adjustment closer to 1.5%.[147]

295. Also at DDs, GEMA published its comprehensive database of available totex information from the gas, electricity, water and aviation sectors over a 20-year period covering 24 price controls.[148] GEMA has compiled a database of 943 observations (licensee-years) which demonstrated a clear tendency towards underspending on totex, with an average underspend of approximately 7%.[149] Upon rigorous testing, the data proved not to be sensitive to sector, time period, price control, licensee or company.[150]

296. The database of 943 observations was then analysed by reference to further, RIIO-2 variables, inputting: (i) RIIO-2 incentive strengths; (ii) the RIIO-2 ratio of totex to RAV; and (iii) the RIIO-2 notional gearing level of 60%. This analysis demonstrated that a totex underspend of approximately 2-4% would deliver expected outperformance of 0.25% on equity.[151] At various stages during the consultation process, the Appellants had argued that much higher levels of totex underspend would be needed to achieve outperformance of 0.25%.[152] Tellingly, the Appellants now appear to accept the accuracy of GEMA's analysis on this point.[153] Further, Ofgem's database of readily available regulated companies in all sectors shows that actual totex has been lower than allowed/forecast totex 72% of the time (i.e. there has been totex underspend in 152 of 210 price controls).[154]

297. GEMA's analysis also identified a positive correlation between totex performance and service incentive performance.[155] Expected outperformance is driven, at least in part, by these service incentive mechanisms. This rigorous analysis demonstrated that network companies generally spend less than their allowances and beat regulatory performance targets, across 24 price controls reviews, over 50 licensees, over a 20-year period.[156] GEMA concluded that this analysis generally supported expected outperformance levels above 0.25% for RIIO-2.

298. In light of the weight of the evidence, and using its regulatory judgement, GEMA decided to implement an adjustment to allowed returns for expected outperformance of 0.25%.[157]

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[147] DD Finance Annex §3.111. [F1/06]
[148] DD Finance Annex, §3.121-125. [F1/06]
[149] DD Finance Annex §3.122-3.123. [F1/06]
[150] DD Finance Annex §3.124. [F1/06]
[151] DD Finance Annex §3.126. [F1/06]
[152] FD Finance Annex §3.126 [F1/06]
[153] NGET and NGG provide the same estimates of 2-4% in their NoA (§4.102); see further NGN at §247; Cadent at §1.49; SGN at §298.
[154] PJ1_073]
[155] DD Finance Annex §3.126 [F1/06]
[156] DD Finance Annex §2.127. [F1/06]
[157] DD Finance Annex §3.139. [F1/06]

299. GEMA also consulted on an ex-post top-up on close-out in the event that outperformance of 0.25% is not realised.[158] GEMA proposed that this would be based on sector average performance.

300. At Final Determinations, GEMA noted that, despite continued opposition from network companies, the RIIO-2 Challenge Group considered the evidence pointed to a 0.5% deduction while Citizens Advice considered that a realistic level of expected outperformance was 1.6%.[159] Considering the evidence and analysis, and bearing in mind the consultation responses, GEMA decided to make a deduction of 0.25% from the assessed point estimate of 4.55%, i.e. to provide a baseline allowed return on equity of 4.3%.[160] This reflected a cautious approach in light of GEMA's view that expected outperformance was very likely to be higher than 0.25%.[161]

301. GEMA also decided to implement an ex-post adjustment mechanism to protect investors, so that each licensee will receive a top-up allowance up to 0.25% if that degree of outperformance is not realised. Bearing in mind the consultation responses to DDs, GEMA decided that a licensee-specific approach would be preferable to a sector-average approach. This would avoid the complexity of creating separate pools of licensees for calculating average performance, while also avoiding the chance of a single licensee or company driving average outperformance such that no top-up would be paid.[162]

302. GEMA noted that several licensees contended that this approach would reduce or remove the incentive to outperform. However, GEMA considered that there remained a strong incentive to earn more than 0.25% and that any diminution of incentives up to the 0.25% level would be marginal.[163]

Response to Grounds of Appeal

303. The objections to GEMA's approach on behalf of the eight Appellants are overlapping, and they are addressed together below. The objections can be summarised briefly as follows:

303.1 The outperformance adjustment of 0.25% is unjustified and/or unnecessary:

303.2 The outperformance adjustment of 0.25% is harmful (because it will undermine incentives, increase the cost of capital, and/or undermine equity financeability), and the ex-post adjustment does not redress that harm.

304. As explained further below, these challenges are without merit. GEMA's approach is principled, supported by the weight of economic evidence, and gives effect to its principal objective and to GEMA's statutory duties. In any event, it is well within the scope of the regulator's discretionary judgement. The appeals should be rejected.

158 DD Finance Annex §3.153-160. [F1/06]
159 FD Finance Annex §§3.138-3.139; see also §§3.155, 3.164. [F1/05]
160 FD Finance Annex §3.147. [F1/05]
161 FD Finance Annex §3.165. [F1/05]
162 FD Finance Annex §3.169. [F1/05]
163 FD Finance Annex §3.174. [F1/05]

The outperformance adjustment of 0.25% is unjustified and/or unnecessary

305. The Appellants advance a number of arguments in support of the contention that the outperformance adjustment is unjustified:

305.1 It is wrong in principle to make a deduction from allowed returns to reflect investor expectations of outperformance;

305.2 An outperformance adjustment is unnecessary because there are other measures available to address information asymmetry;

305.3 The decision is poorly reasoned, relies on flawed assumptions and/or its evidentiary basis is flawed;

305.4 The adjustment will have a discriminatory and/or disproportionate impact on licensees;

305.5 The adjustment is not consistent with best regulatory practice and/or GEMA has failed to have regard to the principles of good regulation in implementing the adjustment.

306. These arguments are addressed in turn below.

It is wrong in principle to make a deduction from allowed returns to reflect investor expectations of outperformance

307. The Appellants contend that adjusting allowed returns by reference to investor expectations of outperformance is wrong as a matter of principle.[164] This argument draws on Burns' dissent in the UKRN Report to the effect that outperformance should be addressed through cost and output target and incentive rates rather than a separate lump-sum adjustment.[165]

308. There is no general principle of regulatory theory or practice prohibiting a lump-sum adjustment to allowed returns on equity. If there were, the Appellants would have invoked it. Nor is there any principled reason why an adjustment to reflect a systemic bias in the regulatory framework should *not* be made. On the contrary, where (as here) the evidence shows a clear tendency towards outperformance in spite of the regulator's best efforts to tighten cost and output targets and incentive rates, a modest adjustment to partially rectify that systemic imbalance is well within the regulator's margin of appreciation.

309. Indeed, GEMA's comprehensive review of the evidence allowed it to conclude with high confidence levels (above 90%) that an outperformance assumption of 0% would be unreliable [McCloskey, §168]. Given this, it would have been irrational for GEMA to set the allowed return by reference to expected outperformance of 0%.

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[164] See NGET and NGG, §§4.31-4.39; NGN §§246-253; Cadent §§246-253; SHE-T §§5.4, 5.8; WWU §§B6.6.

[165] UKRN Report, Section 9. [F1/18]

310. The weight of evidence supports GEMA's conclusions as to the structural nature of information asymmetry. GEMA's database of 943 observations, published at DDs, demonstrated a clear tendency towards underspending on totex, with an average underspend of approximately 7%.[166] As noted above, upon rigorous testing, the data proved not to be sensitive to sector, time period, price control, licensee or company.[167]

311. That evidence is compelling. GEMA commends it to the CMA.

312. GEMA has assessed the dataset carefully, and has controlled with reference to RIIO-2 variables (incentive strengths, totex/RAV ratio, and notional gearing of 60%).[168] The data show that outperformance of <u>at least</u> 0.25%, based on past totex underspend alone, is probable. This rigorous analysis demonstrated that network companies generally spend less than their allowances and beat regulatory performance targets, across 24 price controls reviews, over 50 licensees, over a 20-year period.[169] It also demonstrated that expected outperformance exceeds 0.25% under each of GEMA's three analytical approaches.[170] Further, when outperformance does occur, it easily exceeds 0.25%.[171] These points are discussed further in Mr McCloskey's Witness statement (§§157 to 173). Indeed as Mr McCloskey demonstrates, the Information Quality Incentive during RIIO-1 led to a more significant overall adjustment in allowed returns (0.35%) to that which is now being proposed for the outperformance adjustment for RIIO-2 [McCloskey §161, Fig 9].

313. 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. For example, the September 2020 report by Frontier Economics (commissioned by National Grid) complains that some of the relevant cells have adjustments which do not feed into any outputs, or that there is very little signposting in the book.[172] Similarly, the KPMG report (commissioned by Cadent) notes, *"while the dataset covers a large number of controls, it does have some gaps",* and contends that the fact that not every price control has resulted in outperformance demonstrates that *"it is possible for regulators to set price controls where there is not overall outperformance without the need for an outperformance wedge adjustment".*[173] The peripheral nature of these objections is telling. The "AR-ER" dataset speaks for itself and an update of of the database is provided to the CMA (see Exhibit PJ1_073).

314. The Appellants contend that outperformance in previous price controls can be accounted for by reference to factors other than information asymmetry. Clearly,

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166 DD Finance Annex §3.122-3.123. [F1/06]
167 DD Finance Annex §3.124. [F1/06]
168 DD Finance Annex §3.126. [F1/06]
169 DD Finance Annex §2.127.[F1/06]
170 DD Finance Annex §3.166.[F1/06]
171 DD Finance Annex §3.126 [F1/06]
172 Frontier Economics, September 2020, 'Further Analysis of Ofgem's Proposal to Adjust Baseline Allowed Returns', pp41-42 [NG ref MH1/3.2.4]
173 KPMG Outperformance Wedge Report, §§6.1.6-6.1.7. [PJ1/032]

information asymmetry is not the sole cause of outperformance. But it is also clear that it is a contributing factor. As the witness statement of Mr Akshay Kaul explains, in addition to the reviews conducted by CEPA and the National Audit Office, GEMA conducted extensive analysis of the causes of outperformance in RIIO-1 (Kaul §40). GEMA found that even under RIIO-2 rules, with corrections for 'known' causes, the average outperformance remained strongly positive. This analysis ("residual outperformance") was presented in paras 3.129-3.132 of the Draft Determinations Finance Annex published in July 2020 and an update of this work is also submitted to the CMA (see [PJ1/080] and Kaul §41). This analysis was presented at DDs and has not been substantially challenged.[174] It shows that even after correcting for 'known'RIIO-1 issues and implementing new RIIO-2 rules, it is very likely that outperformance will still be expected for RIIO-2.

315. Indeed, National Grid appears to agree with GEMA that outperformance remains likely in all regulatory scenarios. The Chief Executive of National Grid explained at a UK Investor Tech-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 organisation… 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"* (see McCloskey §165).

316. Frontier contends that the early price controls of DPCR1-3 and PCR2002 should be removed from GEMA's dataset, and that doing so would reduce observed outperformance to 3.7%.[175] The justification for excluding these early price controls is doubtful (GEMA's predecessors would be unlikely to agree with Frontier, for example, that their "focus was entirely on setting a broadly reasonable 'fixed target' alongside very strong incentives" with "comparatively limited" benchmarking).[176] But even assuming Frontier to be correct, a *reduction* of observed totex outperformance to 3.7% would still support GEMA's decision. GEMA's analysis has shown that totex underspend of approximately 2-4% would deliver expected outperformance of 0.25% return on equity; so observed outperformance of 3.7% excluding the early controls would amply justify GEMA's proposed adjustment (which is in any event well within the scope of the regulator's expert judgement).

317. In addition to this, GEMA's approach is supported by equity analyst estimates and MARs[177] (see further McCloskey §§43-83; Wilde 1 §59-62; Kaul §66]. The MAR analysis is brought into sharp relief by National Grid's proposed acquisition of WPD at a 61% premium to RAV (announced on 18 March 2021, after Final Determinations) (see Kaul §122-128, Wilde 1 §§59-62). Similarly, as Mr McCloskey explains, if financial markets expected returns are below the cost of capital under RIIO-2, one would expect to see a persistent fall in share prices following the

174 See DD Finance Annex §§3.129-3.132 [F1/06].

175 Frontier Economics, September 2021, 'Further Analysis of Ofgem's Proposal to Adjust Baseline Allowed Returns', p44.

176 Frontier Economics, September 2021, 'Further Analysis of Ofgem's Proposal to Adjust Baseline Allowed Returns', p44.

177 SSMD, §12.52; see further SSMD Finance Annex §3.229 [F1/03]

announcement of the package (see McCloskey §§198-204). This has not been seen (for an analysis of equity responses to the CMA's determinations in PR19 and to GEMA's DDs, see further McCloskey §§202-204).

318. This is powerful contemporaneous evidence that investors continue to expect outperformance under the RIIO-2 framework notwithstanding the Appellants' arguments to the contrary.

An outperformance adjustment is unnecessary because there are other measures available to address information asymmetry and/or past performance is not a good indicator of future performance

319. The Appellants contend that the outperformance adjustment is unnecessary given other measures to address information asymmetry.[178]

320. This is a question to which GEMA has given careful consideration over more than three years of policy development. It has conducted three formal consultations with stakeholders[179] and countless informal bilateral and multilateral consultations. It has assessed each proposed measure for RIIO-2 on its own and in the round. [180] In GEMA's expert regulatory view, information asymmetry cannot be completely eliminated from the RIIO-2 package.

321. In relation to the specific measures invoked by the Appellants, GEMA's view is as follows:

321.1 Although the Business Plan Incentive ("**BPI**") was designed to encourage ambition from companies on cost efficiency and to discourage inflated spending plans, the mechanism continues to rely upon information and views provided by licensees. This means that some degree of information asymmetry is likely to continue, even with the BPI in place.

321.2 The increased use of uncertainty mechanisms ("**UMs**") for RIIO-2 (particularly in the transmission sectors) may reduce the impact of information asymmetry to some extent, since allowances will be determined closer to the time when the expenditure is incurred. However, GEMA will still be reliant on information and views provided by licensees, meaning that information asymmetry can be expected to persist. Furthermore, many of the measures (such as enhanced stakeholder scrutiny and the business plan incentive) that were applied in the set-up of RIIO-2 will not be applied in-period to the uncertainty mechanisms.

321.3 Benchmarking methods for RIIO-2, while improved in some respects, are similar to the approaches taken in previous controls. This appears to be recognised by the Appellants themselves, who describe these tools as "tried and tested": see, e.g., NGET and NGG at §4.45. GEMA's tweaks to these existing tools for RIIO-2 may help to address some of the impacts of

178 See, NGET/NGG at §4.44; NGN at §258ff; SGN §§328, 373-382; Cadent at §§5.34-5.40; SPT §§55(3); SHE-T §§5.16-5.17; WWUB6.4 - B6.5.
179 The Framework Consultation [F1/10], SSMC, and DDs.
180 See particularly DD Finance Annex, §3.147 and Table 27.[F1/06]

information asymmetry, but given the scale of past outperformance they are extremely unlikely to eliminate it.

321.4 The Appellants refer to GEMA's extensive assessment process for business plans (see e.g. NGET and NGG, §4.49(b)), but business plans have always been extensively and rigorously tested and information asymmetry has never been eliminated completely.

321.5 Linking certain allowances to outputs through Price Control Deliverables ("**PCDs**") may reduce the impact of information asymmetry in the (limited) areas in which PCDs apply because the allowances will be assessed ex-post. However, the allowances that are linked with PCDs are still subject to information asymmetry because (i) information asymmetry may influence the design of some of the PCDs; (ii) in setting the efficient cost level for each PCD, GEMA is reliant to a large extent on information provided by licensees; and (iii) the assessment of delivery against evaluative PCDs can be influenced by information asymmetry.

321.6 The duration of RIIO-2 is five years, as compared to the eight-year RIIO-1 control. This will bring RIIO-2 broadly in line with price controls in other sectors (e.g. water and communications). While the shorter duration of the price control is likely to reduce the impact of information asymmetry to some extent, GEMA's analysis of outperformance across price controls and over time suggests that outperformance remains likely even in price controls of five years' duration.

321.7 Output Delivery Incentives ("ODIs") introduced for RIIO-2 are unlikely to neutralise expectations of outperformance. ODIs are intended to be broadly symmetrical. Downside-only ODIs apply where minimum standards have not been met or there is an unjustified failure to deliver outputs, and it is unreasonable to consider a failure to meet minimum standards as probable. Similarly, some incentives might have a larger downside because the downside is less probable than the upside. [redacted] The two are not equally likely (as noted by GEMA at FD Finance Annex §3.188). So while the maximum and minimum penalty and reward may be different, GEMA expects that the expected incentive value weighted by probability is likely to be zero or positive.[181]

321.8 The introduction of a Return Adjustment Mechanism ("**RAM**") is unlikely materially to affect information asymmetry or outperformance since the RAM will only be triggered by exceptional or extreme gains or losses. However, the baseline is unaffected by caps, collars or RAMs, and information asymmetry is likely to continue to play a role.

[181] For the same reason, the statement at §87 of the witness statement of Scott Mathieson (SPT) as to the asymmetrical nature of penalties and rewards gives a misleading impression.

321.9 Other measures, such as incentive strength, the RIIO-2 totex:RAV ratio, and RIIO-2 rate of notional gearing, have been controlled for by GEMA in its analysis of expected outperformance (see further paragraph 312 above).

