
NOTICE OF APPEAL

Transmission Licence Modification
RIIO-T2 Price Control

Scottish Hydro Electric Transmission plc
(trading as SSEN Transmission)

(Appellant)

and

Gas and Electricity Markets Authority
(Respondent)

3 March 2021



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CONFIDENTIALITY

Certain information provided in this Notice of Appeal and certain of the Witness Statements and Exhibits is confidential to the Appellant, the disclosure of which would harm the legitimate business interests of the Appellant. Such information has been deleted and marked “[CONFIDENTIAL]” in this non-confidential version of the Notice of Appeal.

Written evidence

Exhibit to the Notice of Appeal (<i>NOA-1</i>)
Witness Statement of Maz Alkirwi, SSEN Transmission (<i>Alkirwi-1</i>)
Exhibit to the Witness Statement of Maz Alkirwi (<i>MA-1</i>)
First Expert Witness Statement of Peter Hope, Oxera Consulting LLP (<i>Hope-1</i>)
Exhibit to the First Expert Witness Statement of Peter Hope (<i>PH-1</i>)
Second Expert Witness Statement of Peter Hope, Oxera Consulting LLP (<i>Hope-2</i>)
Exhibit to the Second Expert Witness Statement of Peter Hope (<i>PH-2</i>)

an electricity transmission licence, the conditions of which are to be modified by the Decision.

- 1.6 Accordingly, the Appellant has standing to bring this appeal under EA 1989.
- 1.7 None of the relevant grounds on which the Competition and Markets Authority (*CMA*) could refuse permission to appeal in section 11(C)(4) of EA 1989 is relevant.³

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³ These include: (a) where the appellant does not have legal standing; (b) that the appeal is brought for reasons that are trivial or vexatious; and (c) that the appeal has no reasonable prospect of success.

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D. The RIIO-T2 price control process and GEMA's decision

- 1.12 GEMA commenced its process for setting the RIIO-T2 price control on 12 July 2017 with the publication of its open letter on the RIIO-2 Framework and concluded this process on 3 February 2021 with the publication of the Decision.
- 1.13 The RIIO-T2 price control will take effect from 1 April 2021 and will apply until 31 March 2026.
- 1.14 The RIIO-T2 price control is based on the RIIO framework⁵ used by GEMA to set the revenue that SSEN Transmission is allowed to recover during the period of the price control by using incentives to deliver innovation and outputs.⁶
- 1.15 SSEN Transmission was required to produce a detailed business plan which it submitted to GEMA on 9 December 2019 (*Business Plan*).⁷ SSEN Transmission's Business Plan was supported by the SSEN Transmission Business Plan Supporting Documents and the SSEN Transmission Business Plan Supporting Evidence.⁸
- 1.16 On 9 July 2020, GEMA published its RIIO-2 Draft Determination (*Draft Determination*) to which SSEN Transmission provided a comprehensive response on 4 September 2020.⁹

⁵ Revenue = Incentives + Innovation + Outputs. See RIIO-2 - Framework Decision, NOA-1 / Tab 37 / Executive Summary, page 4.

⁶ RIIO-2 - Framework Decision, NOA-1 / Tab 37 / Executive Summary, page 4.

⁷ SSEN Transmission RIIO-T2 Business Plan, NOA-1 / Tab 45.

⁸ SSEN Transmission, List of Business Plan Supporting Documents, NOA-1 / Tab 46. SSEN Transmission Business Plan Supporting Evidence, available at: <https://www.ssen-transmission.co.uk/riio-t2-plan/>.

⁹ RIIO-2 Draft Determination, available at: <https://www.ofgem.gov.uk/publications-and-updates/riio-2-draft-determinations-transmission-gas-distribution-and-electricity-system-operator>. SSEN Transmission, Response to RIIO-T2 Draft Determination - Main Response Document, NOA-1 / Tab 3.

- 1.17 On 8 December 2020, GEMA published its RIIO-2 Final Determination (*Final Determination*).¹⁰
- 1.18 On 17 December 2020, GEMA gave notice to SSEN Transmission of its proposed modifications to the SSEN Transmission Licence under section 11A(2) of EA 1989 to which SSEN Transmission provided a comprehensive response on 19 January 2021.¹¹
- 1.19 On 3 February 2021, GEMA published its decision to modify the conditions of the SSEN Transmission Licence to give effect to its RIIO-2 price control determination and gave SSEN Transmission notice of the licence modifications under section 11A(7) of EA 1989.

E. Context and scope of SSEN Transmission’s appeal

GEMA’s price control decision fails to achieve the right balance and risks vital investment required to deliver the UK’s Net Zero commitments

- 1.20 GEMA’s RIIO-T2 price control decision has been taken at a critical time in the UK’s pathway towards achieving the UK and Scottish Governments’ legally binding Net Zero commitments by 2050¹² and 2045¹³ respectively. As recognised by the Government, “[e]lectricity networks are a crucial enabler for [achieving these targets], with significant investment needed to accommodate increases in demand for low carbon technologies ... because electricity networks’ behaviour is governed by the regulatory environment, the price control process is key”.¹⁴
- 1.21 SSEN Transmission’s electricity transmission network, and the essential investments in the future development of the network in the RIIO-T2 period, will play a vital role in facilitating the attainment of these objectives. GEMA’s Final Determination has accepted the critical need for this substantial investment in SSEN Transmission’s network – indeed, it states: “[w]e anticipate that significant levels of network investment could be needed over RIIO-ET2 to support the energy system transition on the path to Net Zero in 2050. Delivering on the necessary Net Zero investment is one of the highest

¹⁰ RIIO-2 Final Determination, available at: <https://www.ofgem.gov.uk/publications-and-updates/riio-2-final-determinations-transmission-and-gas-distribution-network-companies-and-electricity-system-operator>.

¹¹ RIIO-2 Statutory Licence Consultation, available at: <https://www.ofgem.gov.uk/publications-and-updates/statutory-consultation-riio-2-transmission-gas-distribution-and-electricity-system-operator-licences>. SSEN Transmission, Response to RIIO-2 Statutory Consultation, **NOA-1 / Tab 36**.

¹² Climate Change Act 2008 section 1, as amended by the Climate Change Act 2008 (2050 Target Amendment) Order 2019, **NOA-1 / Tab 51**: “It is the duty of the Secretary of State to ensure that the net UK carbon account for the year 2050 is at least 100% lower than the 1990 baseline.”

¹³ Climate Change (Emissions Reduction Targets) (Scotland) Act 2019 amends the Climate Change (Scotland) Act 2009, and sets the target to reduce Scotland’s emissions of all greenhouse gases to net-zero by 2045 at the latest, with interim targets for reductions of at least 56% by 2020, 75% by 2030 and 90% by 2040.