321.10 Finally, GEMA agrees that Use-It-or-Lose-It allowances ("**UIOLI**") cannot be subject to outperformance, and for this reason they were excluded from its analysis.[182]

322. It is no answer for the Appellants to contend that RIIO-2 will be tougher overall than previous controls. Complaints to similar effect are often made during the development of a new price control, and the evidence shows that outperformance has almost inevitably followed.

323. This is because information asymmetry is structural. It is a fundamental feature of the system of regulation that the companies which are the subject of the regulation possess information which is not available to the regulator.[183] The Appellants cannot sensibly contend otherwise (see further McCloskey §§147-154; Kaul §§35 and §§117 ; Wilde 1 §§190, 198-202). To the extent that what is disputed is the degree of information asymmetry and its effects: GEMA has identified outperformance across sectors, regulators and over time, and its rigorous analysis has demonstrated that outperformance under RIIO-2 remains probable.[184]

324. Some Appellants contend that the cumulative nature of these changes is such that the possibility of outperformance has been eliminated, meaning that past performance is not indicative of performance under RIIO-2.[185] But GEMA has controlled for RIIO-2 parameters in the data. GEMA's considered view, in the exercise of its regulatory judgement, is that investors continue to expect outperformance well in excess of 0.25% for RIIO-2.

325. National Grid contends that GEMA's statutory duty in s.4AA(5A) GA86 and s.3A(5A) EA89 (see paragraphs 12-21 above) require GEMA to give the various new RIIO-2 tools an opportunity to work before deciding that further action is needed.[186] Similarly, Frontier Economics appears to suggest that GEMA could only consider implementing an outperformance adjustment for the subsequent price control, once all of the new tools for RIIO-2 have been tested and shown to have been ineffective in eliminating information asymmetry. [187]

326. That argument is unreal. Given the breadth and complexity of a price control package it is inevitable that some features will need to be tweaked, updated or developed in each subsequent control period. But on the Appellants' logic, no novel tool could ever

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182 See DD Finance Annex, Table 26 (which does not include the UIOLI allowances, since they were excluded from the analysis). [F1/06]

183 This was reflected in the UKRN Report's findings: see above, paragraphs 287-288.[F1/18]

184 DD Finance Annex, §3.121.[F1/06]

185 See e.g., Cadent §5.38; NGN §293; SPT §55(3); SGN §§361-364; WWU §§B6.4-B6.5

186 NGET and NGG, §§4.60-4.67.

187 See also Frontier Economics, March 2021, "Wedge Report", §4.2.25: "*At the very least, it would be appropriate for Ofgem to allow this expanded set of regulatory tools a chance to address the information asymmetry concerns first, before implementing a further measure as harmful to incentives and regulatory integrity as the outperformance wedge*". See also §4.3.3. [NGG_MH1-2]

be deployed until every other change could be controlled for. GEMA's statutory duty in s.4AA(5A) GA86 and s.3A(5A) EA89 is a duty to have regard to *"(a) the principles under which regulatory activities should be transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed*"; and "*(b) any other principles appearing to him or, as the case may be, it to represent the best regulatory practice"*. GEMA has had careful regard to those principles. It has concluded that a modest adjustment for outperformance is appropriate in light of the overwhelming evidence of systemic information asymmetry. This approach, though novel, is grounded in the evidence and the regulatory principles expounded in the UKRN Report. It is proportionate, consistent and targeted only at circumstances in which action is needed. It has been implemented transparently and has been the subject of formal and informal consultation dating back almost three years. It cannot credibly be suggested that the statutory duty in s.4AA(5A) GA86 / s.3A(5A) EA89 has been breached.

The decision is poorly reasoned and relied on flawed assumptions and/or its evidentiary basis is flawed

327. The Appellants challenge the rationale underpinning GEMA's decision. They argue, variously: that the evidence of outperformance is overstated; that outperformance can arise from many sources besides information asymmetry; that past performance is not a reliable guide to future performance; that the size of the adjustment (0.25%) is arbitrary; that the impact assessment is inadequate; or that the decision does not reflect the caveats in the UKRN Report. [188]

328. In seeking to challenge GEMA's conclusion that the weight of evidence is in favour of outperformance, several of the Appellants construct a straw man.[189] But GEMA did not conclude that outperformance is inevitable or that a 'fair bet' is impossible: rather, its considered view, based on a comprehensive analysis of the data, is that outperformance is more likely than underperformance and, while underperformance or neutral performance is possible, outperformance is probable.[190]

329. In this regard it is telling that the licensees have not materially challenged the data.[191] Frontier Economics identified a single calculation error within the "residual outperformance" spreadsheet published at DDs, with the result that performance for RIIO-GT2 was overstated.[192] GEMA corrected that error at FDs, noting that the impact of the error was confined to GT and that the corrected spreadsheet continued to support the inference of expected outperformance greater than 0.25% for RIIO-2.[193] Even the licensees have been driven to accept that the dataset shows a greater

[188] See NGET and NGG, §§4.68-4.98; NGN §§245ff; Cadent §§5.29, 5.60-5.70; SGN §§357-386.
[189] See, e.g, NGET and NGG at §4.70, describing GEMA's position as "companies always win".
[190] See, e.g., FD Finance Annex, §3.157 and p.156.[F1/05]
[191] See, e.g., SSMD Finance Annex, §§3.290; §3.295. [F1/03]
[192] Frontier Economics, September 2020, p.51. [PJ1/032]
[193] FD Finance Annex, §3.160.[F1/05]

tendency towards outperformance than underperformance.[194] See further paragraphs 295-297 above.

330. National Grid relies heavily on a selection of price controls which it claims show totex overspends, and that this is evidence that a 'fair bet' is possible.[195] Three of those controls (PR04, PR09 and PR14) were already included in GEMA's original analysis and the fourth, a Northern Irish control, was not included only because the requisite data was not readily available. In any event, the possibility of overspending on totex does not negate the <u>probability</u> of outperformance for RIIO-2.

331. Further, as explained above in paragraph 316, Frontier challenged the basis for excluding certain older price controls in the dataset, but even excluding those price controls from the analysis (which GEMA does not accept), the evidence supports average totex outperformance of 3.7%, which in any event would lead to returns greater than 0.25% above the allowed return on equity.[196]

332. As to the sources of outperformance, GEMA accepts that information asymmetry is not the only contributing factor to sustained observed outperformance. However, the levels of outperformance which are apparent from GEMA's extensive historical dataset support the conclusion that the sustained levels of observed outperformance are difficult to explain in the absence of information asymmetry. [Kaul § 40.1-4; Wilde 1§187-192, §198-203]

333. As to the size of the outperformance adjustment, GEMA made clear at SSMD that the value of the adjustment would depend on the evidence and may well be zero.[197] GEMA's initial working assumption was 0.5% return on equity, which it reduced to 0.25% at DDs in light of (i) consultation responses, (ii) the final RIIO-2 package of incentives, and (iii) careful analysis of business plans. GEMA provided ample evidence at DDs that 0.25% was (easily) supported by the evidence (see paragraph 312 above) – and this evidence was not materially altered by Appellants' responses to DD. Far from an arbitrary figure, GEMA's decision to adopt 0.25% (noting that Centrica and Citizens Advice favoured much more sizeable deductions) reflects GEMA's conservative approach to its first use of this novel tool.

334. As to the alleged deficiencies with GEMA's impact assessment,[198] s.5A of the Utilities Act 2000 is not prescriptive in this regard. GEMA has considered and assessed the impacts of the outperformance adjustment and has consulted extensively on this and other measures, including the interlinkages between them [Wilde 1 §§204-

[194] See, e.g, NGET & NGGT §4.71; see also SSMD – Finance Annex, §§33.286, 3.293, referring to a report by First Economics showing 12 instances of outperformance and five of underperformance, where four of the underperforming price controls (aviation and rail) are unlikely to be analogous to the energy sector.
[195] See NGET & NGGT, §§4.81-4.82, citing Ofwat's PR04, PR09 and PR14 price controls, and the CMA's price control determination for Northern Ireland Electricity plc.
[196] Frontier Economics, September 2021, 'Further Analysis of Ofgem's Proposal to Adjust Baseline Allowed Returns', p44.
[197] SSMD Finance Annex §3.300. [F1/03]
[198] See NGET & NGGT, §§4.93-4.98 and PwC Report for the ENA, October 2020, "Review of Ofgem's RIIO-2 Network Price Controls Draft Determinations Impact Assessment". [F1/15]

211]. The contention that the measures have not been assessed 'in the round' is incorrect.[199]

335. As to the contention that GEMA's approach does not reflect the limitations and caveats in the UKRN Report,[200] Mr McCloskey explains that it was not GEMA's intention to implement the UKRN approach exactly or in full and there was no obligation for it to do so (McCloskey §§181-182).

336. As has been explained above, three authors of the UKRN Report recommended an adjustment to reflect investor expectations of outperformance; the fourth disagreed. Self-evidently, this is a matter on which reasonable people may disagree. In such circumstances it is not the role of the CMA to substitute its judgement for that of the regulator simply on the basis that the CMA might have taken a different view (*SONI,* §§3.32, 3.36). GEMA is entitled to a degree of deference in its evaluation of the evidence (see *SONI* at §5.16 and *British Gas* at §3.31) (see further section C.iii above).

The outperformance adjustment will have a discriminatory and disproportionate impact

337. The Appellants contend that the decision to apply a 0.25% deduction equally to all licensees in all sectors is discriminatory and disproportionate, because companies with higher RAV to totex ratios will require a higher proportionate level of totex outperformance than a company with a lower RAV to totex ratio.

338. That argument is without foundation for the reasons explained in Mr McCloskey's statement see §157-169]. In short, National Grid contends that NGET and NGG would need to underspend their totex allowances by 3.6% per annum in order to achieve 0.25% above the allowed return on equity, and that this is discriminatory when compared with values between 1.9-2.2% and 2.2-2.6% for the GDNs and other TOs respectively.[201] However, the reference point for that analysis is baseline totex, which is not GEMA's (or the Appellants') best estimate of the future. Once totex uncertainty is factored in (in particular with reference to a Net Zero 2 totex scenario) the differences between licensees are negligible, such that the level of totex underspend required to hit 0.25% are similar for all licensees across all sectors, in a range of 1.1%-2.4% [McCloskey §159-§164]. This was also encapsulated by GEMA's analysis.[202]

339. Further and in any event, totex underspend is only one variable that contributes to outperformance, as Frontier Economics has recognised.[203]

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199 See, e.g., DD Finance Annex, §3.147 and Table 27,.[F1/06]
200 See Cadent, §5.60-5.64.
201 NGET & NGG, §§4.102-103.
202 See DD Finance Annex, Tables 19 and 26. [F1/06}
203 Frontier Economics, September 2020. [PJ1/032]

The adjustment is contrary to best regulatory practice and/or GEMA has failed to take account of the principles of good regulation

340. NGN contends that the regulator must meet a heightened standard when it seeks to introduce a measure which departs from established regulatory practice.[204] Similarly, SHE-T contends that the outperformance adjustment is contrary to the key regulatory principle that companies should be encouraged to outperform so that benefits can be shared with consumers.[205]

341. There is no basis for NGN's submission that the regulator must meet a heightened standard when seeking to introduce a new measure into the price control. There is nothing in GEMA's principal objective or its statutory duties to support this contention, and contrary to NGN's submission, that was not what the CMA held in *Northern Powergrid v GEMA* (CMA, 29 September 2015). The CMA's assessment of smart grid benefits in that case was fact specific. The CMA considered that GEMA had not adequately tested *"the appropriateness of the single data point that GEMA used in this category"* and that this data point *"was clearly an outlier"* (§101). In the circumstances the evidence did not justify GEMA's conclusion that an adjustment was warranted (§101). The CMA did not lay down a general rule that the first use of a novel regulatory tool must meet a heightened standard of justification.

342. Nor is there merit in the argument that an outperformance adjustment is contrary to key regulatory principles and/or to best regulatory practice. The Appellants' arguments to that effect are little more than assertions. The decision to implement an outperformance adjustment is grounded in an extensive dataset and detailed, painstaking analysis of the evidence. That evidential basis is substantially unchallenged. GEMA has acted transparently and has consulted with stakeholders formally and informally over a three-year period. In response to consultation, it decided to reduce the size of the adjustment to 0.25% from an initial working assumption of 0.5%, and to introduce a licensee-specific ex-post adjustment to address the roughly 7% probability that a licensee will find itself in the 0-0.25% zone [McCloskey §192]. In this context, the contention that GEMA's decision is anything other than "*transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed*" (s.4AA(5A) GA86/ s.3A(5A) EA89) is hopeless.

The outperformance adjustment of 0.25% is harmful

343. The Appellants advance a number of arguments in support of the contention that the outperformance adjustment is harmful. These may be summarised as follows:

343.1 The outperformance adjustment will cause harm to existing and future consumers because it damages incentives

343.2 The ex-post adjustment mechanism does not resolve these problems or redress the harms

[204] NGN §251-252,

[205] SHE-T §§1.51-1.52.

The outperformance adjustment will cause harm to existing and future consumers

344. The Appellants contend that GEMA's decision to adjust the allowed return by reference to 0.25% expected outperformance will harm consumers, primarily on the basis that it will damage incentives.[206]

345. It is striking in this context that the outperformance adjustment was supported by Citizens' Advice and Centrica, both of whom argued for a much more substantial deduction than 0.25%.

346. The Appellants contend that the outperformance adjustment will undermine productivity incentives and/or is contrary to incentive-based regulation in general. Frontier Economics explains that, under ordinary circumstances, companies expect that outperformance under one price control will lead to toughening of the targets under the next price control. This is known as the "ratchet effect". One of the theoretical risks of the ratchet effect is that the incentive to outperform in the first place is diminished. However, according to Frontier, the outperformance adjustment will create a "*double ratchet*" because there is a further reason to hold back: outperformance could bring *"not only tougher targets, but also lower returns"*.[207]

347. That argument is unpersuasive. It is simply not plausible to suggest that licensees will no longer seek to outperform if they face a downwards adjustment of 0.25% and/or the possibility of downwards adjustments in future price controls (as yet unknown). Companies will always seek to maximise profits for their shareholders (see further McCloskey §§201-202).

348. By introducing the "double ratchet" label, Frontier seeks to draw a conceptual distinction between toughening targets ("single ratchet") and reducing allowed returns ("double ratchet") which does not stand up to scrutiny. As the witness statement of Mr McCloskey explains [McCloskey §178], the feedback loop is much weaker in respect of information asymmetry than it is for, say, cost targets which are licensee-specific. A licensee may well expect that totex outperformance in one price control could lead to a reduction in the totex allowance in the next price control. But given that the outperformance adjustment is a measure of information asymmetry across the price control, it is much less likely that any individual licensee's outperformance would lead to a greater adjustment in the next control. Given that weaker feedback loop, to the extent there is any effect of incentives, it is likely to be limited.

349. Nor does the contention that an outperformance adjustment will lead to poorer overall performance stand up to scrutiny.[208] It relies on the assumption that the incentive to outperform will be irretrievably weakened or reduced to nil. If allowed returns are reduced by 0.25% (the argument goes) the companies will simply give up. There will

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[206] See NGET & NGG, §§4.105-4.124; NGN §§285-289; Cadent §§5.17-5.33; SGN §§342-356; SHE-T §§5.18-5.29; SPT §55-56; WWU §§B6.13-B6.18.

[207] Frontier Economics, March 2021, "Wedge Report", p.38 §§4.4.12-4.4.17; discussed in NGET and NGG, §4.107 and Cadent §§5.20-5.25. [NGG_MH1-2]

[208] *Cf* UKRN Report Section 9 (Burns); Frontier Economics, March 2021, "Wedge Report" §4.2.6 [NGG_MH1-2] ; Oxera, "Outperformance Adjustment Report", Section 4A. [WWU ref F1]

no longer be any point "stretching every sinew"[209] and productivity performance will be weaker, driven by weaker incentives.[210]

350. GEMA's view, based on its rigorous evaluation of the evidence, is that outperformance of 0-0.25% reflects information asymmetry rather than effort.[211] That is, the companies do not need to "stretch every sinew" to achieve it; they are likely to achieve it as a matter of course, and beyond 0.25%, the incentives to further outperformance are undiminished.

351. In any event, the argument that incentives will be weakened and productivity will suffer is a generic argument which is invariably raised whenever a regulator acts to tighten targets, reduce cost allowances, or curb returns. It is a spectre which regulated companies love to invoke. It is particularly easy to see through that spectre in circumstances where, as here, the adjustment to allowed returns is modest relative to the evidence of historical levels of outperformance. The simple fact is that there remain very strong incentives to outperform well in excess of 0.25%, because the companies stand to gain much more. Further, even for licensees which find themselves in the 0-0.25% range towards the close of the price control, there will still be a strong incentive to avoid underperformance because the protection of the ex-post adjustment is limited to 0.25%.

352. National Grid's assertion that there will be *"transformative projects which would otherwise be progressed, but which may not go ahead under RIIO-T2"* is unsubstantiated: the Appellants have not pointed to any specific projects which would be uneconomic in the light of the 0.25% reduction to allowed return on equity.[212][213] See further the analysis of aiming up in Section E of the first witness statement of Mr Wilde.

353. The Appellants further contend that a reduction of 0.25% to allowed returns will damage incentives to invest.[214] There is an irony that this argument is being advanced at the same time as the recent announcement of National Grid's acquisition of WPD at a 61% premium on its RAV. The prospect of a possible outperformance adjustment in RIIO-ED2 evidently was not a deterrent to that transaction, and in GEMA's considered view, it is extremely unlikely to be a deterrent to investors more generally.

354. Relatedly, the Appellants argue that the outperformance adjustment of 0.25% will increase the cost of capital in the long run and will undermine equity financeability.[215] This is despite the fact that GEMA's baseline allowed return of 4.30% is consistent with a degree of aiming up (as to which, see further section E(v) above).[216] Once again, this argument is difficult to sustain in light of observed market trends showing

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[209] *Cf* Frontier Economics, §4.2.6.
[210] NGET & NGG, §4.109.
[211] See FD Finance Annex §3.174. [F1/05]
[212] *Cf* the witness statement of Chris Bennett dated 1 March 2021 at §113, asserting that "projects and ideas that would otherwise be progressed would no longer continue" .
[213] See paragraphs [X]-[Y] above, and particularly DD Finance Annex, Table 27.[F1/06]
[214] NGET & NGG, §§4.116-4.118.
[215] NGET & NGG, §§4.119-4.124.
[216] See FD Finance Annex §§3.153, 3.186. [F1/05]

significant outperformance over time, let alone the proposed acquisition of WPD. Despite the licensees' best efforts to portray the outperformance adjustment as fundamentally destabilising to the regulatory regime, it has been trailed by GEMA for more than three years, widely consulted upon, refined and developed over time, and has the support of consumer groups. The contention that this relatively cautious adjustment, which is subject to a licensee-specific guarantee up to 0.25%, represents a major shift to the regulatory framework which will radically increase regulatory risk, is unevidenced and wrong. See further the discussion in Wilde 1 §§163-185.

The ex-post adjustment does not resolve these problems

355. The Appellants contend that the ex-post adjustment will not resolve their concerns and will in fact create new difficulties.[217] These arguments are misplaced. GEMA has concluded, based on its comprehensive review of the data, that there is only a very small probability (around 7%) that energy licensees will find themselves in the 0-0.25% range (see further McCloskey §220). These arguments should be assessed in that context.

356. As to the suggestion that the ex post adjustment leads to perverse incentives, GEMA's responses are threefold:

a) First, the conclusion GEMA has reached on the evidence is that outperformance of 0.25% reflects information asymmetry rather than effort, meaning that the impact on incentives will be negligible as 0.25% can be achieved by the licensees as a matter of course;

b) Secondly, in any event, there remain strong incentives to outperform beyond 0.25%, because past that point incentive strength is on any view unaffected;

c) Thirdly, in the event that one or more licensees does find itself in the 0-0.25% region towards the end of the price control, there remain strong incentives to avoid underperformance because of: the limited nature of the cap; ongoing monitoring of cost efficiency; and the exposure to benchmarking tests against peers.

357. These considerations mean that any reduction in incentive properties within the 0-0.25% deadband is likely to be minimal.

358. As to the suggestions that companies may be incentivised to spend aggressively late in the price control to meet outcome targets which have not yet been delivered, or to bring forward work to allow it to submit a lean looking plan for the next price control,[218] it is not at all clear that these consequences would be contrary to consumers' interests. The proposition that this *"can only lead to material consumer harm"* is wrong.[219]

[217] NGET & NGG, §§4.125-4.142; NGN §§274-291; SPT §55(4); WWU §§B6.13-B6.18; SHE-T §§5.24-5.27; Cadent §5.8.
[218] Frontier Economics, March 2021 "Wedge Report", §4.4.29 [NGG_MH1-2].
[219] *Cf* NGET & NGG, §§4.129-4.130.

359. As to the impact on credit ratings: the Appellants contend that the backstop mechanism offers no benefits in the assessment of credit quality, but this is incorrect. As the first witness statement of Mr Simon Wilde explains (Wilde 1 §179), it is true that ratings agencies may not automatically add 0.25% additional equity return into their ratio calculations. However, GEMA considers that the backstop mechanism does offer some benefit in terms of credit quality because ratings agencies can and do have qualitative discretion to consider substance over form, and they can and do make granular company-specific assumptions (e.g. on totex and ODI performance). [220] Whether the party assessing credit quality includes the 0.25% additional equity return in their ratio calculations, or whether it is factored into the overall assessment in a more qualitative manner, GEMA considers that the ex post adjustment will have some benefit for credit quality.

360. Relatedly, the Appellants' contention that the outperformance adjustment has undermined the stability and predictability of the regulatory framework is wrong and dramatically overstates the significance of this measure. For example, as Mr Wilde explains, Moody's has recently reaffirmed its positive view of GEMA's regulatory framework (see further Wilde 1 §§185-186).[221]

361. As to equity financeability, the ex post adjustment mechanism provides comfort to investors that the 0.25% return will be received, and the absence of this source of revenue in any particular year (due to timing of the cashflow impact) will not be a longer term problem in terms of debt service sustainability.[222] GEMA considered key debt financial ratio results excluding expected outperformance,[223] and found no material change to the 'in the round' assessment of financeability.[224]

362. Some Appellants contend that GEMA has failed properly to assess the impact of the ex-post adjustment, contrary to s.5A of the Utilities Act 2000. That argument has no merit. That section affords considerable discretion to the regulator as to how an impact assessment is carried out (see particularly s.5A(6), "*an assessment carried out under this section may take such form as the Authority considers appropriate*"). GEMA 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 (including documents published July 2018, December 2018, May 2019, July 2020 and December 2020). Since May 2019 stakeholders have been aware of GEMA's working assumption of a 0.5% deduction to allowed returns. Stakeholders have had ample time to anticipate and plan for the quantitative impact of GEMA's proposals. In relation to the ex-post adjustment specifically, this was the subject of formal consultation at DDs and informal

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[220] See Wilde 1 §178 referring to Fitch, "What Investors Want to Know" Sector comment, 11th March 2021 [SW1.037]

[221] See Wilde 1 §179, referring to Moody's Sector Comment "RIIO-2 proposals support sector's business risk profile, but legitimacy in greater focus" 3rd August 2020, page 3 [SW1.051] and Moody's National Grid Credit Opinion, 16th March 2021 [SW1.052].

[222] See further FD Finance Annex §§5.25-5.26.[F1/05]

[223] See FD Finance Annex, paragraph 5.25[F1/05]

[224] See FD Finance Annex, Tables 14, 15 and 16[F1/05] and Wilde 1 §178.

consultations with stakeholders alongside.[225] GEMA's decision at FDs took into account those responses and decided that the ex post adjustment should be licensee-specific (in line with Cadent's proposal). There has been no breach of the requirement to consult and the impact of the ex post adjustment has been rigorously assessed in the round.

363. In any event, the possible impact on incentives within the deadband together with the benefits in reassuring investors are matters which GEMA has carefully considered, on which it consulted at DDs, and which it has weighed up using its expert regulatory judgement. GEMA's considered view is that the risks are outweighed by the benefits. That view is plainly reasonable and within the bounds of the regulator's discretion.

Conclusion on expected outperformance

364. For the reasons set out above, GEMA's decision to adjust allowed returns by reference to expected outperformance of 0.25%, subject to an ex-post 'true-up', is a rational and appropriate response to the structural problem of information asymmetry. The appeals on outperformance should be rejected.

G. COST OF DEBT

Introduction and overview

365. By its First Ground of Appeal, WWU contends that GEMA erred in its approach to cost of debt. WWU advances three arguments in support of this Ground. They are that GEMA: (a) misinterpreted its statutory duty in s.4AA(2)(b) GA86; (b) irrationally relied upon a sector average cost of debt index; and (c) irrationally failed to take account of derivatives in setting the cost of debt allowance.

366. As WWU appears to recognise, the second two arguments stand or fall with the first. The WWU Notice of Appeal states at §A5.3, "*each [error] represents a different facet of, or perspective on, the underlying failure of Ofgem to interpret its statutory duties correctly and apply them to the specific circumstances of WWU*". That is, GEMA's reliance on a sector average approach and cost of debt index, and GEMA's failure to take into account derivatives, are said to be irrational <u>because</u> they do not allow WWU to recover its actual debt and derivative costs (which WWU claims were efficiently incurred). It follows that if the CMA does not consider that GEMA erred in its approach to its statutory duties, it need not consider the second or third arguments.

367. In any event, all three arguments are ill-founded. This is because (a) GEMA has interpreted and applied its statutory duties appropriately; (b) there is nothing irrational in benchmarking costs using an external index and cross checking this index calibration to sector average cost of debt; and (c) the use of derivatives reflect company-specific management choices for which WWU must account to its shareholders.

[225] https://www.ofgem.gov.uk/system/files/docs/2020/07/draft_determinations_-_finance.pdf#page=82 [F1/06]

Background and GEMA's decision

368. GEMA's longstanding practice since privatisation has been to set the allowed return on debt based on market factors rather than the actual cost of debt of individual companies. The first witness statement of Ms Jessica Friend ("**Friend 1**") explains (at §15) that it has been clear from early price controls that allowed return on debt would be set on a sector-wide basis, by reference to market factors in the medium term, and that this would reset at each price control.

369. In the July 2017 RIIO-2 Open Letter, GEMA noted that indexing the estimated cost of debt to a historical trailing average had brought down the allowed return on debt and removed a significant source of risk for companies and consumers (see further Friend 1, §37 and exhibit **[JF1/18]**). GEMA noted that it would review the methodology for keeping allowed return on debt "*appropriately aligned with market conditions"* and invited respondents to consider whether there are *"further refinements we [GEMA] can consider".*

370. In response to the Open Letter, WWU submitted that there were issues with this approach because the 10-year trailing average did not match the timeframe over which WWU raises its debt. WWU considered it important that the cost of capital (including debt allowances) *"must properly reflect the risks we face and be based on current market indices"*[226] (see further Friend 1 §§38-39).

371. In the March 2018 Framework Consultation, GEMA restated the principles applicable to its cost of debt methodology and invited stakeholder responses on the following three options (see Friend 1 §§41-42):

    371.1 Recalibrating the RIIO-1 indexation policy to consider factors such as trailing average period, index used, weighting, etc.;

    371.2 A fixed allowance for embedded debt plus indexation for new debt (i.e. "partial indexation");

    371.3 Pass through allowance for debt.

372. A majority of respondents to the Framework Consultation favoured the first option. Two companies, WWU and ENWL, were in favour of the third option (debt pass through). Overall, however, the third option was opposed by stakeholders on the basis that it would not provide appropriate incentives (see Friend 1 §§43-44).

373. GEMA carefully considered these responses and in the July 2018 Framework Decision, it decided to rule out debt pass-through (see Friend 1 §§45-47). GEMA explained that pass though would have *"poor incentive properties on companies to seek efficient debt financing",* which could be costly for consumers.[227]

374. In the December 2018 Sector Specific Methodology Consultation, GEMA indicated it was minded to rule out partial indexation and debt performance sharing (see Friend 1

[226] WWU response to RIIO-2 Framework Open Letter, page 10, available here: https://www.GEMA.gov.uk/publications-and-updates/open-letter-riio-2-framework [F1/011]
[227] Framework Decision, §6.24. [F1/12]

§§48-52). WWU and ENWL continued to oppose full indexation, arguing that allowed return on debt should be set on an individual company, rather than a sector-wide, basis.

375. In the May 2019 Sector Specific Methodology Decision, GEMA decided not to share debt variances and to apply full indexation.[228] It noted that company-specific allowances (as favoured by WWU and ENWL) *"would remove the strong incentives to manage company debt prudently and efficiently"*.[229] In contrast, setting allowed return on debt by reference to external market indices, calibrated by reference to sector expected efficient debt costs, would provide a fair and reasonable allowance and would be consistent with GEMA's past practice (see Friend 1 §60). GEMA also explained that it would consider adjusted indexation mechanisms for unusual company-specific circumstances, as it had done for RIIO-1, on a notional company basis (Friend 1 §61).[230]

376. GEMA's working assumption for allowed return on debt at the Business Plan stage was based on an extended trailing average of 11-15 years, which led to a forecast across RIIO-2 of 1.93% (see Friend 1 §§63-64). At this stage many network companies proposed a longer trailing average period for the debt index, which would have led to a higher debt allowance than GEMA's working assumption (Friend1 §166). Only WWU continued to advocate for a form of pass through, whereby actual debt and derivative costs would be met subject to an 'efficiency check' (Friend 1 §67). WWU's proposed 'efficiency check' was simply whether the debt and derivatives had been incurred at market rates (Friend 1 §67).

377. GEMA responded to these points at Draft Determinations, noting that pass-through subject to a 'market rates' check would have the effect that each network's customers were exposed to the differential decisions made by the network company on matters such as debt type, tenor, timing and risk management.[231] Those were matters which GEMA considered the companies were best placed to manage, *"in common with corporates in the broader market"*[232] (Friend 1 §71).

378. GEMA used the information gleaned from the business plans to model expected embedded debt costs for each year of RIIO-2, and combined this with estimates of new debt (based on external benchmarks, RAV profiles and notional gearing assumptions) (Friend 1 §72). As Ms Friend explains (Friend 1 §73), GEMA used its combined model of embedded and new debt to: (a) check that embedded debt was contracted at market rates; (b) estimate GD&T network debt costs in each year of RIIO-2; (c) consider exceptional cases (such as RAV-weighted debt allowance) and (d) to compare expected GD&T average debt costs to different indices under different macro-economic scenarios. This information was set out in full at DDs.[233]

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[228] SSMD Core Document §12.11. [F1/08]
[229] SSMD Finance Annex §2.26. [F1/03]
[230] SSMD Finance Annex §2.24. [F1/03]
[231] DD Finance Annex, p.207. [F1/06]
[232] DD Finance Annex, p.207. [F1/06]
[233] DD Finance Annex §2.57. [F1/06]

379. GEMA noted that the networks had different views on whether derivatives should be included in the calibration exercise, and that GEMA's analysis of company derivative use had highlighted significant divergences from benchmarks on the dates of contracts (Friend 1 §§75-76). Given the bespoke nature of derivative instruments, their different possible uses (including to shift financing costs from one period to another), and the complexity of assessing their efficiency, GEMA decided (consistent with its previous practice and other regulatory approaches) to exclude derivatives from the calibration (Friend 1 §§75-79).[234]

380. At Final Determinations, GEMA increased the cost of debt allowance slightly (by increasing the allowance for additional costs of borrowing from 0.17% to 0.25%, to increase the forecast average RIIO-2 allowed return on debt from 1.74% to 1.82%) based on evidence and modelling submitted in response to DDs, and decided to implement the DD position on index selection and trailing average (Friend 1 §§81-83). GEMA also decided to afford networks with a smaller RAV (including WWU) an additional allowance of 0.06% to reflect the possibility that companies which need to issue debt less frequently may face higher risk or higher costs (Friend 1 §83).

381. At FDs GEMA remained of the view that derivative costs should be excluded from the calibration exercise, but explained that it had modelled these costs and found that its RIIO-2 debt allowance would cover combined expected GD&T debt and derivative costs, in any event[235] (Friend 1 §85).

GEMA's statutory duties

382. WWU's interpretation of s.4AA(2)(b) GA86 is contrary to the express terms of the statute and contrary to relevant authority.

383. As set out above at paragraph 18, section 4AA(2)(b) GA86 obliges GEMA, in performing the duties under subsections (1B) and (1C), to *"have regard to… the need to secure that licence holders are able to finance the activities which are the subject of obligations imposed by or under this Part…".* This is the duty to have regard to financeability. There is an equivalent statutory duty in s.3A(2)(b) EA89.

384. Three points bear noting at the outset.

385. **First,** statutory duties to "have regard" are familiar creatures in public law. In *R (Khatun) v Newham London Borough Council* [2005] QB 37 at §47, the court held that an obligation to 'have regard to' something meant that the decision maker must "(a) take it into account and (b) if they decide to depart from it, give clear reasons for doing so". This was cited with approval by the Supreme Court in *Nzolameso v City of Westminster* [2015] UKSC 22, §31.

386. A duty "*to have regard*" to particular considerations has been held to require "*proper and conscientious consideration*" (see R (Hurley and Moore) v Secretary of State for Business, Innovation and Skills [2012] EWHC 201 (Admin), §78, referring to a duty to "*have* due *regard*" (emphasis added)) and to require the decision-maker to give

[234] DD Finance Annex §2.45. [F1/06]
[235] FD Finance Annex, Table 6. [F1/05]

"*objectively… proper reasons, or legitimate reasons*", and "*to demonstrate that it has considered and engaged with the Guidance, not ignored it, or merely paid lip-service to it*", R (Governing Body of the London Oratory School) v the Schools Adjudicator [2015] EWHC 1012 (Admin), §§58-59 (Cobb J).

387. A requirement to "*have regard*" to considerations has been held to afford the decision-maker "*a substantial degree of flexibility as to how he goes about his task*" (R (Pharmaceutical Services) v Secretary of State for Health [2018] EWCA Civ 1925, §81), the Court of Appeal noting in that case that the factors at play were "*complex, socio-economic in nature and potentially in conflict*", and accordingly that they involved "*the exercise of substantial discretion, judgment or assessment*": §84.