¹⁴ BEIS, letter from the Ministry of State for Business, Energy and Clean Growth Rt Hon Kwasi Kwarteng MP to Jonathan Brearley, CEO of Ofgem, 19 October 2020, **NOA – 1 / Tab 78**, available here: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/943755/letter-to-jonathan-brearley.pdf

priorities in the next price control period because of the urgency to decarbonise.”¹⁵

- 1.22 SSEN Transmission’s transmission network in the renewable-rich North of Scotland is already exporting three times as much renewable energy as is consumed locally. Under all Net Zero pathways, by 2030, renewable generation in SSEN Transmission’s network area is set to grow by around three times current levels.¹⁶ Therefore, this clean, green power is essential to the decarbonisation of the UK as a whole and will require connection to the transmission network in the next decade.¹⁷ Since local demand for electricity in the North of Scotland is comparatively low, there is a pressing need for transmission of that green power southwards to the whole of the UK in order to decarbonise the UK economy.¹⁸
- 1.23 SSEN Transmission’s Business Plan for RIIO-T2 was an evidence-based plan built in collaboration with stakeholders to deliver its ambition for a fair transition to Net Zero that maintains reliability and improves service, while protecting consumers from uncertainty as to exactly where and what investment will be required. As explained in the witness statement of Mr Alkirwi, SSEN Transmission set out in its Business Plan an ambitious and transformative base programme of at least £2.4 billion of investment that is essential to connect known and confirmed renewable generation, maintain the reliability of the transmission network, and safely operate a growing network over the next decade.¹⁹ However, in order to be on track to deliver the investment required for Net Zero and support the green economic recovery, SSEN Transmission estimates that this could require additional expenditure of between £1.3 billion²⁰ and £2.8 billion²¹ via uncertainty mechanisms.
- 1.24 As part of this critical role in the drive towards Net Zero, SSEN Transmission has also set ambitious plans to reduce its own emissions in line with what is required to meet this challenge. These carbon reduction commitments have been verified by the Science Based Target initiative, making SSEN Transmission the world’s first electricity networks company to receive external accreditation for a science-based target in line with a 1.5°C global warming pathway.²²

¹⁵ RIIO-2 - Final Determination, Electricity Transmission System Annex, **NOA-1 / Tab 10 / Para 2.145**.

¹⁶ SSEN Transmission, Response to RIIO-T2 Draft Determination - Main Response Document, **NOA-1 / Tab 3 / Para 1.2, Figure 1.1**

¹⁷ SSEN Transmission, Response to RIIO-T2 Draft Determination - Main Response Document, **NOA-1 / Tab 3 / Para 1.2**.

¹⁸ SSEN Transmission, Response to RIIO-T2 Draft Determination - Main Response Document, **NOA-1 / Tab 3 / Para 1.2**.

¹⁹ SSEN Transmission, Business Plan, **NOA-1 / Tab 45, Page 27**: <https://www.ssen-transmission.co.uk/media/3761/a-network-for-net-zero-final-business-plan.pdf>. At Final Determination, GEMA reduced SSEN Transmission’s totex expenditure to £2.2bn while retaining the outputs associated with £2.4bn of totex expenditure set out in the Business Plan. SSEN Transmission, *A Network for Net Zero RIIO-T2 Business Plan* (December 2019) (<https://www.ssen-transmission.co.uk/media/3761/a-network-for-net-zero-final-business-plan.pdf>), **NOA-1 / Tab 45 / Page 27**.

²⁰ SSEN Transmission, Business Plan, **NOA-1 / Tab 45 / Page 9**.

²¹ SSEN Transmission, Business Plan, **NOA-1 / Tab 45 / Page 27**.

²² Science-based targets show companies how much and how quickly they need to reduce their greenhouse gas (**GHG**) emissions to prevent the worst effects of climate change. Through the Paris Agreement, signed at COP21 in Paris on 12 December 2015, world governments committed to substantially reduce global GHG emissions to limit the global temperature increase in this century to below 2 degrees Celsius above pre-industrial levels and pursuing efforts to limit warming to 1.5°C. To achieve this, GHG emissions must halve by 2030 – and drop to net-zero by 2050. The private sector has a crucial role to play in this transformation.

- 1.25 Against that background, SSEN Transmission was disappointed that GEMA's Final Determination places this vital investment, which GEMA acknowledges is necessary, at significant risk. In particular, the Final Determination fails to achieve the balance of risk and return that is required to attract essential new investment to deliver on SSEN Transmission's game-changing multi-billion pound plan. This is primarily because GEMA has provided a financial package, in particular as regards the "Weighted Average Cost of Capital" or "WACC" (*WACC*), which is markedly too low: this financial package will under-compensate investors and fail to attract the necessary investment in the business, ultimately to the detriment of consumers. Falling behind Net Zero pathways over the next five years of the RIIO-T2 price control period will make it significantly harder to get back on track in future years and risks costing existing and future consumers more in the long term.
- 1.26 GEMA's WACC decision, notably regarding the cost of equity (*CoE*) element of the WACC, suffers from a series of significant errors. The WACC is a key element in any price control. It is intended to cover the costs that SSEN Transmission incurs in paying equity and debt investors for providing the capital it needs in order to operate and invest in its business. The CoE is a core component of the WACC and estimates the rate of return a shareholder requires for investing equity into a transmission business. Investors need to be confident that they will receive a sufficient rate of return on their investments, and SSEN Transmission must be able to charge its customers at a level that enables it to pay an investible rate of return. SSEN Transmission must compete to attract investment against other UK and international opportunities for investors. It is therefore important that the RIIO-T2 price control decision ensures that SSEN Transmission remains an attractive investment proposition. In the context of the investment required for the current price control period, the CoE is of greater importance than ever to support the investment needed to support Net Zero objectives.²³
- 1.27 Unfortunately, GEMA's Final Determination has set the WACC for RIIO-T2 at the lowest rate ever in an energy price control decision (and below the rate that the Competition and Markets Authority (*CMA*) has provisionally found that the lower-risk water companies should receive) and the WACC has been set at such a low level that it risks SSEN Transmission's ability to attract the substantial new investment required.
- 1.28 As a consequence of the errors made by GEMA in setting the WACC for RIIO-T2 its decision was contrary to its statutory duties and wrong (**Grounds 1 and 2**). The need for GEMA to set the WACC at a level commensurate with the need to attract new investment is firmly enshrined in GEMA's statutory duties (which also apply to the CMA in its decision on this appeal):
- (a) GEMA's principal objective is to protect the interests of consumers, including their interests in the delivery of a secure electricity supply and in reducing electricity-supply emissions of targeted greenhouse gases (sections 3A(1)-(1A) EA 1989). Further, GEMA is required by statute

²³ SSEN Transmission, Business Plan, NOA – 1 / Tab 45 / Page 27, <https://www.ssen-transmission.co.uk/media/3761/a-network-for-net-zero-final-business-plan.pdf>

to have regard to the need to secure that SSEN Transmission is able to finance its regulated activities (the **Financeability Duty**) (section 3A(2)(b) EA 1989) and to the Secretary of State's Social and Environmental Guidance, which reflects the Climate Change Act 2008 targets (section 3B(2) EA 1989).

- (b) As the CMA has held previously, in order to satisfy its Financeability Duty, GEMA was specifically required to set a WACC at a rate that ensures that the revenues and therefore cash flows made by the licence holder are sufficient to pay investors a sufficient rate of return.²⁴

1.29 In addition to GEMA's failure to set the WACC at the correct level, it has further prejudiced SSEN Transmission's ability to secure sufficient investment in the network to meet its Net Zero objectives by:

- (a) unlawfully attempting to introduce powers into SSEN Transmission's licence that could allow GEMA fundamentally to alter the price control decisions GEMA has taken in respect of SSEN Transmission's total expenditure (*totex*) allowances – and thus the nature of the price control – by unappealable “direction”, circumventing the mandatory statutory process for decision-making and appeals (**Ground 3**); and
- (b) arbitrarily forcing SSEN Transmission to accept the cash-flow risk on receipt of use of system charges rather than the party best able to manage that risk, without carrying out any analysis or having any sufficient evidential basis to substantiate this decision, and without providing SSEN Transmission adequate compensation for the significant cost liability to which this gives rise (**Ground 4**).

1.30 SSEN Transmission has carefully considered the Decision and the objective of the CMA to dispose of appeals fairly and efficiently within the time periods prescribed by EA 1989.²⁵ Accordingly, SSEN Transmission has confined its appeal to four key grounds of appeal where the Decision is wrong and has a material impact on SSEN Transmission's business. The grounds of appeal in respect of these issues are summarised below.