388. In the context of s.4AA(2)(b) GA, the above means that GEMA must (i) take into account the need to secure that licence holders are able to finance their activities; and (ii) if GEMA decides to adopt an approach which does or may have the result that one or more licensees is not able to finance their activities, it must give clear reasons.

389. A duty to "have regard" is not a duty slavishly to follow. The statutory words do not impose an obligation of result.

390. **Second,** the duty to have regard to financeability applies "*in performing the duties under subsections (1B) and (1C)*". The duties in subsections (1B) and (1C) are broad and general discretionary requirements (*"in the manner which … [GEMA] considers is best calculated to further the principal objective")*.[236] Put simply, GEMA must have regard to financeability in the course of carrying out its functions so as to further the principal objective (wherever possible by promoting effective competition). It is the principal objective which is paramount. The duty to have regard to financeability is one of several considerations to which GEMA's attention is directed in the course of furthering that objective. The others include:

390.1 The need to secure that all reasonable demands for electricity are met, and so far as it is economical to meet them, that all reasonable demands in Great Britain for gas conveyed through pipes are met: s.4AA(2)(a) GA86;

390.2 The need to contribute to the achievement of sustainable development: s.4AA(2)(c) GA86;

390.3 The interests of certain categories of vulnerable individuals (including the disabled and chronically sick, individuals of pensionable age, individuals with low incomes, and individuals residing in rural areas): s.4AA(2)(b) GA86;

390.4 Subject to subsections (1B) and (2) and to s.132(2) of the Energy Act 2013, GEMA must carry out its functions under this Part in the manner which it considers is best calculated (a) to promote efficiency and economy on the part of licensees; (b) to protect the public from dangers arising from the provision of services under the licences; and (c) to secure a diverse and viable long-term energy supply: s. 4AA(5) GA86;

236 See paragraphs 14-15 above.

390.5 The principles under which regulatory activities should be transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed: s.4AA(5A)(a) GA86; and

390.6 Any other principles appearing to the Authority to represent the best regulatory practice: s. 4AA(5A)(b) GA86.

391. The statutory language is not consistent with an interpretation which requires GEMA to secure financeability in all circumstances (and regardless of the other competing considerations to which Ofgem is directed by statute).

392. **Third,** it is self-evident that some of these considerations may be in tension with one another. For example, there could be a tension between GEMA's duty to have regard to financeability on the one hand, and GEMA's duty to carry out its functions in the manner which it considers is best calculated to promote efficiency and economy on the part of licensees. This tension could manifest in the event that GEMA adopted an approach to the allowed return on debt which offered no or minimal incentive to licensees to manage their debt portfolios efficiently.

393. **Fourth,** it follows from the above that the statutory duty to have regard to financeability is not necessarily breached merely because GEMA's allowed return on debt is below a licensee's actual debt (or debt and derivative) costs. It will be sufficient to discharge the duty in s.4AA(2)(b) if GEMA's approach allows a reasonably efficient operator in the relevant sector to finance its activities.

394. This focus on the notional efficient operator reflects GEMA's consistent practice as well as the approach taken by other regulators. It has been accepted and applied by the CMA and its predecessors in other contexts. For example:

395. In *Bristol Water* (CC, 4 August 2010) the Competition Commission rejected the appellant's argument that the duty to secure financeability in s.2(2A)(c) of the Water Industry Act 1991 required Ofwat to consider Bristol Water's actual (as distinct from notional) conditions. At §10.9:

> *"Contrary to Bristol Water's submission, we did not consider that we were obliged to base our assessment [of financeability] on Bristol Water's actual condition, since, as noted in paragraphs 2.23 to 2.27, this was likely to guarantee Bristol Water a return regardless of how well it had performed its functions. Further, such a guarantee would be to the detriment of consumers and would prevent us providing incentives for Bristol Water to carry out is functions properly. Giving such a guarantee would give priority to our duty under section 2(2A)(c) [of the Water Industry Act 1991] over our other duties under section 2(2A) to further the consumer interest and secure that Bristol Water carries out its functions properly. Our aim was to give equal weight to those duties."*

396. Rather, the Competition Commission was *"concerned with the financeability of an efficient company"* (§10.11*).* The CC agreed with Ofwat that *"it is reasonable for an inefficient company… to earn less than the cost of capital"* (§5.9) and observed that

"Bristol Water's actual financial structure is for Bristol Water to determine… at Bristol Water's own risk" (§10.10).

397. That was in the context of the Water Industry Act 1991, which requires Ofwat "*to* secure *that [licensees] … are able (in particular, by securing reasonable returns on their capital) to finance the proper carrying out of those functions*" (emphasis added).[237] That is a more onerous duty than the duty to have regard to financeability in s.4AA(2)(b) GA.

398. Nevertheless, the Competition Commission held that Ofwat's duty to secure financeability would be discharged so long as Ofwat ensured that the projections for opex and capex and the allowances for cost of debt and equity (and therefore WACC) were reasonable, and provided that Bristol Water had reasonable options which enable it to raise finance while complying with its licence conditions: §§10.8-10.9.

399. Importantly, the Competition Commission held that it was reasonable for Ofwat to introduce a mechanism which meant that "*an inefficient company (that is, one which fails to produce well-balanced, evidence-based business plans) [would] produce less than the cost of capital*": §5.9. Requiring Ofwat to ensure that the licensees were actually financeable, regardless of the circumstances, would be tantamount to a guarantee—which would have prioritised the duty to secure financeability over Ofwat's other duties, such as the duty to further the consumer interest: §10.9. That is, a requirement for Ofwat to base its assessment on Bristol Water's actual circumstances would have been contrary to the statute.

400. That logic applies *a fortiori* to s.4AA(2)(b) GA86, where the corresponding duty is weaker (to *"have regard to… the need to secure"* rather than *"to secure"*).

401. The standard of the notional efficient operator was also upheld by the Competition Commission in *Northern Ireland Electricity Ltd* (CC, 26 March 2014). In that case, the Commission held that financeability required setting an allowed return "*at a level at which we considered that an efficient licence holder would be able to provide the transmission and distribution services envisaged under [the price control]*": §66. This was assessed "*independently of the particular identity of the licence holder*": §66.

402. The principle was affirmed again by the CMA in *Bristol Water plc* (CMA, 6 October 2015), where the CMA held that the primary consideration in setting the allowed return on capital should be "*whether efficient companies could finance their functions*": §10.75.

WWU's case on the duty to have regard to financeability

403. WWU contends that GEMA's duty to have regard to financeability requires it to ensure that it (as distinct from the notional licensee in this sector) is able to maintain

[237] The Water Industry Act 1991, s.2(2A) provides:
"The Secretary of State or, as the case may be, the Authority shall exercise and perform the powers and duties mentioned in subsection (1) above in the manner which he or it considers is best calculated – […] (c) to secure that companies holding appointments under Chapter 1 of Part 2 of this Act as relevant undertakers are able (in particular, by securing reasonable returns on their capital) to finance the proper carrying out of those functions". [F1/33]

an investment grade credit rating: see §§A4.9-4.10. It is asserted that s.4AA(2)(b) codifies *"the necessity"* and *"a mandatory outcome that must be achieved"* (NoA, §A4.18(c)-(d)).

404. That interpretation is contrary to the statutory text. As WWU acknowledges, the duty to have regard in s.4AA(2)(b) is subsidiary to the "principal objective" which is "*to protect the interests of existing and future consumers in relation to gas conveyed through pipes":* s.4AA(1). That is the most important matter, and GEMA's primary obligation.

405. GEMA does have a discretion, in that it can carry out is functions in the manner which it considers is best calculated to further that objective; and wherever appropriate, it must do so in a way which promotes competition. But the structure of (1B) and (1C) makes clear that protecting the interests of consumers is a more important consideration than promoting competition. And it is in performing the duties under subsections (1B) and (1C) that the duty to have regard to financeability comes into play, along with the duty to have regard to the interests of particular categories of vulnerable consumers (subsections (2) and (3)).

406. WWU seeks to reinterpret the duty "*to have regard to*" financeability as an obligation of result (i.e. "*to ensure*"). This approach, if accepted, would elevate the financeability duty over Ofgem's other duties, contrary to the express words of the statute and contrary to relevant authority (see paragraphs 395 - 402 above).

The origins of the statutory duty in s.4AA

407. WWU contends that the financing duty is a primary duty to which GEMA must have particular regard (see NoA, §§A4.19-A.420). A close analysis of the legislative history reveals that submission to be wrong.

408. The original formulation of s.4 of the GA86[238] imposed a duty on the relevant authority to exercise its functions *"in the manner which [it] considers is best*

[238] The original s.4 provided:

> ***4. General duties of Secretary of State and Director***
>
> 1. *(1)The Secretary of State and the Director shall each have a duty to exercise the functions assigned to him by this Part in the manner which he considers is best calculated—*
>   1. *1.to secure that persons authorised by or under this Part to supply gas through pipes satisfy, so far as it is economical to do so, all reasonable demands for gas in Great Britain; and*
>   2. *2.without prejudice to the generality of paragraph (a) above, to secure that such persons are able to finance the provision of gas supply services.*
> 2. *(2)Subject to subsection (1) above, the Secretary of State and the Director shall each have a duty to exercise the functions assigned to him by this Part in the manner which he considers is best calculated—*
>   1. *1.to protect the interests of consumers of gas supplied through pipes in respect of the prices charged and the other terms of supply, the continuity of supply and the quality of the gas supply services provided;*

calculated" to secure that (a) licensees could satisfy all reasonable demands for gas in Great Britain and (b) to secure that such persons are able to finance the provision of gas supply services. The original subsection (2) provided a list of matters which the relevant authority was obliged to seek to further, namely: protecting the interests of consumers (s.4(2)(a)), promoting efficiency and economy on the part of licensees and the efficient use of gas (s.4(2)(b)); protecting the public from dangers arising from gas transmission or distribution and from the use of gas (s.4(2)(c)); and enabling effective competition in the supply of gas (s.4(2)(d)). The original subsection (3) required the relevant authority to take into account *"in particular, the interests of those who are disabled or of pensionable age"*.

409. That provision was amended by s.9 of the Utilities Act 2000, which substituted a new s.4AA for the original s.4 GA86. The new s.4AA provided in subsection (1) that the "principal objective" of GEMA and the Secretary of State was *"to protect the interests of consumers in relation to gas conveyed through pipes, wherever appropriate by promoting effective competition between persons engaged in, or in commercial activities connected with, the shipping, transportation or supply of gas so conveyed."* By subsection (2), the Act provided that, in carrying out those functions in such a way that he or she considers is best calculated to further the principal objective, the Authority shall have regard to *"(a) the need to secure that, so far as it is economical to meet them, all reasonable demands in Great Britain for gas conveyed through pipes are met; and (b)" the need to secure that licence holders are able to finance the activities which are the subject of obligations imposed by or under this Part or the Utilities Act 2000*."

410. WWU is wrong to contend that this change did not affect the status of the duty to have regard to financeability. In enacting s.9 of the Utilities Act 2000, Parliament made a deliberate choice to elevate the duty to protect the interests of consumers to the status of "principal objective". Under the amended s.4AA GA86, the two duties (to secure that reasonable demands for gas are met, and that licence holders are able to finance their activities) were important matters to which GEMA should "have regard", but they were subsidiary to the principal objective in s.4AA(1). That is obvious from the structure and language of the provision.

411. It was also confirmed by the Explanatory Notes, which explain that these provisions *"replace the existing general duties"* and *"give the Authority a principal objective, in*

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2. *2.to promote efficiency and economy on the part of persons authorised by or under this Part to supply gas through pipes and the efficient use of gas supplied through pipes;*
3. *3.to protect the public from dangers arising from the transmission or distribution of gas through pipes or from the use of gas supplied through pipes;*
4. *4.to enable persons to compete effectively in the supply of gas through pipes at rates which, in relation to any premises, exceed 25,000 therms a year.*

3. *(3)In performing his duty under subsection (2) above to exercise functions assigned to him in the manner which he considers is best calculated to protect the interests of consumers of gas supplied through pipes in respect of the quality of the gas supply services provided, the Secretary of State or, as the case may be, the Director shall take into account, in particular, the interests of those who are disabled or of pensionable age.* [F1/38]

carrying out its functions in either sector [gas or electricity], to protect the interests of consumers, wherever appropriate by promoting effective competition.".[239] The matters which were previously phrased as primary duties were now encompassed within the duty to further the principal objective.[240]

412. The amended s.4AA GA86 established a clear hierarchy of duties. At the top of the hierarchy was the principal objective of protecting the interests of consumers, wherever appropriate by promoting competition. Subsidiary to the principal objective were the duties to secure that reasonable demands for gas are met, and that licence holders would be able to finance their activities. Further subsidiary duties were to promote efficiency and economy by licensees (among other matters), as set out in the newly introduced subsection (5).

413. The paramountcy of the principal objective to protect the interests of consumers was further cemented by s.16 of the Energy Act 2010, which removed the words "*wherever appropriate by promoting effective competition…"* from s.4AA(1) into a new subsection (1B). In doing so, Parliament made clear beyond peradventure that the promotion of competition, like other matters mentioned therein, was important only insofar is it furthered the principal objective.

414. The newly inserted subsections (1A), (1B) and (1C) defined the interests of consumers for the purposes of the principal objective (in subsection (1A)); and reframed the duty to promote competition wherever possible (in subsections (1B) and (1C)) so as to make clear that it is a secondary consideration to the principal objective. That is confirmed by the Explanatory Notes to the Energy Act 2010, which state in §81 *"The amendments clarify the relationship between the principal objective and the obligation to further this objective through the promotion of competition wherever appropriate".*

415. The Energy Act 2010 also inserted the words "*in performing the duties under subsections (1B) and (1C), the Secretary of State or the Authority shall have regard to*" into s.4AA(2), in place of the previous formulation *"having regard to".* Presumably Parliament sought further to emphasise that the duties to (i) have regard to securing that reasonable demands for gas are met; and (ii) to have regard to the need to secure that licensees are able to finance their activities, are matters which the Secretary of State and the Authority should have regard to in the course of performing their functions. They are not freestanding, mandatory objectives.

416. WWU submits that it can never be in the consumer interest for licensees to be underfunded such that they may not be able to fulfil their obligations (NoA, §A4.11). That is obviously wrong. The absolute duty for which WWU contends would not fit within a regime where licence holders have the freedom to distribute to shareholders as they choose and to set their own capital structures. Nor is it consistent with a regime which expressly contemplates that licence holder may fail in extremis (hence the special administration regime in the Energy Acts).

[239] Explanatory Notes to the Utilities Act 2000, §20. [F1/41]
[240] Explanatory Notes to the Utilities Act 2000, §21. [F1/41]

417. WWU is wrong to suggest that GEMA has failed to set out its approach to its statutory duties and how the price control gives effect to them (NoA, §§A4.13-A.14). That submission is disingenuous in circumstances where GEMA has adopted the same approach with respect to notional company financeability since privatisation; and where GEMA has set out its proposed approach to financeability for RIIO-2 in detail on several occasions.[241] It is plainly not the case that WWU was in the dark.

Other statutory formulations

418. The closest analogy to the duty to have regard to financeability in s.4AA(2)(b) is found in the Civil Aviation Act 2012, s.1(3)(a), which provides (emphasis added):

> *"in performing its duties under subsections (1) and (2) the CAA must have regard to—**(a) the need to secure that each holder of a licence under this Chapter is able to finance** its provision of airport operation services in the area for which the licence is granted".*

419. The Explanatory Notes to that Civil Aviation Act 2012 provide (emphasis added):

> "*Whilst this [s.1(3)(a)] should require the CAA to encourage efficient and economic investment by allowing a reasonable return over time**, the financing duty does not require the CAA to ensure the financing of regulated airports in all circumstances, for example the regulator would not be required to adjust regulatory decisions in order to take account of an airport's particular financing arrangements or put the interests of users at risk by making them pay for an inefficient operator's financing decisions**".*[242]

420. The Minister in the Public Bill Committee on the Bill for this Act in the House of Commons explained that this provision *"does not require the CAA to ensure the financing of regulated airports in all circumstances"* and that the CAA was *"likely to base its approach on the needs of a reasonable and efficient airport operator"*. Indeed, the Minister expressly noted that *"increasing the price cap to enable an inefficient licence holder to obtain sufficient return to finance the airport"* was unlikely to be consistent with the regulator's duty to consumers.[243]

421. There are other statutes which use the formulation *"have regard to the need to secure"* (as found in s.4AA(2)(b) GA86) where it is evident from the context that no

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[241] See, e.g., Financeability Assessment for RIIO-2: Further Information" on 26 March 2019 https://www.ofgem.gov.uk/system/files/docs/2019/03/financeability_assessment_for_riio2_further_information_20190326.pdf [F1/13]; see also SSMD https://www.ofgem.gov.uk/system/files/docs/2019/05/riio-2_sector_specific_methodology_decision_-_finance.pdf#page=82, §§4.19-4.22. [F1/03]

[242] Explanatory Notes to the Civil Aviation Act 2012, §38(a). [F1/42]

[243] Public Bill Committee, Civil Aviation Bill, Session 2010-12, 28 February 2012, col.141. https://publications.parliament.uk/pa/cm201212/cmpublic/civilaviation/120228/pm/120228s01.htm

strict obligation of result is imposed.[244] Indeed, were it otherwise, the statutory formulation would say, "*shall secure*" in place of "*shall have regard to the need to secure*".