Key errors in GEMA's decision: overview of grounds of appeal

Ground 1: Methodological errors in the calculation of cost of equity

1.31 GEMA determined the CoE allowance using a three-step methodology. Step 1 was to apply the capital asset pricing model (**CAPM**) to produce a CoE range. Step 2 involved applying cross-checks to that range. Step 3 required GEMA to decide on a specific point within the range as the applicable CoE. GEMA also chose (in an unprecedented approach) to assess the likelihood of outperformance against the CoE (i.e. that actual returns will exceed expected

²⁴*Firmus Energy (Distribution) Limited v Northern Ireland Authority for Utility Regulation Final Determination* (26 June 2017) (**Firmus Energy Appeal**), NOA-1 / Tab 58 / Para 7.60.

²⁵ CMA, 'CMA70: Energy Licence Modification Appeals: Competition and Markets Authority Rules' (October 2017) (**CMA Appeal Rules**), NOA-1 / Tab 49 / Rules 4.1 and 4.2.

returns) and to apply a reduction to reflect its view of that expected outperformance.²⁶

- 1.32 GEMA's decision made significant errors at each of these three steps in its approach, and in so doing has failed properly to have regard to and/or give the appropriate weight to its statutory duties; has failed to achieve its stated effect to set an appropriate balance of risk and return; and has made several errors of fact and/or law.
- 1.33 These errors individually and cumulatively result in a significant underestimation of the CoE element of the WACC, which for SSSEN Transmission has been set at 4.25% (with a further reduction to 4.02% to reflect expected outperformance).²⁷ GEMA's Step 1 involved significant errors in key elements of the WACC calculation (the risk-free rate (**RFR**), total market return (**TMR**), and beta); GEMA's Step 2 involved significant errors in its cross-checks of the results it had arrived at; and GEMA's Step 3 involved significant errors in relation to its application of the "outperformance" reduction and "aiming up". The key errors made by GEMA are summarised below.

Ground 1A: Errors in the RFR

- 1.34 The RFR is the return an investor could expect on an investment that carries zero risk and it is an important element of the CAPM.
- 1.35 GEMA set the RFR at -1.58% (60% gearing, CPIH-real).²⁸ This decision was wrong because it relied entirely on evidence based on the spot yield of index-linked gilts (**ILGs**) as a proxy for the RFR. GEMA erred in principle by relying solely on spot yields of ILGs in setting the RFR for SSSEN Transmission as it failed to account for "convenience premium"²⁹ embedded in government bonds, as shown in the empirically observed gap between corporate and sovereign risk-free rates. In reaching its decision, GEMA also disregarded more relevant evidence, including data relating to AAA-rated corporate bonds. Further, GEMA incorrectly adopted the 20-year Sterling Overnight Index Average (**SONIA**) swap rates as an unconventional cross-check, despite serious concerns over the data quality of those rates and the wide range of factors that could have been driving them, giving rise to a further incorrect downward bias. These errors led GEMA to significantly underestimate the RFR.
- 1.36 As Oxera explains in its expert report, the correct approach would be to estimate the RFR by applying an upward adjustment to the spot yields on ILGs, in order to account for the convenience premium ('bottom-up' approach) or to start with a rate unaffected by the convenience yield, namely AAA-rated corporate bond yields, and then deflate it by factors that specifically affect AAA corporate bond

²⁶ The errors relating to the flawed outperformance adjustment is explained in **Ground 2** below.

²⁷ RIIO-2 - Final Determination, Core Document, **NOA-1 / Tab 9 / Table 5** and RIIO-2 - Final Determination, Finance Annex, **NOA-1 / Tab 12 / Table 13**. Figures rounded to the second decimal place.

²⁸ RIIO-2 - Final Determination, Finance Annex, **NOA-1 / Tab 12 / Page 24**.

²⁹ As explained in further details at paragraph 4.7, government bonds offer money-like convenience services which have special characteristics that investors value, relating to safety, liquidity and wide acceptability. These special properties lead to a reduction in the returns expected by investors on those ILGs, compared with non-government securities. This reduction is known as the "convenience premium" or "convenience yield".

yields such as liquidity premia and default risk ('top-down' approach). These approaches result in an RFR estimate of -0.99% and -0.96% respectively.³⁰

Ground 1B: Errors in setting the TMR

- 1.37 The TMR is a measure of returns on the whole market for UK equities and represents the total return that investors require for investing in equities.
- 1.38 GEMA set the TMR range at 6.25%-6.75% with a midpoint of 6.5%.³¹ This decision was wrong because it relied on a synthetically created "back cast" of the Consumer Prices Index (**CPI**) as a measure of inflation which was unreliable and contained acknowledged errors. GEMA also failed to properly consider the available evidence on the Retail Prices Index (**RPI**) measure, which is a better reflection of historical investor expectations and does not suffer from similar data reliability issues. Finally, GEMA incorrectly relied on the geometric average with a subjective uplift rather than the directly observed arithmetic average when calculating historical equity returns which produces a downwardly biased TMR estimate. These errors led GEMA to underestimate the TMR.
- 1.39 As Oxera explains in its expert report, the correct approach would be to use the arithmetic average of RPI-real returns. This produces a TMR range of 7.0%-7.5%.

Ground 1C: Errors in setting the beta

- 1.40 The asset beta is a measurement of the systematic risk of an investment compared to the market. It therefore measures the amount of the equity risk premium needed to account for the higher or lower relative risk of that investment.
- 1.41 GEMA set the asset beta for energy networks at 0.349.³² In reaching this decision, GEMA wrongly relied on water companies as comparators for electricity transmission operators, despite the fact that water companies (i) have lower asset risk profiles, and (ii) consistently show lower asset betas in empirical data. GEMA also used an incorrect sample of European networks as comparators in estimating the asset beta, which included clear outliers with low equity liquidity that should have been excluded. GEMA also incorrectly applied asset beta estimates relevant to the French energy sector to the UK sector without any consideration of its fundamentally different regulatory and economic conditions.
- 1.42 These errors led GEMA to underestimate the beta applicable to SSEN Transmission. As Oxera's expert report explains, the correct approach would be to set an asset beta range that uses National Grid's five-year asset beta as the low end and the average five-year asset beta of properly comparable European

³⁰ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Para 5.72**

³¹ RIIO-2 - Final Determination, Finance Annex, **NOA-1 / Tab 12 / Para 3.86**.

³² RIIO-2 - Final Determination, Finance Annex, **NOA-1 / Tab 12 / Table 9**.

networks as the high end, giving a range of 0.37-0.40,³³ which translates to an equity beta range of 0.83-0.91.³⁴

Ground 1D: GEMA failed to apply the established principle of “aiming up”

- 1.43 Once it had decided on its CoE range, GEMA needed to decide on a specific point within the range as the applicable CoE. In doing so, GEMA did not appropriately take account of the risk of SSEN Transmission not being able to attract the level of investment it needs to carry out its investment programmes. GEMA disregarded the widely accepted principle in economic regulation in the UK and internationally, and recent guidance from the CMA itself,³⁵ that economic regulators should “aim up” within the CoE range to avoid the risk that customers lose the benefits of investment. Aiming up in the CoE range was particularly necessary in the RIIO-T2 period to ensure the benefits of investment designed to meet Net Zero objectives over the price control period. Aiming up in RIIO-2 is even more important given that GEMA’s decision results in a reduction of 357 bps in the CoE compared to RIIO-T1, particularly as most of this reduction is due to changes in methodology introduced by GEMA that are disputed and all act in the same direction of reducing the CoE estimate.
- 1.44 Contrary to established practice, recently endorsed by the CMA,³⁶ GEMA has adopted a CoE point estimate that is lower than the appropriate range and failed to aim up even on its own incorrect range,³⁷ contributing further to an incorrect estimation of the CoE.
- 1.45 GEMA’s failure to aim up was an error in principle and further resulted in a material underestimation of the CoE. Oxera’s expert report has collected a large amount of primary evidence to form a range based only on data that they consider to be robust. As Oxera explains in its expert report, the correct approach would be to aim up within the corrected range of 5.61%-6.78% (for 60% gearing).³⁸ For SSEN Transmission, with 55% gearing, the range would be 4.98%-6.02%.³⁹ GEMA has adopted a point estimate of 4.25% within a range of 3.62%-4.86% at 55% gearing. The difference between the middle of the Oxera range and the GEMA point estimate is 125 bps and therefore, on a standalone basis (i.e. assuming that the other errors in GEMA’s CoE parameters have not been corrected), GEMA should have aimed up by at least 125 bps in order to have aimed up within the Oxera range.