422. WWU submits that the use of the phrase *"licence holders"* in s.4AA(2)(b) means *"all licence holders together and each licence holder individually",* (§A4.25) and from this it reasons that GEMA must have an obligation to consider *"company-specific positions"* (§A4.27). WWU further submits that the legal effect of the licence condition to "*use reasonable endeavours to maintain an Investment Grade Issuer Credit Rating at all times*"[245], is that the obligation to maintain an investment grade credit rating becomes an obligation that the company must be funded to meet. This submission is contrary to principle and impossible in practice. The licence condition does not place an obligation on GEMA to ensure licensees have an investment grade rating irrespective of the circumstances and irrespective of their actual financing decisions. That would be tantamount to an indemnity. In any event it is impossible in practice in circumstances where GEMA has no control over licensees' decisions on capital structure, financial policies, dividend payments or risk management (all of which affect licensee credit ratings).

Conclusion on statutory duties

423. The duty in s.4AA(2)(b) GA86 obliges Ofgem to have regard to the need to secure that licensees are able to finance the activities which are the subject of their obligations. This have regard duty has been discharged by Ofgem. The allowance it has set for RIIO-2 is sufficient for the notional efficient operator in the GD sector to meet its debt costs.

Sector average debt allowance

424. WWU contends that GEMA acted irrationally in adopting a debt index expected to provide for sector average cost of debt. Although WWU accepts that regulators can sometimes use indexation for the purposes of setting a cost of debt, it is argued that *"the approach taken by Ofgem, in the gas distribution sector at the present time is wrong as a matter of law and policy"* (§A5.1).

425. This argument is contingent upon WWU's interpretation of the financeability duty in s.4AA(2)(b) GA86 (see NoA, §§A5.1-5.3). That is, WWU submits that it is irrational for GEMA to have relied upon an indexation measure which will not allow WWU to recover the actual costs of its debt and derivatives; and that s.4AA(2)(b) GA86 require GEMA to compensate WWU for its actual debt and derivative costs because, on WWU's case, those costs were efficiently incurred.

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[244] See, e.g., Local Government and Public Involvement in Health Act 2007, s.93(4) [F1/34] ; Counter Terrorism Act 2008, s.66(2)[F1/35]; Communications Act 2003, s.3(4)(g) [F1/36]; Family Law Act 1996, s.63A(2) [F1/37].

[245] Paragraph 1.1 of the Standard Special Condition A38 of the Gas Transporters Licence. [F1/43]

426. It follows that if the CMA considers that GEMA has interpreted its statutory duties correctly, it need not consider the issues raised by WWU in relation to the debt index or derivatives.

427. To the extent that these questions arise for consideration, WWU's case on these points is wholly lacking in merit. Each of WWU's arguments is addressed below.

Inherent irrationality

428. GEMA's approach is to set the allowed return on debt by reference to an external index, applying a trailing average over the medium term, and then to cross check the index calibration to sector average cost of debt.

429. It has been GEMA's consistent practice over more than 20 years to set allowed return on debt based on medium term estimates of market rates, as distinct from individual company costs. That approach is robust, rooted in the data and strongly grounded in regulatory practice.

430. This well-established regulatory practice has been subject to extensive consultation in this and previous price controls. It has also been accepted by the CMA.

431. For example, in *Anglian Water Services Ltd, Bristol Water plc, Northumbrian Water Ltd and Yorkshire Water Services Ltd* (CMA, 29 September 2020, Provisional Findings) ("the **PR19 Provisional Findings**") the CMA rejected an appeal from Yorkshire which was very similar to the argument now advanced by WWU. See, e.g., at §9.343:

> *"We do not see strong evidence for Yorkshire's submission relating to the adoption of actual costs as the basis for our estimate and in our view there would be little to no incentive for companies to ensure that their debt costs were as low as possible if there were a 'cost-pass-through' mechanism in place."*

432. In response to Yorkshire's contention that this would unfairly penalise them for matters such as the date of issue, the CMA said (at §9.344-345):

> *"We agree with Yorkshire's view that the date of issue is likely to be a significant factor in actual company debt costs, and that due to falling market rates in recent years this has meant that companies with a disproportionally older debt book will have higher costs. Rather than suggesting that this means companies should be compensated for their actual debt costs, we take the view that this simply means that these companies can, at some point in the future, roll their debt book at lower than average costs and will move (potentially significantly) below the benchmark used to calculate the notional cost of debt.*
>
> *We acknowledge that future interest rates are not guaranteed to be at or below historic levels but suggest that **by deploying a consistent and long-term treasury strategy, efficiently run companies should not***

spend inappropriately long periods of time on the "wrong side" of the benchmark level*."(emphasis added)*

433. Accordingly, the CMA has recently considered whether an industry benchmark approach (such as that used by GEMA) is consistent with the position assumed for the notional efficient entity.

434. The CMA also observed that "*independently assessing the 'efficiency' of every debt instrument used by every company in the sector would not seem to represent the effective use of a regulator's time and resources*" (§9.343). But this is precisely what WWU's proposed approach would inevitably entail (including not only debt costs but also those of complex derivatives).

435. In summary, the CMA concluded §9.359(a):

> *"[W]e agree with Ofwat that an overall benchmark-led approach to estimating the cost of embedded debt is appropriate, and we adopt this approach. We disagree with Yorkshire's view that actual debt costs should be the basis of each company's estimate, and we do not include actual costs within our estimate*".

436. It is worth noting that WWU's *debt* costs are expected to be covered by GEMA's allowed return on debt [redacted] WWU's NoA often refers to 'debt costs' when it is in fact referring to debt *and* derivative costs. However, the two are distinct, derivatives derive their value from underlying assets or benchmarks but are not strictly speaking debt themselves.

437. It is no answer for WWU to claim that its debt and derivative costs were efficiently incurred and so should be met. Allowing a pass through for each individual network's debt and derivative costs subject to an efficiency check would remove or radically reduce the incentive for companies to ensure their debt costs are as low as possible, as the CMA held in PR19 Provisional Findings, §9.343 (*"in our view there would be little to no incentive for companies to ensure that their debt costs were as low as possible if there were a 'cost-pass-through' mechanism in place").*

438. Further, that approach would expose each network's customers to that network's decisions on debt type, tenor, timing and risk management. See, e.g., PR19 Provisional Findings, §9.486, *"the amount of new debt taken in any particular period remains a decision for management, and hence not for the regulator to second-guess. Therefore, any risk associated with this decision should also lie with management."*

439. A company's actual financial structure is for the company to determine at its own risk: see PR19 Provisional Findings, §9.321:

> *"The approach taken [by] Ofwat in PR19 is to estimate a reasonable level of debt costs for a company with the notional financing structure, with shareholders retaining benefits and incurring costs of any*

differences between the assumed reasonable level of debt costs and the companies' actual debt costs. We agreed that this is the correct approach and have also adopted it in this provisional determination."

440. See also *Bristol Water plc* (2010), ibid, §10.10:

"We [the Competition Commission] agreed with Ofwat that Bristol Water's actual financial structure is for Bristol water to determine, but that this was at Bristol Water's own risk. Accordingly, we considered it reasonable for us to conduct our assessments on the basis of assumptions as to the financial structure that we considered to be reasonable in terms of gearing (as long as we applied such adjustments in calculating the WACC), and that we were entitled for this purpose to include assumptions that shareholders would supply finance in some form."

Basis in economic theory

441. The contention that an external index calibrated by reference to sector average costs lacks a basis in economic theory is absurd. WWU has itself accepted the appropriateness of using external debt indices in this context.[246] GEMA's calibration of that index against a sector average, with adjustments on a notional basis to reflect circumstances which are outside company control, is strongly grounded in regulatory practice (see further paragraphs 431-435 above). It also accords with GEMA's previous practice: GEMA applied indexation to the allowed return on debt for RIIO-1 (using a ten-year trailing average of iBoxx indices) for GD&T companies.

442. It has long been clear to network companies and their shareholders that, since debt allowances are set by reference to medium term market trends, there are risks associated with raising a large proportion of debt in a short period and/or fixing the rate on that debt for a long period.[247] [redacted]

[246] See WWU's response to the 2017 Open Letter [JF1/11].
[247] See SSMD §2.24: *"It has therefore been clear to network companies and their shareholders that there would be a risk involved in raising a large proportion of debt over a short period of time and/or fixing the rate on that debt for long periods of time. This is because if the interest rate on that debt did not broadly reflect the rolling ten-year average market and/or sector average debt rates they could out-or-underperform the resulting cost of debt allowance set for the sector as a whole. A lower risk strategy for matching debt costs to debt allowances would be to raise debt (or fix rates on debt) gradually over time (accepting that this is a decision for networks and their shareholders)."* [F1/03]

Skewed results

443. WWU contends that the sector average cost of debt will produce skewed results because of the different characteristics of the companies. But this is inevitable in any sector, and with any average. The only way to avoid this would be pass-through; but pass-through would eliminate any incentive to manage debt efficiently. The important point is not that companies within the sector should be identical in every respect, but rather that GEMA should control for differences between the companies which are outside their control, as it does by reference to RAV and the small company premium.

444. WWU's contention that it is fundamentally different from the companies whose costs of debt largely drive the output of the index (§A.5.18) is misplaced. WWU seeks to argue that *"significant differences in the timing and circumstances of debt issuance"* means these companies are not comparable (§A5.22). But the differences between companies in this sector which are beyond their control (such as company size and RAV) have already been taken into account by GEMA (see GD&T FDs, Finance Annex, §§2.58-2.65).

445. Further, having calibrated the external index against the sector average, GEMA performed cross-checks to exclude unusual, atypical or off market debt.[248] On this basis intercompany loans were excluded, since GEMA was not satisfied that they had terms and conditions that would be generally available to a notionally efficient operator borrowing from an external third party.[249] GEMA also flagged debt instruments which were significantly higher than the relevant benchmark for further review;[250] and decided to exclude SHE-T's debt costs from the pool due to SHE-T's atypical RAV growth profile, (which meant that more of its debt was raised recently at lower cost).[251] GEMA also considered the index calibrations proposed by the networks and tested a range of different interest rate and inflation scenarios.[252] The approach was rigorous and balanced.

Unlawful discrimination

446. The argument that GEMA has unlawfully discriminated against WWU is closely related to the previous argument that the sector average is skewed. The basis of this contention appears to be that WWU is unfairly penalised because of the timing and circumstances of its debt issuance.

447. This argument is ill-founded. The timing of WWU's debt issuance is not the reason it faces higher costs in respect of its debt and derivative portfolio. [redacted]

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248 https://www.ofgem.gov.uk/system/files/docs/2020/07/draft_determinations_-_finance.pdf#page=22 [F1/06]
249 https://www.ofgem.gov.uk/system/files/docs/2020/07/draft_determinations_-_finance.pdf#page=22 §2.49. [F1/06]
250 https://www.ofgem.gov.uk/system/files/docs/2020/07/draft_determinations_-_finance.pdf#page=22 §§2.50-2.51. [F1/06]
251 https://www.ofgem.gov.uk/system/files/docs/2020/07/draft_determinations_-_finance.pdf#page=23, §2.57; see also §§2.69, 2.71. [F1/06]
252 https://www.ofgem.gov.uk/system/files/docs/2020/07/draft_determinations_-_finance.pdf#page=23. §§2.57-2.72. [F1/06]

[redacted] (Friend 1 §§133-132; §160). That decision carried particular risks and rewards which were either weighed up by shareholders at the time, or should have been. [redacted] It is not for WWU's consumers to absorb the costs, now that interest rates (and therefore GEMA's allowed return on debt) have fallen below it.

448. [redacted]

449. GEMA recognised that smaller companies, which may tend to raise debt less frequently, may bear a greater risk that rates may be higher than average when debt is needed and/or may face higher relative costs for transacting at smaller sizes. That is why GEMA has made an adjustment in favour of smaller companies (including WWU). It is also, no doubt, why many network companies choose to spread rate setting risk over the medium term, rather than at one point in time.

450. WWU proposes that GEMA should make company-specific adjustments to remediate the alleged discrimination. But if WWU were provided with a higher allowance than SGN Scotland or NGN despite the similarity of the objective circumstances outside their control, this may well found an argument of discrimination on the latter companies' behalf. Decisions taken by WWU's management and shareholders as to its capital structure and risk management are not an appropriate ground on which to base differential treatment.

451. In any event, the effect of such a company-specific adjustment in WWU's favour would be to "*do away with the strong incentives to manage company debt prudently and efficiently that setting a sector-wide cost of debt benchmarked to market trailing averages provides*" (as set out in SSMD, §2.26). Further, such an approach "*may also require Ofgem to undertake much greater scrutiny and control over company financing decisions and actions and greater standardisation of company capital structures*" contrary to the rationale underpinning GEMA's decision-making (SSMD, §2.26).

452. GEMA has explained the benefits of the external index calibrated by sector average in full in the decision documents.[253] In particular, the alternative approach (pass-through, with or without WWU's proposed "efficiency check") would expose

[253] See particularly SSMD §2.27. [F1/03]

consumers in different locations to paying different charges due to the different financing risk strategies of management and/or their shareholders.

Retrospective imposition of an interest rate profile policy

453. WWU contends that GEMA's approach to allowed return on debt amounts to the retrospective imposition of an interest rate profile policy. There is said to be no basis for rejecting WWU's approach as inefficient or inappropriate, since the only benchmark is market rates at time of transaction, and WWU's portfolio of debt and derivatives was transacted at market rates (§A5.42). But that is wrong. Whether the transaction was done at market rates is merely one factor which is relevant to an assessment of a corporate entity's financing efficiency: others include timing, type, tenor, profile, and spread (Friend 1 §112). There is no question of GEMA imposing retrospectively an interest rate policy or judging WWU's decisions with the benefit of hindsight. GEMA has never given WWU to understand that its actual debt costs would be met. On the contrary, it has been clear to licensees since privatisation that an allowed return on debt would be set by reference to medium term market trends, and that the allowance would be sector-wide rather than specific to actual company costs.

Conclusion

454. Contrary to WWU's case, it is no part of GEMA's role or statutory functions to stipulate a particular strategy. Rather, the job of the regulator is to reflect a reasonable, average strategy in its allowance. This does not extend to remunerating companies for the specific strategies they choose to adopt.

Failure to take into account derivatives

455. WWU contends that GEMA ought to have taken account of its derivative position in setting the allowed return on debt. This argument, like WWU's argument that the index was irrational, is in effect a repackaging of WWU's interpretation of the financeability duty. WWU's core proposition is that GEMA acted irrationally because its allowed return on debt is not sufficient for WWU to recover the actual costs of its debt and derivative portfolio.

456. It is important to note that WWU's debt costs (absent derivatives) are in fact well within GEMA's allowed return on debt for RIIO-2 (Friend 1 §166). [redacted]

457. WWU contends that derivatives are commonly used and well understood, such that GEMA should have regard to them in setting debt allowances (§§A6.3-A6.5). But the frequency of their use is no answer to the fact that derivatives can be manipulated so as to shift financing costs from one period to another, and their future use is difficult to predict, making their costs and benefits difficult for the regulator to assess (see further DD Finance Annex, §2.54). For example, GEMA's cross checks identified 190 derivative pay or receive legs as being more than 25bps from market benchmarks, demonstrating to GEMA that it is difficult to draw comparisons across derivatives given the bespoke nature of these instruments (Friend 1 §76).

458. These features of derivatives means that a snapshot of their use by a company at one point in time cannot necessarily give an accurate picture of their costs and benefits in the medium and longer term (DD Finance Annex §2.54, and Friend 1 §139.3). It is not the case that derivatives are simply another means of securing a functional equivalent to index-linked bonds (cf NoA §§A6.9-6.10).

459. Given this, GEMA does not accept that Oxera's work is a rigorous assessment of the efficiency of WWU's derivative portfolio, for the reasons set out in the first witness statement of Ms Friend (Friend 1 §§153, 165-167).

460. The different approaches which different network companies take to derivatives indicates that their use reflects company-specific management decisions, the costs and benefits of which it is appropriate for equity investors to hold (DD Finance Annex §2.55). [redacted] It is not appropriate in these circumstances for consumers to meet these costs.

461. It is true that ratings agencies tend to take derivatives into account (*cf* NoA, §A6.4). However, they only consider the current cost of derivatives and their impact on particular credit ratios (Friend 1 §144). The ratings agencies do not assess whether derivatives were undertaken "efficiently" many years ago (which would be the task facing GEMA in the event that derivatives were included in the analysis) (Friend 1 §144).

462. Although approaches to derivative use vary across licensees, the use of cross currency swaps to return foreign currency liabilities to GBP is the one area of commonality. It is for this reason that GEMA has taken into account the post-swap GBP equivalent costs of foreign currency issuance in its calibration (DD, p.204). That is consistent with GEMA's approach (*cf* NoA §A6.12) because it is part of the notional efficient operation in a context where 100% of network company revenues are in GBP.

463. Although GEMA stands by its position that derivatives should not be included in the calibration, GEMA did collect detailed data on these instruments, and presented the results of the calibration testing both including and excluding derivatives (and intercompany loans). According to GEMA's modelling, on an aggregate basis across GD&T these costs are expected to be covered by the allowed return on debt: see FD Finance Annex §2.40 and Table 6; and Friend 1 §148].