³³ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Para 7.49**.

³⁴ After the Modigliani-Miller cross-check adjustment and using the appropriate debt beta of 0.05. See Section 1C.vii below.

³⁵ CMA (2020), PR19 ‘Provisional Findings’, Limited price determinations - Provisional Findings, 29 September; CMA (2021), PR19 January Working Papers – Point Estimate, **PH-1 / Tab 49**.

³⁶ CMA (2020), PR19 ‘Provisional Findings’, Limited price determinations - Provisional Findings, 29 September; CMA (2021), PR19 January Working Papers – Point Estimate, **PH-1 / Tab 49**.

³⁷ GEMA asserts that its CoE decision is “arguably consistent with a degree of aiming up”, on the basis that having reduced the CoE from 4.55% to 4.40% at Step 2, GEMA then reverted to a figure of 4.55% at Step 3 (see RIIO-2, Final Determination – Finance Annex, page 69). However, this does not constitute “aiming up” but simply reverses the incorrect reduction at Step 2 which should never have been made in the first place.

³⁸ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Table 9.1**.

³⁹ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Table 9.1**.

Ground 1E: Errors in the cross-checks carried out regarding the CoE figure

- 1.46 As noted above, after applying the traditional CAPM approach at Step 1, Step 2 involved applying cross-checks in order to assess whether the Step 1 figure appeared to fall in an appropriate range. GEMA relied on its cross-checks to support the incorrectly low CoE estimates it had derived in Step 1.
- 1.47 On the basis of its purported cross-checking process, GEMA reduced the midpoint of the CoE range produced by its CAPM analysis at Step 1 from 4.55% to 4.40%.⁴⁰ However, GEMA's approach to cross-checking was fundamentally flawed and cannot justify its decision to support or lower the results of the CAPM analysis at Step 1. Each of the cross-checks relied on by GEMA was affected by basic errors including misinterpreting the academic literature GEMA relied on; misinterpreting recent market data; and relying on purported comparators (such as infrastructure funds and offshore networks) that are not comparable to the onshore electricity transmission sector. GEMA has also failed to give appropriate weight to directly observable market evidence including the asset risk premium v. debt risk premium (*ARP – DRP*) cross-check. Oxera's expert evidence explains that, had GEMA performed its cross-checks appropriately and taken relevant evidence into account, the results would have demonstrated that its CoE estimate was materially lower than justified by market evidence.
- 1.48 The errors in GEMA's purported cross-checking of the results at Step 1 are a further reason that its decision on CoE was wrong and demonstrate that SSEN Transmission's grounds of appeal on RFR, TMR, beta and aiming up are well founded.

Conclusions on Ground 1

- 1.49 The above errors by GEMA, individually and cumulatively, resulted in a CoE which is too low. GEMA's decision was wrong because:
- (a) GEMA's decision was based on errors of fact and/or law (in particular the public law duty to reach reasonable decisions). **[section 11E(4)(c) and (e) EA 1989]**
 - (b) GEMA failed properly to have regard to and/or to give the appropriate weight to: (i) the interests of existing and future consumers in the delivery of a secure electricity supply and in reducing electricity-supply emissions of targeted greenhouse gases (sections 3A(1)-(1A) EA 1989); (ii) the need to secure that all licence holders are able to finance their activities (section 3A(2)(b) EA 1989); and/or (iii) the Social and Environmental Guidance issued by the Secretary of State and the related Net Zero Duty⁴¹ (section 3B(2) EA 1989). **[section 11E(4)(a) and (b) EA 1989]**

⁴⁰ RIIO-2 - Final Determination, Finance Annex, **NOA-1 / Tab 12 / Table 12.**

⁴¹ As defined in para 2.9 et seq below.

- (c) GEMA’s decision failed to achieve the effect stated by GEMA to set an “appropriate balance of risk and return”,⁴² to set a WACC “consistent with current evidence and market conditions”⁴³ and to fairly compensate investors for the risks they face by setting an appropriate CoE.⁴⁴ [section 11E(4)(d) EA 1989]

Ground 2: GEMA was wrong to apply a flawed outperformance adjustment

- 1.50 As noted above, at Step 3 in its decision-making on CoE, GEMA chose to assess the likelihood of outperformance against the CoE (i.e. that actual returns will exceed expected returns) and to apply a specific reduction to the CoE level calculated at Steps 1 and 2 to reflect GEMA’s expectation of SSEN Transmission’s outperformance. This reduction has been referred to as GEMA’s “outperformance adjustment”. On this basis, GEMA further reduced the allowed return for SSEN Transmission by 0.22% below its (already too low) estimate of the CoE.⁴⁵ This resulted in a reduction of SSEN Transmission’s CoE allowance from 4.25% to 4.02%.⁴⁶
- 1.51 GEMA’s application of an “outperformance adjustment” reduction was wrong as it sought to undermine fundamental principles of incentives-based regulation and thereby risks damaging the energy sector’s productivity, investment and, as a consequence, long-term consumer welfare. There is no regulatory precedent for deducting outperformance ex-ante from a price control. Using the wide array of regulatory tools available to it, and taking account of all relevant evidence, GEMA should have set an appropriately calibrated price control. There was no proper basis for reducing SSEN Transmission’s CoE through an outperformance adjustment.
- 1.52 Moreover, GEMA’s decision runs contrary to a key underlying principle of UK economic regulation: that companies should be encouraged to outperform so that there are benefits to be shared with consumers. Applying an “outperformance adjustment” as GEMA did stands to have a seriously detrimental impact on companies’ incentives and the long-term productivity of the electricity transmission sector and, in consequence, on the interests of existing and future consumers. GEMA’s fundamentally flawed decision to apply the “outperformance adjustment” was a simplistic device to produce short-term bill savings while overlooking the long-term negative impact on outcomes and bills as a result of undermining incentives to create efficiency and to invest.

⁴² RIIO-2 - Final Determination, Core Document, NOA-1 / Tab 9 / Page 52; see also RIIO-2 - Draft Determination, Core Document (9 July 2020), NOA-1 / Tab 1 / Para 6.1.

⁴³ RIIO-2 - Final Determination, Core Document, NOA-1 / Tab 9 / Para 6.1.

RIIO-2 - Final Determination, Core Document, NOA-1 / Tab 9 / Para 6.3; see also RIIO-2 - Draft Determination, Finance Annex (9 July 2020), NOA-1 / Tab 2 / Para 1.10.

⁴⁴ RIIO-2 - Final Determination, Core Document, NOA-1 / Tab 9 / Page 53; see also RIIO-2 - Draft Determination, Core Document (9 July 2020), NOA-1 / Tab 1 / Para 2.1.

⁴⁵ RIIO-2 - Final Determination, Finance Annex, NOA-1 / Tab 12 / Table 13.

⁴⁶ RIIO-2 - Final Determination, Finance Annex, NOA-1 / Tab 12 / Table 13. Figures rounded to the second decimal place.