Conclusion on Cost of Debt

464. For the reasons set out above, the appeal on WWU's Ground 1 should be rejected. GEMA's approach to the allowed return on debt is consistent with established regulatory practice, supported by rigorous evaluation of the data, and in any event is well within the scope of GEMA's expert regulatory judgement (see section C(iii) above).

H. TAX CLAWBACK

Introduction and overview

465. By its Sixth Ground of Appeal, WWU complains of alleged changes to the treatment of interest payments on derivative instruments for the purposes of the "**tax clawback**" mechanism in the Gas Transporter Licence.

466. As explained in detail below, no changes in substance have been made to GEMA's approach to the treatment of interest payments on derivative instruments since an Open Letter of GEMA dated 31 July 2009. Moreover, if there is to be a change to this treatment, that is a matter which will be addressed in future in PCFM Guidance, which will sit alongside the RIIO-GD2 RIGs. The approach to the treatment of interest payments was not something which was specifically addressed in the RIIO-2 Final Determinations.

467. There is, accordingly, no "*decision by GEMA to proceed with the modification of a condition of a licence*" that is susceptible to appeal under section 23B GA 86.

468. GEMA having raised this point in its submissions on permission to appeal, the CMA then asked WWU to identify which provision or element of the licence modifications this ground of appeal was directed against. WWU's response was that the tax clawback policy was incorporated within the revised Price Control Financial Handbook that will be effective from 1 April 2021 and that the 2009 Open Letter "has no legal status in its own right" and its status and effect is "*entirely dependent on the content of the licence conditions introduced by the decision of Ofgem on 3 February this year*" **[PH1/24**.]

469. However, although there has been a modification to the manner in which the policy has been implemented which involved a modification of a condition of a licence (see the First Witness Statement of Penny Harandy ("**Harandy**") §§50-62), GEMA has not made any modification to the Gas Transportation Licence Conditions *concerning the treatment of interest payments on derivatives* for the purposes of the tax clawback. There is accordingly no decision susceptible to appeal. Further, the 2009 Open Letter was also referenced in the GD1 Price Control Financial Handbook. GEMA's decision on the treatment of interest payments on derivatives is historic (dating from 2009, or at the latest 2019) and WWU is out of time to challenge.

The Tax Clawback Mechanism

470. The development of the tax clawback mechanism is described in detail in Harandy Section A. The mechanism precedes RIIO-GD1. The purpose of the tax clawback was explained in GEMA's Open Letter to network licensees dated 31 July 2009 (the "**2009 Open Letter**")[254] and accurately summarised at WWU NoA, §§F1.1-F1.4. In short:

470.1 Interest payments made by licensees on their debt are tax deductible;

470.2 The Price Control Financial Model includes an allowance for taxation payments based on a licensee's notional cost of debt - i.e. its notional level of interest payments over the price control period;

470.3 A licensee with a higher than modelled cost of debt (i.e. higher than notional interest payments) will be eligible for higher than modelled tax deductions and, thus, will be over-compensated by a taxation allowance calculated based on the modelled cost of debt;

470.4 The tax clawback is applied during each year of the RIIO price controls, through the Annual Iteration Process to reduce a licensee's taxation allowance as necessary to reflect (i) actual interest costs being higher than modelled interest costs resulting in (ii) actual interest-related tax deductions being higher than modelled interest-related tax deductions and, therefore, (iii) actual tax liabilities being lower than modelled tax liabilities.

470.5 In RIIO-GD1, the tax clawback mechanism was incorporated in Part B of Special Licence Condition 3C (Specified Financial Adjustments) with effect from 1 April 2013 **[PH1/8];** a more detailed description of the mechanism was set out in part 3 of Chapter 4 (Tax liability allowances) of the GD1 Price Control Financial Handbook (a licence instrument, which forms part of the licence)[255] and a link to the 2009 Open Letter itself was referred to in Chapter 10 (Legacy price control adjustments) of the GD1 Price Control Financial Handbook.

The treatment of interest payments on derivative instruments

471. WWU is particularly concerned with the treatment for the purposes of the tax clawback of interest payments made under RPI swap and interest rate swaps: see WWU NoA, §F2.1. Under these types of contracts, both parties will undertake to make interest payments by reference to a notional principal sum; with one party typically undertaking to make payments at a fixed rate of interest and the other undertaking to make payments at a floating rate of interest (e.g. an index-linked rate of interest or a specified market rate). The 2009 Open Letter did not specifically address the tax clawback treatment of interest liabilities incurred under swap contracts, but clearly stated (on page 4) that "*actual interest*" for the purpose of the tax clawback calculation includes "*actual net interest (payable less receivable) for the*

[254] Open letter: Clawback of tax benefit due to excess gearing | Ofgem **[PH1/4]**
[255] GD1 Financial Handbook_post Stat Con mark up (ofgem.gov.uk) **[PH1/7]**

price controlled business extracted from regulatory accounts, used on an accruals basis" (emphasis added). There is no reason on the face of this text to suppose that "actual net interest" might exclude interest payments incurred or accrued under swaps contracts (such liabilities being tax deductible): see Harandy §16.

472. The 2009 Open Letter also stated (on page 4) that "*actual interest*" excludes, *inter alia*, "*fair value adjustments (e.g. losses on derivatives)*". A "fair value adjustment" is a change in the sale/purchase value of the swap contract; it is broadly analogous to the capital appreciation or depreciation of a real estate asset over time in that the loss or gain occasioned by this type of adjustment is not realised unless and until the swap contract is transferred to a third party. A "fair value adjustment" has no profit and loss impact: it is distinct from the interest payments accrued and periodically incurred by the parties to a swap contract; and would be readily understood to be distinct by any regulatory finance professionals: see Harandy §§17-18.

473. On 22 June 2015 **[PH1/10]**, WWU wrote to GEMA seeking to clarify the treatment of interest liabilities under swap contracts for the purposes of the tax clawback and arguing that such liabilities should be excluded from the assessment of "actual interest".

474. On 13 July 2015 **[PH1/11]**, GEMA replied to WWU only (i) correctly noting that the definition of "actual interest" in the 2009 Open Letter excludes "*fair value adjustments (e.g. losses on derivatives)*" and (ii) incorrectly concluding therefrom that "*inflation related expenses and income both accrued and actual should be excluded from the value of adjusted tax deductible net interest paid for the purposes of RIIO GD1 tax clawback adjustment calculations*". Specifically, that conclusion confused the concepts of a "fair value adjustment" to a swap contract, being an unrealised gain or loss on the value of a derivative broadly analogous to capital appreciation/depreciation in real estate, with the inflation accretion payments due under a swap contract, broadly analogous to rental income or expense on real estate. See Harandy §28.

475. The 13 July 2015 letter was sent to WWU only and was not drawn to the attention of other network licence holders. With the exception of WWU, no other network licence holder has queried the treatment of interest liabilities under derivative contracts for the purposes of the tax clawback. Ofgem has not seen any instances in which a licensee - other than WWU - has excluded interest or inflation accretion payments associated with derivatives from its "actual interest" figure reported for the purpose of the tax clawback. See Harandy §29.

476. On 13 March 2019[256], GEMA consulted on certain proposed changes to the RIGs, including the following note on page 16 - "*We would expect Net Interest Per Regulatory (RIIO-1) definition to include all inflation derivative payments that attract tax relief (because that is the definition used for tax clawback)…*" (emphasis added).

256 Notice proposing modifications to the Regulatory Instructions and Guidance (RIGs) for RIIO-GT1 (version 6.1) | Ofgem **[PH1/12]** & **[PH1/13]**

477. WWU was aware of this consultation as evidenced by its response to GEMA dated 11 April 2019[257]. That response noted that the extract from page 17 of the draft RIGs set out above "*appears to conflict with what we have previously been advised by Ofgem*"; although no mention was made of GEMA's letter of 13 July 2015.

478. On 30 April 2019, GEMA published the 2019 RIGs Direction updating the RIGs so as to, *inter alia*, incorporate the language set out at §475 above[258]. It can be inferred that WWU was aware of the final RIGs document given its participation in the consultation.

479. In October 2019, GEMA did agree to an adjustment so that a derivative payment should be reflected in the 2013/14 period and not in the 2018/19 period as WWU had originally requested, however, there was no suggestion of making the same adjustment for any other periods (Harandy §37).

480. Indeed, on 4 October 2019, GEMA emailed all network licensees reminding them that it had clarified the definition of net interest and net debt in the RIIO-1 RFPR RIGs[259] in its 30 April 2019 decision, and instructing all licensees to use in their upcoming RFPR submissions the value reported as "Net Interest Per Regulatory (RIIO-1) Definition" for the purposes of the tax clawback. The purpose of this communication was to ensure that there was no room for doubt as to the treatment of derivative inflation payments as regards the net interest calculation.

481. For the purpose of RIIO-2, GEMA proposed to retain the tax clawback policy. The precise mechanism in the licence conditions and related documents has changed under RIIO-2 (as explained in Harandy §§50-62). However, there has been no change whatsoever to the treatment of interest payments on derivative instruments for the purposes of the "**tax clawback**" mechanism. There is nothing in the revised Price Control Financial Handbook (the provision identified by WWU in response to the CMA as the element of the licence modifications its appeal was directed against) which addresses at all the treatment of interest payments. In respect of the treatment of interest on derivative payments, the position remains governed by the RIGs 2019 (although it may change in future, because it is under consideration in the consultation on the PCFM Guidance): see Harandy §§50-62.

GEMA's core objection to WWU's Sixth Ground of Appeal

482. The key premise of WWU's Sixth Ground of Appeal is that the inclusion of interest liabilities under derivatives (such as swaps) in the price control tax clawback calculation is "*Ofgem's newly adopted position*": see WWU NoA, §§F3.2 & F3.3.

483. That is wrong. The inclusion of interest payments on derivatives in the definition of "actual interest" for the purposes of the tax clawback is clear from the terms of the 2009 Open Letter (which was incorporated into Part B of Licence Special Condition 3C of the Gas Transporter Licence as described in §470(5) above), once the

257 **[PH1/14]**
258 Direction to make modifications to the Regulatory Instructions and Guidance (RIGs) for RIIO-GD1 (version 6.0) | Ofgem **[PH1/15]**
259 Ofgem made the same RIGs modification in the ED1, ET1 and GT1 sectors.

distinction between interest liabilities (including index-linked interest liabilities) and "fair value adjustments" is understood.

484. WWU did not challenge the 2009 Open Letter and it is out of time to do so now. Nor did it challenge the 2019 RIGs Direction.

485. To put the point another way, GEMA has not, as part of its RIIO-2 Final Determinations, made any modification to the Gas Transportation Licence Conditions concerning the treatment of interest payments on derivatives for the purposes of the tax clawback. There is, accordingly, no "*decision by GEMA to proceed with the modification of a condition of a licence under section 23*" that is susceptible to appeal under section 23B.

WWU's complaint of breach of a legitimate expectation/absence of consultation

486. Further, and in any event, WWU's claim that there has been a breach of a legitimate expectation (NoA §F3.1(a) – (c)) is baseless.

487. In order for a legitimate expectation to arise, the promise relied upon must be clear, unambiguous and devoid of any relevant qualification: see *R (Heathrow Hub Ltd) v Secretary of State for Transport* [2020] EWCA Civ 213 at §§68-69.

488. There is patently no such promise in the present case. The 2009 Open Letter, as explained above, would have been understood by finance professionals as including interest on derivatives. Indeed, this is reflected in the fact that GEMA has not seen any instance in which network licence holders other than WWU have been excluding interest payments on derivatives from their "actual interest" for the purposes of the tax clawback calculation (Harandy §29).

489. Further, if and to the extent that GEMA's letter of 13 July 2015 created any legitimate expectation that WWU's interest liabilities on derivatives would not be included in the tax clawback calculation - which GEMA does not accept – such legitimate expectation was obviously defeated by the 2019 RIGs Direction. As at 2019, the position that such interest was included was made wholly clear to WWU. WWU responded to the consultation, disagreeing with the approach and accordingly plainly understood GEMA's position as at that point. WWU did not seek judicial review of that Direction at the time; it is, again, now out of time to do so.

490. Further, even if (contrary to the above) a legitimate expectation in relation to the treatment of interest on derivatives had arisen it would not be unfair for GEMA to depart from that. GEMA's statutory duties require it to apply the approach which it considers best meets those duties and its objectives. Moreover, GEMA cannot unduly fetter its discretion. However, the basic point remains that GEMA is not <u>in the licence modifications under appeal</u> seeking to make any change to the treatment of interest on derivatives. The licence modifications do not address that issue (although it will be addressed in future, through consultation on the PCFM Guidance).

491. This basis of challenge that there has been a breach of a legitimate expectation should therefore be rejected.

492. Similarly, the claim that there has been a failure to consult on the change (NoA §F3.1(e)) should be rejected. There has been no change on the issue of the treatment of interest on derivatives adopted in the licence modifications which are under appeal. To the extent that there is going to be a change in future from the present position (set out in the 2019 RIGs), GEMA is consulting on that and has yet to reach a position.

The alleged lack of logical coherence in GEMA's position on interest on derivatives

493. Under this sixth ground, WWU claims that the 2015 Letter establishes a position that is "logically coherent" in that derivatives should be excluded both from the calculation of the cost of debt and from the calculation of tax clawback.

494. This is rejected. As explained in response to Ground One of WWU's appeal, addressed above in section G, there is a rationale for excluding derivatives from the allowed return on debt and an explanation as to why the position is different for the tax clawback.

494.1 In summary, the allowed return on debt is calibrated with reference to gas distribution and transmission ("GD&T") average debt costs, which does not explicitly include derivatives. However, in FDs, GEMA confirmed that at the industry level, inclusion of derivatives in this assessment would not have changed the RIIO-2 GD&T allowed return on debt calibration decision (i.e. a 10-14 year trailing average plus 0.25%) and would not be expected to cause a revenue shortfall relative to the allowed return on debt. The allowed return on debt is provided on a notional company basis.

494.2 The tax allowance is likewise set on a notional company basis, unless the conditions for tax clawback are met.

494.3 The primary purpose of the tax clawback isn't to adjust this notional allowance to an actual company allowance; its primary purpose is to remove the incentive, which would otherwise exist, for licensees to increase their gearing and lower their actual tax costs, while retaining the full tax allowance. GEMA believes that creating an incentive for companies to maintain excessive levels of gearing is not in the long-term best interests of consumers. The tax clawback is an adjustment directly referencing *actual* company circumstances where a company operates with both a level of gearing and an interest expense more than the notional company and as a result creates an excessive tax shield. As set out above, the purpose of this mechanism is to claw back from licensees the revenue benefit they obtain from the excess tax deductibility of interest associated with excessive levels of debt.

495. See the first witness statement of Jessica Friend at §148-150.

Conclusion on Tax Clawback

496. This ground of appeal should be rejected. In practice, WWU is seeking to challenge a decision that: dates from 2009; was confirmed in 2019 following a consultation in which WWU took part; and is in reality not part of the RIIO-2 Final Determinations at all.

I. TNUOS

Introduction and Summary

497. By its Fourth Ground of Appeal, SHE-T seeks to challenge GEMA's decision to allocate to electricity transmission owners ("TOs") the cash flow risk of under-recovery of annual allowed revenues through transmission network use of system charges ("TNUoS") charges; such cash flow risk having been borne by NGET from 2005 until 2019 and then NGESO since 2019 (when NGESO separated from NGET). Prior to 2005 each TO was responsible for setting and collecting their own TNUoS charges. As explained below, GEMA maintains that:

497.1 The relevant cash flow risk is adequately remunerated in the RIIO-2 package through the allowed return on equity, and any revenue shortfalls are funded through allowances for maintaining a revolving credit facility and through a time value of money adjustment.

497.2 The scale of cash flow volatility for SHE-T is approximately 0.3% of Regulatory Asset Value (RAV), which is similar to the volatility borne by other licensees in the gas distribution and electricity distribution sectors that are funded on a similar basis.

497.3 SHE-T has not demonstrated any shortfalls in funding. Indeed, the cost of funding cash flow volatility is small enough to be immaterial.

497.4 The consultation process was full.

498. The cash flow risk referred to in SHE-T's Fourth Ground of Appeal arises by virtue of TOs' allowed revenues being recovered through TNUoS charges to suppliers and generators, which are (i) levied on a /MWh[260] basis and (ii) set annually in advance using forecast levels of consumption and generation. Where the actual level of consumption and/or generation is lower than that assumed for the purpose of setting TNUoS charges, this can lead to under-recovery of TOs' annual allowed revenues.[261] Any under-recovery in a given year is reflected in an adjustment to TNUoS charges one charging year later: see SHE-T NoA, §7.9. The risk in question is not, therefore, one of permanent under-recovery of allowed revenues, but rather of delayed recovery of those revenues relative to a particular assumed profile. TOs receive a time value of money compensation for delayed recovery.[262]

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[260] Or rather, a combination of /MW and /MWh basis. During the year, monthly charges to suppliers are based upon a supplier forecast of their demand, and at the end of the financial year, there is a reconciliation to reflect outturn levels of demand.

[261] Similarly, a higher than predicted level of consumption/generation can lead to over-recovery of annual allowed revenues; however, this is not the focus of SHE-T's concern; indeed SHE-T ignores this point.

[262] See page 126 of Ofgem's RIIO-2 Final Determinations – Finance Annex. [F1/05]

499. Prior to the introduction of the British Electricity Trading and Transmission Arrangements ("**BETTA**") in 2005[263], each TO was responsible for setting and collecting their own TNUoS charges – and so bore the cash flow risk of delayed recovery of allowed revenues described above. Under BETTA, NGET became responsible for setting and collecting TNUoS charges for all of the TOs and was required to account to the other two TOs for their allowed revenues on an ex-ante forecast basis – in other words, NGET bore the cash flow risk of delayed recovery on behalf of all three TOs. Since the separation of the Electricity System Operator ("**ESO**") from NGET in 2019, the ESO has set and collected TNUoS charges, and has continued to account to the TOs for their allowed revenues on an ex-ante forecast basis: see SHE-T NoA, §§7.9-7.10.

500. Under the RIIO-2 price control, the ESO will continue to set and collect TNUoS charges, but will only be required to account to the TOs for the (variable) charges collected; rather than accounting on the basis of forecast recovery. Thus, TOs will once again be exposed to the cash flow risk of delayed recovery of allowed revenues, as they were prior to the introduction of BETTA.

501. GEMA explained its reasons for this in the consultation leading to and in GEMA's Decision on re-allocation of TNUOS Revenue Collection Risk, published on 9 July 2020, alongside the Draft Determinations (DD) on ESO and TO funding ("the July 2020 Decision"). GEMA believed that the TOs were best placed to bear the TNUoS cash flow risk, as the onshore larger RAVs, and direct interest in their allowed and collected revenues, make them a more natural, and more economical owner of this cash flow timing. See Simon Wilde's second Witness Statement ("**Wilde 2**") §§6-18; §§21-34.

502. SHE-T raises six sub-grounds, each of which are addressed in turn.

Sub-Ground One: Alleged disconnect between risk and responsibility

503. In summary, SHE-T complains that the Decision: (i) leaves SHE-T exposed to a reduction in its allowed revenue which will leave it underfunded to deliver the programme of investment needed during RIIO-2; by reason of a (ii) fundamental disconnect between risk and responsibility: NoA §§7.21-7.27.

504. Each of these points are addressed in turn.

Alleged exposure to underfunding

505. SHE-T complains that this change of approach will leave it exposed to "*a perpetual and potentially increasing cash flow risk that is not in its power to manage or control, and without any compensation for the associated financing and administrative costs*": SHE-T NoA, §§7.2 and 7.26.

[263] See the updated guide to the British Electricity Trading and Transmission Arrangements (BETTA), referred to in Wilde 2 §11. https://www.ofgem.gov.uk/sites/default/files/docs/2002/12/1366-18dec02vol2.pdf Paragraph 7.18. [F1/14]

506. SHE-T refers to an "*existing average TNUoS shortfall*" of [redacted] (NoA, §7.23) and expected "*exposure*" of between £15m and £60m per annum on the assumption of current levels of consumption/generation forecasting accuracy (NoA, §7.26).

507. However, these figures do not represent any permanent under-recovery for SHE-T, but rather delayed recovery relative to an assumed profile. GEMA is unclear how SHE-T's average shortfall value of [redacted] has been calculated, but it should be noted that in RIIO-2, SHE-T would only be exposed to approximately 22% of any TNUoS shortfall, which represents its share of the annual TNUoS revenues collected by the ESO.

508. Moreover, there is no evidence of a systematic bias in favour of under-recovery, and therefore no basis to the claim that the shortfall would be perpetuated or increase over time. While the direction of any forecasting error (i.e. whether it leads to an under- or over-recovery) by the ESO is unpredictable, there is no evidence or reasonable hypothesis to suggest that the ESO would systematically err in the direction of *under-recovery* – which is a necessary condition for the scenario identified by SHE-T to materialise (and, as explained, any under/over-recovery can be reconciled or settled with a 1-year lag and would not result in a perpetual shortfall of revenue). See Wilde 2 §§57-59.

509. Further, such cash flow risk is already reflected in SHE-T's price control package in the following ways (see Wilde 2 §40):

509.1 First, cash flow risk is captured in equity beta and therefore in the allowed return on equity. SHE-T's assumed equity beta is informed by National Grid plc's ("NG plc") observed beta for the period 2005-2020, during which NGET carried the cash flow risk of under-recovery of TNUoS charges for all of the GB TOs (see above).[264] Therefore, SHE-T's allowed return on equity already captures the cash flow risk associated with possible under-recovery of TNUoS. Thus, from an equity-risk-and-return point of view, SHE-T's RIIO-2 settlement is consistent with the transfer of this cash flow risk from the ESO back to the TOs. Indeed, if cash flow risk is material, the use of NG plc's beta may *over-estimate* the risk for SHE-T, as SHE-T will only take a proportion of the risk, whereas NG plc held it on behalf of all of the GB TOs.

509.2 Second, any under-recovery is captured and remunerated through a time value of money adjustment.[265]

509.3 Third, when setting the allowed return on debt, the Authority provided SHE-T with annual funding of £0.9m for liquidity / Revolving Credit Facility ("RCF") of around £240m, consistent with GEMA's RIIO-2 Final Determinations – Finance Annex.

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[264] In assessing SHE-T's equity beta, GEMA also had regard to the equity betas of listed water companies Pennon (PNN) Severn Trent (SVT) and United Utilities (UU), which also bore revenue collection cash flow risk over the relevant period assessed: see Table 10 of Ofgem's RIIO-2 Final Determinations – Finance Annex. [F1/05]

[265] See page 126 of Ofgem's RIIO-2 Final Determinations – Finance Annex. [F1/05]

510. GEMA also estimate that the magnitude of cash flow volatility (i.e. absolute value of differences between allowed and actual revenues) for SHE-T and other TOs is approximately 0.3% of its RAV. This is directly comparable to the cash flow volatility borne by other licensees (which GEMA estimate to be between 0.20% and 0.4% of RAV over RIIO-1) in the gas distribution, electricity distribution and gas transmission sectors that are funded on a similar basis to SHE-T. See Wilde 2 §§42-43.

511. SHE-T's Notice of Appeal does not quantify the extent of any alleged funding shortfall or estimate the impact of GEMA's alleged errors in relation to TNUoS risk. GEMA respectfully suggests that SHE-T would need to demonstrate that a funding shortfall exists before the CMA can find in its favour.

512. While GEMA's view is that no such shortfall exists, it has considered hypothetical approaches to estimating the size of the funding requirement for the cash flow risk on a purely stand-alone basis and ignoring any funding that is already implicitly provided through the allowed returns on equity and debt. One possible estimate of the stand-alone cost of SHE-T's cash flow risk is £0.3m per year[266] for SHE-T (equivalent to 0.05% of revenue). This is based on the estimated cost of arranging a Working Capital Facility for £65m, being 22%[267] of the ESO's estimate of the reduction in its required working capital attributable to the transfer of cash flow risk to the TOs[268]; 22% is the proportion of total TNUoS charges (for all three TOs) due to SHE-T. See Wilde 2 §§45-47.

513. Other approaches to estimating these costs on a stand-alone basis may be possible and GEMA emphasises that the above estimate is illustrative and does not represent its view of the actual impact of the error alleged by SHE-T, or the size of any resulting funding shortfall. In order to estimate the impact more precisely it would be necessary to deduct from any estimate of the stand-alone cost a reasonable estimate of the funding for TNUoS risk implicit in the overall cost of equity and cost of debt funding provided in RIIO-2. That itself is not a straightforward calculation and, again, any estimate is likely to involve a degree of speculation.

514. Nevertheless, it is clear that any additional cost associated with the transfer of cash flow risk from the ESO to SHE-T that is not already captured in SHE-T's existing cost of funding allowance is likely to be zero or small, meaning that it can reasonably be concluded that the decision to re-allocate the cash flow risk has no material impact on SHE-Ts interests. Neither SHE-T nor any of the other TOs provided any evidence

[266] Taking £65m and multiplying it by a commitment fee of 0.45% as per Draft Determinations, Finance Annex, page 181:
https://www.ofgem.gov.uk/system/files/docs/2020/07/draft_determinations_-_finance.pdf#page=181 [F1/06]

[267] Per Final Determinations, Finance Annex, p. 202 and 203 -
https://www.ofgem.gov.uk/system/files/docs/2021/02/final_determinations_-_finance_annex_revised_002.pdf#page=202. [F1/05]

[268] Per the ESO's business plan:
https://www.nationalgrideso.com/document/158051/download#page=134. [F1/45]

either as a part of the wider RIIO-2 consultation process nor as a part of this appeal to show a material impact. See Wilde 2 §49.

Alleged disconnect between risk and responsibility

515. By way of preliminary, GEMA disagrees that the transfer of risk is inappropriate or creates a prejudicial disconnect, as alleged by SHE-T. GEMA considers that the TOs are best placed to bear the TNUoS cash flow risk and that this is the most efficient arrangement for consumers. This is explained further below.

516. SHE-T claims that the approach adopted "*creates a fundamental disconnect between: (a) the party responsible for forecasting demand and generation, and setting TNUoS charges accordingly (the ESO); and (b) the parties who bear the financing and administrative costs arising if such forecasts are inaccurate and lead to a mismatch between (i) the amounts that the ESO invoices the generators and suppliers of electricity; and (ii) the amounts due from the ESO to the TOs."* (NoA §7.22). SHE-T alleges that the disconnect "*between risk and responsibility disincentivises the ESO from making accurate demand and generation forecasts, because the costs arising from this will be borne by the TOs...*" (NoA §7.23) and that the changes to the ESO's licence have *"weakened the accuracy incentives for the ESO*" (NoA §7.24).

517. These claims should be rejected. In deciding to transfer the cash flow risk, GEMA recognised the need for appropriate incentivisation for the ESO to provide accurate forecast and tariff calculations. GEMA introduced ESO framework changes for RIIO-2 to mitigate forecasting risk: see Wilde 2 §71.

518. The ESO's RIIO-2 incentives framework rewards or penalises the ESO based on an assessment of its performance against predefined expectations for its different activities (set out in the 'ESO Roles Guidance'). For RIIO-2, the ESO's TNUoS performance forms part of the evaluation of the ESO and will be explicitly considered in the following ways (see Wilde 2 §§72-75):

518.1 First, through specific performance expectations on the ESO to forecast accurately and manage an efficient charging process through the ESO Roles Guidance.

518.2 Second, through an explicit requirement on the ESO to provide evidence to GEMA on the accuracy of its TNUoS forecasts in its published incentives performance reports.

518.3 Third, through a defined, multi-layered, process of collation and publication and overview of evidence from stakeholders, which gives several routes to SHE-T to influence the ESO's incentives outcome where it believes its performance on TNUoS charging is insufficient.[269]

[269] In addition, a procedure under the SO-TO Code ("STC") should allow a role for the TOs as will aspects of the RIIO-2 forecasting methodology: see Wilde 2 §§116-120.

519. As a result of these and other ESO RIIO-2 framework changes, there is an increased incentive on the ESO to deliver a good service in relation TNUoS charging rather than seeking cost reductions in this area: see Wilde 2 §76.

520. Further, the ESO is under a licence obligation to produce and publish accurate and unbiased forecasts.[270] GEMA actively enforces this condition; for example, notifying the ESO in April 2021 of a penalty of £1.5m for a suspected breach of the obligation: see Wilde 2 §77.

521. These measures result in a framework which will operate to ensure there is a sufficient incentive on the ESO to make forecasts which are as accurate as possible, to provide transparency on the reasons for any deviations from its original forecasts and to provide SHE-T and other TOs with the opportunity to influence the ESO's incentives outcome.

522. There is therefore no material risk that forecasting performance will deteriorate. Indeed, SHE-T have provided no evidence of this. The 'disconnect' alleged by SHE-T will not therefore lead to the detrimental impact which it claims. See Wilde 2 §78.

Summary

523. In summary, in response to Sub-Ground One:

523.1 GEMA disagrees that the decision to move the cash flow risk creates a prejudicial disconnect. It is a policy which is the most efficient arrangement for consumers (as explained further below).

523.2 In any event, GEMA has put in place mechanisms in the price control package to incentivise accurate forecasting by the ESO, through which the TOs also have some influence over the forecasts.

523.3 Finally, the price control package provides adequate funding to SHE-T to manage any cash flow risks.

524. This Sub-Ground should therefore be rejected.

Sub-Ground Two: Alleged absence of compensation for the costs associated with the cash flow timing risk

525. SHE-T claims that it will be required to bear costs that have not been accounted for in its overall totex allowance and that this is in contrast to the treatment of the ESO: NoA §7.28.

526. As explained in paragraph 509 above, the cash flow risk to TOs is already reflected in the price control package in a number of ways. TOs are provided with an allowance for liquidity through the allowed return on debt. This allowance is based on liquidity facilities of 10% of debt RAV[271], implying a RCF of around £240m. This is

[270] See Condition 28, paragraph 4(g) of the Electricity Transmission Licence Standard Conditions (Functions for an economic, efficient and coordinated system operator). [F1/44]
[271] https://www.ofgem.gov.uk/system/files/docs/2021/02/final_determinations_-finance_annex_revised_002.pdf, page 14 [F1/05]

equivalent to 40-50% of annual revenue. These remunerated sources of liquidity are more than sufficient to cover the maximum possible level of cash flow volatility including the maximum reasonable assumed cash flow risk associated with TNUoS. GEMA therefore did not consider TNUoS cash flow timing to materially influence totex costs. The TOs did not provide any specific or compelling evidence of additional administrative costs to change this view nor any estimate or evidence of any costs associated with this cash flow risk. See Wilde 2 §§52-53.

527. GEMA therefore did not consider it necessary to give any additional funding to TOs, as GEMA believe they can manage cash flow risk without additional funding. This is consistent with the approach taken to other sectors and prior to the NGET:ESO separation in April 2019: see Wilde 2 §54.

528. As to SHE-T's claim (NoA §7.28) that the ESO has been given an allowance to cover risk and cash flow management even though it no longer bears the cash flow risk under consideration, this additional funding to the ESO was given to reflect asymmetric risk and contingent capital.[272] This is a figure which takes account of the transfer of TNUoS risk to the TOs, which could have been higher if the ESO had continued to hold the TNUoS cash flow risk. See Wilde 2 §29.

529. This Sub-Ground should therefore be rejected.

Sub-Ground Three: alleged risk of SSEN Transmission failing to meet Standard Condition B7 of its licence

530. SHE-T claims that "*by failing adequately to compensate SSEN Transmission for the TNUoS cash-flow timing risk, GEMA has put SSEN Transmission at risk of failing to meet Standard Condition B7 of its licence. This condition requires SSEN Transmission at all times to act in a manner calculated to secure that it has available to it such resources as shall ensure that it is at all times able: (i) to properly and efficiently carry on the transmission business; and (ii) to comply in all respects with its obligations under its licence"*(NoA §7.29).

531. This claim should be rejected for the reasons outlined in response to Sub-Ground One, point (i) above. Any additional cost associated with the transfer of cash flow risk from the ESO to SHE-T that is not already captured in SHE-T's existing cost of funding allowance is likely to be zero or small. See paragraphs 506 to 514 above.

532. This Sub-Ground should be rejected.

Sub-Ground Four: An alleged absence of evidence to demonstrate the basis for GEMA's decision

533. SHE-T claims that GEMA has not provided any evidence or analysis to demonstrate the basis for its decision, namely that the costs to the industry would be more efficient

[272] The ESO still holds Bad Debt cash flow risk associated with the non-payment of TNUoS and BSUOS charges.

if the onshore TOs rather than the ESO were to bear the TNUoS cash flow risk (NoA §7.33).

534. This claim is incorrect. GEMA provided detailed analysis in both the December 2018 Consultation and the July 2020 Decision, noting the evidence which was provided to it in the course of consultation.

535. In the December 2019 Consultation, GEMA noted that "*prior to legal separation, the magnitude of the variance [the absolute difference per year between allowed and collected revenues] was modest compared to the size of NGET's Regulatory Asset Value (RAV) (over £13bn) and borrowings. In contrast, the size of the variance is less modest relative to the ESO's RAV (£211m in nominal terms at the end of 2019/20*[15]*) and borrowings. In March 2019, a credit rating performed by Moody's noted that the ESO's rating was constrained by exposure to such revenue collection activities. The rating provided by Moody's (which was "investment grade") was reliant on Moody's assigning a high likelihood of parental support should it become necessary to maintain ESO credit quality. We understand that prior to legal separation, NGET managed TNUoS cashflow variances using the wider working capital needs of NGET's business. Further, the ESO currently has – and would likely continue to need – a Working Capital Facility (WCF) to manage the TNUoS cashflows. Ofgem will need to take into consideration the ability of a relatively small standalone company to procure and support a WCF of equivalent size*." (§2.7). GEMA explained that "*this means that the finance cost would, in our view, if allocated to the ESO, be less efficient because financiers (both debt and equity) in the ESO would require a larger allowance than financiers (both debt and equity) in the onshore TOs*" (§2.11).

536. Following receipt of submissions and evidence, GEMA explained that "*this change would have a number of benefits, including overall efficiency of the industry arrangements and for incentives. We explained that the onshore TOs' larger RAVs, and direct interest in their allowed and collected revenues, make them, in our view, a more natural, and more economical, owner of this cash flow timing risk exposure. The difference between allowed and collected revenues can be material in relation to the size of the ESO – this means that the finance cost, if allocated to the ESO, would, in our view, be less efficient because financiers (both debt and equity) in the ESO would require a larger allowance than financiers (both debt and equity) in the onshore TOs. Our view on these benefits has not changed*.". See further Wilde 2 at §§20 – 34 for an explanation of GEMA's position.