1.53 GEMA's decision to proceed with the licence modification under section 11A of EA 1989 in this way is therefore wrong because:

- (a) The outperformance adjustment fundamentally undermines the principles of the RIIO framework and fails to achieve the effect stated by GEMA. [section 11E(4)(d) EA 1989]
- (b) The decision was based on unreliable evidence that does not support a 22 bps adjustment and is therefore based on an error of fact and/or law. [section 11E(4)(c) and (e) EA 1989]
- (c) GEMA has introduced a mechanism that will disincentivise companies from outperforming and investing, resulting in negative consequences for existing and future consumers. GEMA has therefore failed properly to have regard to and/or to give the appropriate weight to its statutory duties. [section 11E(4)(a) and (b) EA 1989]

Impact of GEMA's errors in respect of the CoE (Grounds 1 and 2)

1.54 As shown in Table 1 below, SSEN Transmission estimates the financial impact of the errors identified in Grounds 1 and 2 where relevant over the RIIO-T2 price control period. In other words, if those errors remain uncorrected, that is the estimated sum by which SSEN Transmission will be underfunded as a result of GEMA's price control decision.

Table 1: Summary of GEMA's CoE errors, Oxera's corrections, and estimated financial impact of errors for the RIIO-T2 period

Ground of appeal	Component of CoE calculation	GEMA's estimate	Oxera's estimate	Estimated financial impact on SSEN Transmission for the RIIO-2 period of difference between flawed range and corrected range (m) ⁴⁷
1A	Risk-free rate	-1.58%	-0.96% – -0.99%	[CONFIDENTIAL]
1B	Total market return	6.5%	7.0% – 7.5%	[CONFIDENTIAL]
1C	Equity beta (at 60% gearing)	0.759	0.83 – 0.91	[CONFIDENTIAL]
	CoE (at 60% gearing)	4.55%	5.61% – 6.78%	[CONFIDENTIAL]
	CoE (at 55% gearing)	4.25%	4.98% – 6.02%	[CONFIDENTIAL]
1D	Aiming up	4.25% (at 55% gearing)	Aim up by at least 125bps if using GEMA's range without correction	[CONFIDENTIAL]
2	Outperformance	0.22%	Remove 22bps adjustment	[CONFIDENTIAL]

⁴⁷ See Section 9 of the Notice of Appeal on "Relief Sought".

Ground 3: GEMA’s decision to reserve significant parts of the price control decision for future “directions” was unlawful

- 1.55 GEMA’s decision seeks to reserve to itself the ability to modify very substantial parts of its price control decision after the event by way of “directions” without following the prescribed statutory process and which are not subject to any statutory right of appeal. Between £1.3 and 2.8 billion of the proposed future investment in SSEN Transmission’s Business Plan over RIIO-T2 is accordingly subject to significant uncertainty because it is subject to future unappealable directions from GEMA that may modify the Final Determination.⁴⁸
- 1.56 The new licence conditions proposed by GEMA’s Final Determination would allow it to vary the price control in a number of important areas, including by making judgements on whether SSEN Transmission has fully delivered certain “Evaluative Price Control Deliverables” on time, and by deferring GEMA’s decision-making on whether SSEN Transmission is to be given funding via various “Re-opener” mechanisms, including in relation to highly material “Large Onshore Transmission Investment” projects. The envisaged directions would not relate to consequential or implementing matters under the Final Determination but would affect whether major investments can be made and, if so, what cost allowances will be awarded. Decisions on issues such as these are core elements of a price control decision.
- 1.57 GEMA’s chosen approach to making these future decisions is unlawful as it undermines and circumvents key features of the statutory scheme prescribed by Parliament. The EA 1989 sets out a complete statutory code for the process to be followed when taking price control decisions. That statutory scheme sets out the process to be followed by GEMA in taking decisions on price control matters and provides a right of appeal to the CMA for licensees and third parties affected by such decisions. It does not confer any power on GEMA to use a “direction” (or any process other than a statutory licence modification) to implement important elements of a price control. Moreover, issuing directions which cannot be appealed to the CMA to modify a price control decision would frustrate licensees’ and third parties’ statutory right to appeal price control matters to the CMA and the related remedies provided to licensees and third parties by statute. SSEN Transmission does not disagree that GEMA may wish to include provisions to re-open price control issues during the RIIO-T2 period, but, under the applicable statute, any final decision on such a re-opener process should be formalised through a licence modification decision, which is capable of appeal by licensees or third parties.
- 1.58 GEMA’s decision to proceed with the licence modification under section 11A of EA 1989 in this way is therefore wrong in law within the meaning of section 11E(4)(e).
- 1.59 GEMA’s decision in this respect also creates a serious risk that SSEN Transmission will be underfunded as a result of future directions issued by GEMA and further risks SSEN Transmission’s ability to provide an adequate return to its shareholders and make the necessary investment in the network

⁴⁸ Alkirwi-1 / Para. 11.1.

required during the RIIO-T2 timeframe, in breach of GEMA's financeability duty.

Ground 4: GEMA was wrong to transfer cash-flow risk of charge decisions relating to Transmission Network Use of System (TNUoS) made by the National Grid Electricity System Operator (the ESO) to SSEN Transmission

- 1.60 SSEN Transmission's final ground of appeal concerns GEMA's decision to transfer the revenue collection cash-flow risk relating to TNUoS charges from the ESO to the onshore transmission operators (*TOs*).
- 1.61 The transmission network is owned by the TOs. Electricity generators and suppliers pay for the use of the network by way of various charges, by far the most significant being TNUoS charges, which cover the cost of installing and maintaining the network. Under the current system, each TO charges to the ESO its allowed revenue for a given year under the prevailing price control decision (subject to certain deductions) in twelve equal monthly instalments. These amounts are therefore fixed and known to the TOs and the ESO in advance. The ESO sets TNUoS charges to reflect these monthly amounts, and in turn charges generators and suppliers.
- 1.62 Setting the TNUoS charges requires the ESO to estimate how much electricity will be required during the period in question. The TOs have no control over this process. If the ESO has not accurately estimated this, it may recover more or less revenue from generators and suppliers than the amount due to the TOs. The ESO currently makes up for any overall shortfall (or excess) at the end of a given year by adjusting TNUoS charges in the year falling two years thereafter. Thus, the ESO takes the short-term cash-flow risk of a mismatch between: (i) the fixed amounts that it pays to the TOs; and (ii) the variable amounts that it receives by way of TNUoS charges. This arrangement creates certainty for the TOs that they will each receive on time the full amount of their (monthly) allowed revenue throughout the price control period.
- 1.63 However, GEMA's Decision unfairly and unjustifiably makes a fundamental change to this arrangement in relation to the TNUoS charges of the onshore TOs. This has the effect of transferring the cash-flow risk from the ESO to the onshore TOs, which the onshore TOs have no ability to manage or control. GEMA now requires the ESO to pay onshore TOs *only* such TNUoS revenue as it has invoiced to generators and suppliers during a given month, with any under- or over-recovery to be shared between the onshore TOs in proportion to their respective allowed revenues under the price control.
- 1.64 GEMA's Decision misallocates risk, as it creates a disconnect between the party responsible for forecasting demand (the ESO) and the parties who bear the risk of inaccurate forecasting (the onshore TOs). As a result, the ESO is disincentivised from improving the accuracy of its estimates of demand for a given period, because any financing charges arising from its inaccuracies will be borne by the TOs. This means that the current average under-recovery by the ESO [CONFIDENTIAL] may not only fail to close but in fact grow larger during RIIO-2. This concern is exacerbated by the fact that GEMA has not

defined the strength of any alternative mechanism to incentivise the ESO to improve the accuracy of its forecasting. GEMA has wrongly focussed on who is best placed to withstand the risks in question rather than who is best placed to manage it and what systems should be put in place to improve such management.

- 1.65 In fact, GEMA has presented no substantiating evidence or analysis to justify its principal rationale for the Decision, namely that the costs to the industry would be more efficient if the cash-flow risk is borne by the TOs, which should have included an assessment whether the average under-recovery by the ESO would be likely to increase because of the new arrangement. Nor has GEMA carried out any impact assessment or cost-benefit analysis, despite the potentially serious impacts on the onshore TOs, contrary to its statutory obligations. GEMA has also failed to consult on the precise arrangements it proposes to give effect to its decision.
- 1.66 As a result of GEMA's Decision, SSEN Transmission could unreasonably be forced to bear significant and unnecessary financing (and other) costs that would be avoided if the current charging model were retained. While the ESO had previously been allowed an express cost allowance in its price control to protect it against the risk of such costs, GEMA has allowed no such cost allowance for the TOs in the new licence modifications to take account of this transferred cost risk. Moreover, contrary to GEMA's claim, it has not taken these costs into account when setting the WACC.⁴⁹ GEMA's Decision therefore amounts to an unfair and inappropriate cross-subsidy of the ESO by the TOs.
- 1.67 GEMA's decision was flawed because it imposes a perpetual and potentially increasing cash-flow risk on SSEN Transmission that is not in its power to manage. GEMA's decision may result in SSEN Transmission being routinely and enduringly unable to recover its annual allowed revenue under the RIIO-T2 price control. This in turn will leave SSEN Transmission underfunded to deliver the wide-ranging programme of investment needed over this period, including that towards the delivery of Net Zero, and ultimately lead to significant harm to the public and the environment, and therefore in breach of GEMA's statutory duty to protect the interests of consumers in security of supply and emissions reductions as well as its Financeability Duty.
- 1.68 GEMA's decision to proceed with the licence modification under section 11A EA 1989 in this way is therefore wrong because:
- (a) GEMA has failed properly to have regard to and/or to give the appropriate weight to: (i) the interests of existing and future consumers in the delivery of a secure electricity supply and in reducing electricity-supply emissions of targeted greenhouse gases (sections 3A(1)-(1A)); (ii) the need to secure that all licence holders are able to finance their activities (section 3A(2)(b)); and/or (iii) the Social and Environmental

⁴⁹ Email correspondence between Ofgem and SSE re TNUoS Risk Transfer, 29 January 2021, **NOA-1 / Tab 96**.

Guidance issued by the Secretary of State and the related Net Zero Duty⁵⁰ (section 3B(2)). [section 11E(4)(a) and (b) EA 1989]

- (b) GEMA's decision was based on errors of fact and/or law (in particular the public law duty to reach reasonable decisions). [section 11E(4)(c) and (e) EA 1989]

1.69 SSEN Transmission respectfully requests that the CMA removes the modifications to the SSEN Transmission Licence which give effect to the GEMA's TNUoS decision.

F. Key documents

1.70 The grounds of this appeal, reasons and supporting evidence are contained in this Notice of Appeal, in Exhibit NOA-1 and in the Witness Statements and Exhibits to those Witness Statements.

1.71 SSEN Transmission has provided written evidence in support of its appeal in the form of:

- (a) Witness Statement of Maz Alkirwi, Finance Director for SSEN Transmission;
- (b) First Expert Witness Statement of Peter Hope, Partner, Oxera Consulting LLP; and
- (c) Second Expert Witness Statement of Peter Hope, Partner, Oxera Consulting LLP.

1.72 SSEN Transmission has also included the following key documents in **NOA-1**:

In respect of the RIIO-T2 price control:

- (a) GEMA, *RIIO-2 Framework Consultation* (7 March 2018);⁵¹
- (b) SSEN Transmission, *Response RIIO-2 Framework Consultation* (2 May 2018);⁵²
- (c) GEMA, *RIIO-2 Framework Decision* (30 July 2018);⁵³
- (d) GEMA, *RIIO-2 Sector Specific Methodology Consultation – Core document* (18 December 2018);⁵⁴
- (e) GEMA, *RIIO-2 Sector Specific Methodology Consultation – Finance Annex* (18 December 2018);⁵⁵

⁵⁰ As defined in para 2.9 et seq below.

⁵¹ NOA-1 / Tab 21.

⁵² NOA-1 / Tab 22.

⁵³ NOA-1 / Tab 38.

⁵⁴ NOA-1 / Tab 23.

⁵⁵ NOA-1 / Tab 24.

- (f) SSEN Transmission, *RIIO-2 Sector Specific Methodology Consultation Response* (14 March 2019);⁵⁶
- (g) SSEN Transmission, *RIIO-2 Sector Specific Methodology Consultation Response - Cover Letter* (14 March 2019);⁵⁷ GEMA, *Financeability assessment for RIIO-2 - Further information* (26 March 2019);⁵⁸
- (h) GEMA, *RIIO-2 Sector Specific Methodology Decision – Core document* (24 May 2019);⁵⁹
 - (i) GEMA, *RIIO-2 Sector Specific Methodology Decision – Finance Annex* (9 July 2020);⁶⁰
- (i) SSEN Transmission, *Business Plan* (9 December 2019);⁶¹
- (j) GEMA, *Consultation on TNUoS Revenue Collection Risk* (18 December 2019);⁶²
- (k) GEMA, *RIIO-2 - Draft Determination, Core Document* (9 July 2020);⁶³
 - (i) GEMA, *RIIO-2 - Draft Determination, Finance Annex* (9 July 2020);⁶⁴
- (l) GEMA, *Decision on re-allocation of TNUoS Revenue Collection Risk* (9 July 2020);⁶⁵
- (m) SSEN Transmission, *Response to RIIO-T2 Draft Determination* (4 September 2020);⁶⁶
 - (i) Oxera, *'Draft Determination Response - The Cost of Equity for RIIO-2 (ENA report)'* (4 September 2020);⁶⁷
- (n) GEMA, *Informal Licence Drafting Consultation* (30 September 2020);⁶⁸
- (o) SSEN Transmission, *Response to RIIO-2 Informal Licence Drafting Consultation* (28 October 2020);⁶⁹

⁵⁶ NOA-1 / Tab 25.

⁵⁷ NOA-1 / Tab 29.

⁵⁸ NOA-1 / Tab 26.

⁵⁹ NOA-1 / Tab 39.

⁶⁰ NOA-1 / Tab 40.

⁶¹ NOA-1 / Tab 45.

⁶² NOA-1 / Tab 27.

⁶³ NOA-1 / Tab 1.

⁶⁴ NOA-1 / Tab 2.

⁶⁵ NOA-1 / Tab 41.

⁶⁶ NOA-1 / Tab 3.

⁶⁷ NOA-1 / Tab 7.

⁶⁸ NOA-1 / Tab 30.

⁶⁹ NOA-1 / Tab 31.

- (p) GEMA, *RIIO-2 – Final Determination, Core Document* (8 December 2020, revised 3 February 2021);⁷⁰
 - (i) GEMA, *RIIO-2 - Final Determination, Electricity Transmission System Annex* (8 December 2020, revised 3 February 2021);⁷¹
 - (ii) GEMA, *RIIO-2 - Final Determination, Finance Annex* (8 December 2020, revised 3 February 2021);⁷²
 - (iii) GEMA, *RIIO-2 - Final Determination, SHET Annex* (8 December 2020, revised 3 February 2021);⁷³
- (q) GEMA, *RIIO-2 Notice of Statutory Consultation on RIIO-2* (17 December 2020);⁷⁴
- (r) SSEN Transmission, *Response to RIIO-2 Statutory Consultation* (19 January 2021);⁷⁵
- (s) GEMA, *RIIO-2 Large Onshore Transmission Investments (LOTI) Guidance and Submissions Requirement Document* (26 January 2021);⁷⁶ and
- (t) GEMA, *RIIO-2 Licence modification decision* (3 February 2021).⁷⁷

1.73 SSEN Transmission has endeavoured to provide all relevant facts, reasons, documentary evidence and witness statements with this Notice of Appeal. If permission to appeal is granted, however, it may be necessary for SSEN Transmission to file further material, particularly following receipt of GEMA's response and any disclosure.

⁷⁰ NOA-1 / Tabs 8 and 9.