537. SHE-T makes the following points in support of this Sub-Ground, each of which are addressed in turn.

538. First, that the only evidence for GEMA's conclusion was the larger RAV of the onshore TO's. However, the borrowing costs of a regulated entity are determined by its credit rating not its RAV (NoA §7.33(a)).

539. As to this, it is not the case that the only basis for GEMA's conclusion was the size of the RAV of the ESO compared to the TOs.

540. As explained by GEMA in the July 2020 Decision (see page 5), the ESO's credit rating was influenced by the holding of the cash flow risk. GEMA considered the

ESO's small RAV to be an issue influencing the ESO's credit rating: see Wilde 2 §§23 – 29.

541. Further, there were other reasons in support of the decision, including that the TOs had an interest in the collection and that this approach would be in line with the treatment in other industry: see the July 2020 Decision and Wilde 2 §§17, 30.

542. Second, SHE-T argues that the costs to the industry may be higher owing to the inefficiency of spreading working capital facilities and administrative costs across four companies (NoA §7.33(b)).

543. GEMA considered administrative costs in the July 2020 Decision and considered the change would not lead to additional administrative costs to the TOs or ESO (page 5 under the section "*Administrative costs associated with TNUoS Revenue Collection Risk Re-allocation*"). SHE-T's view that it was unlikely that the change was justified because the "*costs would be across four companies rather than one*" was considered by GEMA (see page 12, July 2020 Decision). As GEMA explained, SHE-T "*did not substantiate its view on costs so we had no firm basis upon which to agree with its view. Our assessment in Annex 1 of impacts does not indicate issues that change our view of the overall benefits for electricity consumers*".

544. Third, SHE-T contends that GEMA assumed that forecasting accuracy would not deteriorate as a result of the decision (NoA §7.33(c)) and failed to consider the cost of any incentive necessary to ensure accurate forecasts (NoA §7.33(d)). As explained in paragraphs 517 to 521 above, in deciding to transfer the cash flow risk, GEMA recognised the need for appropriate incentivisation for the ESO to provide accurate forecast and tariff calculations. GEMA introduced ESO framework changes for RIIO-2 to mitigate forecasting risk.

545. Contrary to what is claimed by SHE-T, the July 2020 Decision was reached following consultation and consideration of a range of evidence and representations. It was not solely based on the mere fact that the ESO had a smaller RAV than the onshore TOs, and, indeed, GEMA considered the very points which are now raised again by SHE-T on appeal. (This is discussed further in response to Sub-Ground Six).

Sub-Ground Five: Alleged failure to conduct an impact assessment

546. SHE-T complains that GEMA failed to carry out an impact assessment ("IA") or any other form of cost benefit analysis and that this was required in view of the significant impact that this could have on the TOs, such that GEMA has acted contrary to section 5A of the Utilities Act 2000 and its own internal guidance documents (NoA §7.34)

547. The obligation to carry out an IA applies where (a) GEMA is "*proposing to do anything for the purposes of, or in connection with, the carrying out of any function exercisable by it under or by virtue of*" Part 1 of the GA 1986 or Part 1 of the EA 1989; and (b) "*it appears to [the Authority] that the proposal is important*"; unless it appears to GEMA that "*the urgency of the matter makes it impracticable or inappropriate*" to comply with the requirements of the section: s.5A(1).

548. Section 5A(2) provides that a proposal will be "*important*" within the meaning of s.5A(1)(b) "only *if its implementation would be likely to do one or more of the following*

> *(a) involve a major change in the activities carried on by the Authority;*
>
> *(b) have a significant impact on persons engaged in the shipping, transportation or supply of gas conveyed through pipes or in the generation, transmission, distribution or supply of electricity or in the provision of smart meter communication services (in respect of electricity meters or gas meters);*
>
> *(c) have a significant impact on persons engaged in commercial activities connected with the shipping, transportation or supply of gas conveyed through pipes or with the generation, transmission, distribution or supply of electricity;*
>
> *(d) have a significant impact on the general public in Great Britain or in a part of Great Britain; or*
>
> *(e) have significant effects on the environment."*

549. Before implementing a proposal which is important within the meaning of s.5A(2), GEMA must either (a) carry out and publish an assessment of the likely impact of implementing the proposal, or (b) publish a statement setting out its reasons for thinking that such an assessment is unnecessary: s.5A(3).

550. GEMA's external Impact Assessment Guidance (4 May 2020) (the "**IA External Guidance**") explains GEMA's understanding of those criteria and gives a number of illustrative examples (see Table 1, p.10).

> *"Proposals likely to result in 'significant impacts' may include those where implementing the proposal would:*
>
> > *Have significant costs for industry participants and/or people in connected commercial activities*
> >
> > *Affect industry participants' ability to choose the price, quality, range or location of their gas and/or electricity or associated services.*
>
> *'Significant impacts' may be likely, for example, where implementing a proposal significantly affects: security and/or diversity of energy supplies; health and safety; gas or electricity prices; competition in British markets; sustainable economic growth and productivity; a sustainable energy system; energy efficiency; quality of service; social impacts including effects on fuel poverty, people with disabilities and/or with protected characteristics."*

551. In the July 2020 Decision, GEMA expressly considered its duty under section 5A, in the context of representations from SHE-T that an IA should be conducted. GEMA

reached the view that it did not consider that "*this decision involves a major change to the Authority's activities and we do not consider that it will have significant impacts on industry participants, the general public or on the environment*".

552. This position was correct and in line with the requirements of section 5A and GEMA's Guidance. GEMA did not consider that the decision to re-allocate the risk of TNUoS revenue collection back to TOs was significant within the meaning of section 5A and/or GEMA's Guidance.

553. As explained in detail in response to Sub-Ground One above, it is clear that any additional cost associated with the transfer of cash flow risk from the ESO to SHE-T that is not already captured in SHE-T's existing cost of funding allowance is likely to be zero or small, meaning that it can reasonably be concluded that this change has no material impact on SHE-Ts interests. Neither SHE-T nor any of the other TOs provided any evidence either as a part of their response to the proposal to re-allocate this risk, nor as part of the wider RIIO-2 consultation process nor as a part of this appeal to show a material impact.

554. Further, and in any event, although GEMA did not carry out an impact assessment specifically of the decision to re-allocate cash flow risk, GEMA: (i) did assess the impact, in a separate Annex to the July 2020 Decision; and (ii) has engaged in an IA in relation to the RIIO-2 package. In relation to the latter:

554.1 GEMA set out its proposed approach to impact assessments for RIIO-2 in Annex 5 to the Framework Decision[273] in July 2018. That document stated that GEMA would consider the impacts of its decisions *"in the round and at sectoral level",* using the RIIO-2 objectives and Ofgem's published statements of its "*regulatory stances*" to establish an assessment framework (FW Decision p.91).

554.2 Pursuant to this, various draft and preliminary IAs have been published in the course of the RIIO-2 decision making process, including an IA on 8 December 2020[274] which accompanied the RIIO-2 Final Determinations, which set out Ofgem's final view on the impact of its Final Determinations. These assessments have considered the RIIO-2 package, as it applies to TOs.

554.3 As had been explained in the July 2020 Decision "As *part of our RIIO-2 Draft Determinations, we welcome views from stakeholders on risk benchmarking and associated remuneration (see question FQ6a in the Finance Annex). We consider that views on risk and remuneration, including any cash flow risk issues, are more appropriately captured in that forum. We will take any such views into account in our RIIO-2 Final Determinations*" (page 3). The arguments which SHE-T makes in relation to its alleged exposure to underfunding and its risked inability to comply with Standard Licence Condition B7 could have been advanced in response to the Draft Determinations. As explained above, in response to Sub-Ground One, GEMA

[273] https://www.ofgem.gov.uk/publications-and-updates/riio-2-framework-decision [F1/12]
[274] https://www.ofgem.gov.uk/system/files/docs/2020/12/final_determinations_-_impact_assessment_annex.pdf [F1/15]

considers that the price control package as a whole provides adequate funding to SHE-T to manage any cash flow risks.

554.4 SHE-T have not suggested that that broader consultation and IA into the RIIO-2 package as a whole was insufficient or unlawful, and would have no good basis for doing so.

555. It is therefore not correct that there has been any failure by GEMA to comply with the requirements of section 5A.

556. Finally, SHE-T implies that GEMA's decision not to conduct an IA was solely "*because the impacts are valued at less than £5m*" (NoA §7.34). This is a partial quotation from page 3 of the July 2020 Decision which does not reflect the totality of GEMA's reasoning in deciding not to conduct an IA.

557. The July 2020 Decision reads, in material part, "*[w]e do not consider this decision involves a major change to the Authority's activities, and we do not consider that it will have significant impacts on industry participants, the general public or on the environment. For these reasons, we have considered the impacts in a proportionate way, in line with our impact assessment guidance. A summary of our considerations are set out at Annex 1, alongside our consideration of stakeholder responses at Annex 2. Although we consider the monetary benefits of our proposal are difficult to quantify, in our view, the direct monetary impacts are relatively small. We note that the Better Regulation Framework indicates that impacts less than £5m are treated proportionately, in terms of impact assessment*".

558. It is clear from this passage that GEMA's decision was not wholly based on a definitive finding that there was an impact of less than £5m, rather it was based on a view that the impacts overall were not significant (within the meaning of section 5A). As explained above, GEMA's view is that the magnitude, in terms of additional funding cost, is zero or immaterial: see paragraphs 512 to 514 above.

Sub-Ground Six: Alleged failure to consult

559. SHE-T contends that GEMA's consultation and assessment of the decision to re-transfer the cash flow risk to TOs was flawed and incomplete (NoA §7.35).

560. GEMA conducted a full consultation in advance of reaching the July 2020 Decision. This is outlined in detail in Wilde 2 §§84-123. In short summary:

560.1 The issue of whether to re-transfer the cash flow risk arose as a consequence of responses received by GEMA to the RIIO-2 Sector Specific Methodology Decision and Further Consultation ("the May 2019 Consultation") in which GEMA first asked consultation questions about the ESO's ability to manage TNUoS cash flow risk. In response to the May 2019 consultation, a respondent suggested that it would be more efficient if TOs bore the risk than the asset light ESO (Wilde 2 §§90-91).

560.2 In the resulting RIIO-2 Methodology for the Electricity System Operator Decision and Further Consultation (28 August 2019) ("the August 2019 Decision and Further Consultation"), GEMA recognised this issue and proposed to explore the then present position further, to understand whether it was appropriate, and asked stakeholders if they agreed that it could be more efficient if the TOs bear the TNUoS revenue collection risk, to reflect respective variances between allowed and actual revenue: see paragraphs 2.65 – 2.70, in particular Q12 "*Do you agree that it could be more efficient if Transmission Network Owners bear TNUoS revenue collection risk, to reflect respective variances between allowed and actual revenue?*" (Wilde 2 §§92-93).

560.3 SHE-T responded to the August 2019 Decision and Further Consultation and disagreed that the passing of revenue collection risk to TOs is more efficient than the risk sitting with the ESO (Wilde 2 §93).

560.4 GEMA recognised that there was an industry desire for further consultation on this issue, and also noted that any decision on this issue would also be factored into the RIIO-2 determinations process (see page 4, Financial Methodology and Roles Framework for the Electricity System Operator – Decision, 25 October 2019) (Wilde 2 §§94).

560.5 GEMA published a consultation specifically on this issue on 18 December 2019 (TNUoS Revenue Collection Risk Consultation), setting out GEMA's TNUoS cash flow re-allocation proposal and explaining why GEMA were considering reallocating the TNUoS collection cash flow timing risk from the ESO to the onshore TOs. It was also proposed that any decisions made on this issue would be done in stages so that "*any decisions made to change the allocation of the TNUoS cash flow timing risk in time for the start of RIIO-2 would be taken into account in our price control determinations for the ESO and onshore TOs*": see paragraph 1.6 of the December 2019 Consultation (Wilde 2 §95-97).

560.6 GEMA received six responses to the December 2019 Consultation, four of which were broadly supportive of the proposed re-allocation of TNUoS cash flow risk to the TOs (Wilde 2 §98).

560.7 Following the July 2020 Decision to transfer cash flow risk to the TOs, GEMA proceeded to consult further on the funding of the ESO and the TOs. In the course of this, SHE-T had a full opportunity to respond and present evidence in relation to its funding and exposure to risk. SHE-T argued in its feedback on Draft Determinations funding[275] that the change to the revenue management risk, amongst a range of other changes, has increased risk relative to RIIO-1, but did not provide any specific and compelling evidence or analysis in support of this. The TOs did not provide any specific and compelling estimate or evidence of any costs associated with this cash flow risk. GEMA therefore did not consider it necessary to give any additional funding to TOs. (See Wilde 2 §§106-113).

[275] https://www.ofgem.gov.uk/publications-and-updates/riio-2-draft-determinations-transmission-gas-distribution-and-electricity-system-operator, SSEN Part 2, SSEN response to DD questions, page 254 [F1/26]

561. In summary, SHE-T had a full opportunity to comment on and provide evidence in relation to the decision of whether cash flow risk should be allocated, how that should be achieved and what if any impact that should have on the TOs' RIIO-2 price control settlement. Moreover, a decision-maker will usually have a broad discretion as to how a consultation exercise should be carried out: *R (Greenpeace) v Secretary of State for Trade and Industry* [2007] EWHC 311, [2007] Env LR 29, §62 (Sullivan J). Further, and in any event, as explained in *Firmus Energy (Distribution) Limited v Northern Ireland Authority for Utility Regulation* at §3.20 "*If the CMA is satisfied that the regulator's decision was correct, then the fact that the regulator's consultation process was deficient ought not to matter, unless that process was so deficient that the CMA cannot be assured that the regulator did indeed get it right.*".

562. As to each of the specific failures alleged by SHE-T in NoA §7.35:

562.1 It is wrong to imply (as at NoA §7.35(a)) that GEMA did not consult as to whether the risk should be transferred to TOs. As explained in paragraph 560 above, the issue as to whether the risk should be transferred arose as a consequence of a response to the May 2019 consultation and GEMA specifically asked a question as to whether there should be a transfer of the risk to TOs in the August 2019 Decision and Further Consultation. Further, GEMA had not reached a decision on that issue prior to the December 2019 Consultation, which was a further opportunity to comment on it.

562.2 It is wrong to say (NoA §7.35(b)) that GEMA did not provide any detailed reasoning or evidence in support of the decision. As explained above in paragraphs 533 to 545 response to Sub-Ground Four, GEMA did provide this.

562.3 It is wrong to contend (NoA §7.35(c)) that GEMA made errors of fact in calculating the under-recovery and the variability. On 9 April 2021, the ESO confirmed that the TNUOS cash flow exposure faced by TOs in 2014/15 would have been £99m. Regarding the historical average under-recovery figure, the £33m figure previously presented by related to the period 2004/5 to 2018/19 and reflects the impact of over-recovery (a positive number) netting off against under-recovery (a negative number). [redacted] See Wilde 2 fn 4.

562.4 In NoA §7.35(d) SHE-T claims "*GEMA's analysis wrongly relied on a simplistic and flawed analysis of RAV for the TOs and ESO, which underestimated the ESO's RAV by around £140m",* supported by MAWS §12.54(b). This is incorrect. The £211m RAV figure presented in TNUOS Consultation related to 2019/20, whilst the figure presented by SHE-T relates to 2025/26. The ESO's RAV on 31 March 2020 is now estimated as £213m (nominal), a £2m increase from the figure previously presented, £211m. Whilst GEMA agrees that the ESO's RAV is projected to grow to around

£350m (using 2018/19 prices) by the end of RIIO-2 (31 March 2026), over this period S-HET's RAV is also projected to grow, from £3,063m to £4,646m. Over RIIO-2, the RAVs of SPT and NGET also continue to grow. Over RIIO-2, the aggregate RAV of all 3 TOs remains over 60 times higher than the ESO's. In response to NoA §7.35(e) GEMA considered fully the appropriate settlement for TOs as part of the broader price control package.

562.5 As to NoA §7.35(f), GEMA considered alternatives to the reallocation to the TOs. This is apparent from the history of the consultation outlined above, in which the proposal to re-allocate in fact stemmed from a response to a broader consultation in relation to the ESO's settlement.

562.6 As to NoA §7.35(g), as explained in paragraphs 515 to 522 above, GEMA gave detailed consideration to issues of forecasting accuracy.

562.7 As to NoA §7.35(h), GEMA is aware that the approach in electricity transmission, whereby the ESO collects TNUoS tariffs for the whole of GB on behalf of all TOs, differs to the approach in the distribution sectors, where each network has a direct responsibility to collect its own tariffs, but does not accept SHE-T's assertion that there is a disconnect between the ESO's risk and responsibility on TNUoS setting because of the penalties which can be imposed on the ESO: see Wilde 2 §69.

563. For these reasons, Sub-Ground Six should be rejected.

J. CONCLUSION

564. For the reasons set out above, the CMA is invited to dismiss the appeals.

565. As set out at paragraph 5 above, consistently with the CMA's indication, GEMA proposes that submissions on remedies should be made following Provisional Determinations (should such submissions be needed).

23 April 2021