⁷¹ NOA-1 / Tab 10.

⁷² NOA-1 / Tabs 11 and 12.

⁷³ NOA-1 / Tab 13.

⁷⁴ NOA-1 / Tabs 32 and 33.

⁷⁵ NOA-1 / Tab 36.

⁷⁶ NOA-1 / Tab 37.

⁷⁷ NOA-1 / Tabs 14-20.

Section 2: Statutory Framework

A. Overview

2.1 In this section, SSEN Transmission sets out the statutory framework governing this appeal, specifically:

- (a) the overall statutory scheme for modifications of licence conditions;
- (b) relevant statutory duties to which GEMA is subject in making licence modifications;
- (c) the statutory provisions governing appeals to the CMA;
- (d) the standard of review to be applied and the approach to be followed by the CMA when considering whether to allow an appeal;
- (e) the specific statutory grounds of appeal; and
- (f) previous CMA decisions in which the Financeability Duty has been considered.

B. The overall statutory scheme for modifications of licence conditions

2.2 In summary:

- (a) GEMA has the power under section 6(b) of EA 1989 to grant a “licence authorising a person to participate in the transmission of electricity for that purpose” (a **TL**).
- (b) GEMA granted a TL to SSEN Transmission on 28 March 1990.
- (c) GEMA has the power to “make modifications of ... (a) the conditions of a particular licence” under section 11A(1)(a) of EA 1989.
- (d) GEMA made a decision to modify the SSEN Transmission Licence under section 11A of EA 1989 on 3 February 2021. A copy of EA 1989 is provided at **NOA-1 / Tab 53**.

2.3 GEMA’s power to make modifications is significantly constrained by a number of features of the statutory scheme which provide important rights and safeguards for licence holders, alongside GEMA’s general duties identified below. In particular:

- (a) The right to consultation: Before making any modifications GEMA must give notice: (a) stating that it proposes to make modifications, (b) setting out the proposed modifications and their effect, (c) stating the reasons why it proposes to make the modifications, and (d) specifying the time within which representations with respect to the proposed modifications may be made (section 11A(2) EA 1989). That time must not be less than 28 days from the date of publication of the notice (section 11A(3) EA 1989). The notice must be published in a way that brings it to the attention of affected persons and specifically must be sent to each relevant licence holder (section 11A(4) EA 1989). GEMA must consider any representations duly made (section 11A(4A) EA 1989).

- (b) The right of appeal: Section 11C(1) EA 1989 provides that an appeal lies to the CMA against a decision by GEMA to proceed with the modification of a licence condition under section 11A EA 1989. The statutory right of appeal reflects the importance of licence modification decisions.⁷⁸ Importantly, separate provision is made where the appeal relates to a “price control decision”, namely, where the purpose of the condition being modified is, in the CMA’s opinion, to limit or control the charges on or the revenue of the licence holder (section 11F(7) EA 1989). In an appeal against a price control decision, such as this appeal, the CMA has wider remedial powers and has a longer period of time in which to determine the appeal. This reflects the Government’s position when introducing the appeal provisions that “*the appeal body would need the additional power to substitute a new price control determination for that of Ofgem, due to the in-depth nature of the investigations required to determine the issue*”,⁷⁹ as well as Parliament’s intention that the CMA should carry out particularly rigorous scrutiny of price control decisions, with a longer and more in-depth investigation, in light of the complexity of such decisions and their fundamental importance for licence holders.

C. Relevant statutory duties to which GEMA is subject in making licence modifications

- 2.4 Under section 3A of EA 1989, GEMA’s principal objective is to protect the interests of existing and future consumers in relation to electricity conveyed by distribution systems or transmission systems (section 3A(1)). Section 3A(1A) of EA 1989 sets out that:

Those interests of existing and future consumers are their interests taken as a whole, including:

- (a) their interests in the reduction of electricity-supply emissions of targeted greenhouse gases;
- (b) their interests in the security of the supply of electricity to them; and
- (c) their interests in the fulfilment by [GEMA], when carrying out its functions as designated regulatory authority for Great Britain, of the objectives set out in Article 36(a) to (h) of the Electricity Directive.

- 2.5 In addition, Articles 36(a) to (h) of the Electricity Directive⁸⁰ sets out a list of “*general objectives*” which GEMA must take all reasonable measures to pursue.

- 2.6 In carrying out its functions, GEMA must act in the manner best calculated to further its principal objective, wherever appropriate by promoting effective

⁷⁸ The current appeal regime was introduced to comply with the EU law requirement that a party affected by a decision of a regulatory authority has a right to appeal to an independent body: Directive 2009/72/EC, Article 37(17).

⁷⁹ Department of Energy and Climate Change (DECC), *Implementation of the EU Third Package: Consultation on licence modification appeals*, NOA – 1 / Tab 79, Paras 2.5 and 2.20. Available at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/43240/586-eu-third-package-condoc2.pdf

⁸⁰ Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC, NOA-1 / Tab 52.

competition (section 3A(1B) EA 1989). Further, GEMA must also comply with a number of specific statutory duties, including *inter alia* its duties to have regard to the need to secure that all reasonable demands for electricity are met (section 3A(2)(a) EA 1989), the need to secure that all licence holders are able to finance their activities (section 3A(2)(b) EA 1989) and the need to contribute to the achievement of sustainable development (section 3A(2)(c) EA 1989).

- 2.7 GEMA's statutory duties additionally include acting in compliance with applicable legal standards in respect of its regulatory decision-making, i.e. ensuring that it acts in a way which is transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed, as well as having regard to all other principles which appear to represent the best regulatory practice (section 3A(5A) EA 1989).
- 2.8 As a public body, GEMA is also subject to overarching public law duties including to consult lawfully and act rationally and for proper purposes and within the ambit of its statutory powers. These duties apply to all actions taken by GEMA but weigh especially heavily in respect of decisions which relate to the most material aspects of a licensee's business and operations, in particular price control decisions.

The Net Zero Duty

- 2.9 Another important statutory duty on GEMA of particular relevance in this appeal is its duty to have regard to guidance on social and environmental matters.
- 2.10 Section 3B of EA 1989 provides that the Secretary of State "*shall from time to time issue guidance about the making by the Authority of a contribution towards the attainment of any social or environmental policies set out or referred to in the guidance*", and GEMA "*shall, in carrying out its functions ... have regard to any guidance issued under this section*". A materially identical equivalent duty is also found in section 4AB of the Gas Act 1986 (**GA 1986**).
- 2.11 In 2010, pursuant to these provisions, the Secretary of State (then for Energy and Climate Change) issued "Social and Environmental Guidance to the Gas and Electricity Markets Authority". This guidance reflected the "80% by 2050" target that was at that stage in force under section 1(1) of the Climate Change Act 2008 (**CCA 2008**). Section 1(1) imposes a duty on the Secretary of State as to the level of the "net UK carbon account" (the amount of net UK emissions of targeted greenhouse gases for a period adjusted by the amount of carbon units credited or debited to the account) for the year 2050. The duty is to ensure that the net UK carbon account is lower than the "1990 baseline" (the baseline of net UK emissions of targeted greenhouse gases against which the percentage amount in subsection 1(1) is applied) by a minimum percentage amount.
- 2.12 Since that guidance was issued, a new "net zero" target has been introduced. The Climate Change Act 2008 (2050 Target Amendment) Order 2019 amended section 1 of the CCA 2008 so that the minimum percentage by which the net UK carbon account for the year 2050 must be lower than the 1990 baseline is increased from 80% to 100%. However, the Secretary of State has not yet issued new guidance to reflect that new target.

- 2.13 Ofgem’s Decarbonisation Action Plan (2020)⁸¹ noted that the 2010 guidance was issued before the 2019 target of achieving Net Zero by 2050 and, whilst welcoming further clarification, expressed the view that “*Ofgem’s duty to reduce greenhouse gas emissions should be viewed in the context of that legislated target*”.
- 2.14 GEMA has also published correspondence between itself and the Secretary of State in which it set out a summary of its activities and how they comply with the Secretary of State’s Social and Environmental Guidance, including in how it has met the emissions target guidance through RIIO price control.⁸² The Net Zero Duty is of particular importance to this appeal given that SSEN Transmission is required to deliver significant new investments over the price control period⁸³ related to projects which are required to create new transmission infrastructure for electricity from renewable sources.

The Financeability Duty

- 2.15 Of particular relevance in the present appeal, GEMA is required to ensure that SSEN Transmission is able to finance the activities that are the subject of obligations imposed by or under relevant legislation, i.e. the activities covered by its TL (the ***Financeability Duty***). The Financeability Duty is set out in section 3A(2) of EA 1989 as amended, as follows:

In performing the duties under subsections (1B) and (1C), the Secretary of State or the Authority shall have regard to ... (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, the Utilities Act 2000, Part 2 or 3 of the Energy Act 2004, Part 2 or 5 of the Energy Act 2008 or section 4, Part 2, sections 26 to 29 of the Energy Act 2010 or Part 2 of the Energy Act 2013.

- 2.16 Equivalent duties are imposed on regulators in other regulated sectors: on GEMA as gas regulator under section 4AA(2)(b) of GA 1986, and on Ofwat as water regulator under section 2(2A)(c) of the Water Industry Act 1991 (***WIA 1991***). These respectively provide:

In performing the duties under subsections (1B) and (1C), the Secretary of State or [GEMA] shall have regard to ... (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, the Utilities Act 2000, Part 5 of the Energy Act 2008 or section 4, Part 2, or sections 26 to 29 of the Energy Act 2010.

The Secretary of State or, as the case may be, [Ofwat] 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

⁸¹ GEMA, ‘Ofgem’s Decarbonisation Action Plan’ (2020), **NOA-1 / Tab 87**.

⁸² Social and Environmental Guidance to the Gas and Electricity Markets Authority (15 December 2016), **NOA-1 / Tab 90**, available at: https://www.ofgem.gov.uk/system/files/docs/2017/01/social_and_environmental_letter_to_beis_2016_for_website.pdf.

⁸³ See **Alkirwi-1 / Section 7**.

securing reasonable returns on their capital) to finance the proper carrying out of those functions.

- 2.17 Materially identical wording is used in each Act, particularly in the imperative language regarding the need to secure that licence holders are able to finance their activities. As set out below, in the Firmus Energy Appeal, the CMA specifically acknowledged that financeability in the context of gas and electricity requires the rate of return (or WACC) to be set at a high enough rate such that the revenues and therefore cash flows made by the licence holder are sufficient to pay investors and lenders⁸⁴. That case concerned Northern Ireland but the applicable legislation there provides for the Financeability Duty in materially identical terms to the EA 1989, hence the CMA's comments equally apply in the present case⁸⁵.
- 2.18 As set out below, the Financeability Duty has been considered by the CMA in a number of previous price control appeals. These cases demonstrate that:
- (a) the CMA will carry out appropriately rigorous scrutiny in relation to the analysis and approach that underpins GEMA's price control decisions where they have a bearing on licence holders' WACC and financeability; and
 - (b) where it identifies errors in GEMA's analysis or approach, the CMA will uphold appeals by reference to the statutory grounds in section 11E(4) of EA 1989 – in particular grounds (a) and (b) (that GEMA failed properly to have regard to, or to give the appropriate weight to, the matters to which it must have regard in carrying out its principal objective or statutory duties), but also, where appropriate, grounds (c) (that GEMA's decision was based wholly or partly on an error of fact) and/or (d) (that the modifications fail to achieve in whole or in part the effect stated by GEMA).
- 2.19 UK economic regulators have interpreted the Financeability Duty as having two “strands”.⁸⁶
- 2.20 These two strands are as follows:
- (a) that an efficient, well-run company should be able to earn a rate of return that is commensurate with the cost of capital; and
 - (b) that an efficient, well-run company should be able to generate sufficient revenues to raise equity and debt finance from capital markets readily and on “reasonable” teams.

⁸⁴ *Firmus Energy Appeal*, NOA-1 / Tab 58 / Para 7.60.

⁸⁵ There is separate legislation in the Gas (Northern Ireland) Order 1996 and the Electricity (Northern Ireland) Order 1992, but provision for both sectors is also made by the Energy (Northern Ireland) Order 2003. In particular, the 2003 Order provides for the principal objective and general duties of the Department of Enterprise, Trade and Investment and the Northern Ireland Authority for Utility Regulation in both sectors. The general duties include a duty to carry out their functions in the manner best calculated to further the principal objective, having 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 Part II of [the Electricity Order or the Gas Order respectively] or this Order*” (Article 12(2)(b) and 14(2)(b)) NOA-1 / Tab 54.

⁸⁶ GEMA (2010), ‘Embedding financeability in a new regulatory framework’, January, NOA-1 / Tab 88 / Page 6, Para 3.1. Ofwat (2011), ‘Financeability and financing the asset base – a discussion paper’, March, NOA-1 / Tab 91 / Page 10, Para 16.

- 2.21 Therefore, in order to satisfy its Financeability Duty, GEMA must:
- (a) **first**, set the allowed rate of return at a level that reflects the cost of debt and cost of equity for an efficiently financed electricity transmission company. In that context, the allowed return must be sufficient to ensure there is an adequate equity return to attract and sustain equity investment; and
 - (b) **second**, ensure that, when the price control settlement is considered as a whole, the cash flows are sufficient to allow the (notional) company to maintain a ‘solid’ investment grade (i.e. BBB+) credit rating, while providing a return to equity holders.
- 2.22 The two strands of financeability are related. However, it is important to recognise that meeting one strand does not imply that the other strand has been met. In particular, a finding that projected debt metrics are in line with thresholds for a BBB+ rating does not in itself provide evidence that the cost of capital and, in particular, the cost of equity have been set at a level that appropriately reflects capital markets and the level of risk borne by investors. GEMA’s financeability duty requires it to consider whether the company is able to attract new equity at the allowed rate of return (i.e. whether the company is an ‘investible proposition’).
- 2.23 This has been recognised by the CMA in previous price control appeals. For example, in the case of the NATS En Route Ltd (2020) redetermination, the CMA concluded that the return on equity had been set too low despite the company exceeding credit ratio thresholds in the Civil Aviation Authority’s (CAA’s) analysis.⁸⁷ Similarly, in the Bristol Water (2015) redetermination, the CMA emphasised the need to consider the level of the cost of capital, and expenditure allowances, as part of its assessment of whether the financing duty had been met.⁸⁸
- 2.24 SSEN Transmission considers that GEMA has breached the Financeability Duty by:
- (a) providing insufficient allowance to remunerate equity investors for the level of risk they bear in investing in electricity transmission assets; and
 - (b) incorrectly including an ‘outperformance’ adjustment in the calculation of the return on equity.

D. The statutory provisions governing appeals to the CMA

- 2.25 Right of appeal: Section 11C(1) of EA 1989 provides that:

⁸⁷ Competition and Markets Authority (23 July 2020), ‘NATS (En Route) Plc / CAA Regulatory Appeal - Final report’, **NOA-1 / Tab 59**.

⁸⁸ Competition and Markets Authority (2015), ‘Bristol Water plc: A reference under section 12(3)(a) of the Water Industry Act 1991’, **NOA-1 / Tab 56 / Page 348, Para. 11.23**: “*Credit ratio analysis forms part of the assessment of financeability, but needs to be considered alongside the rest of the determination. In that context, we have had regard to our analysis on wholesale totex and cost of capital*”.

An appeal lies to the CMA against a decision by [GEMA] to proceed with the modification of a condition of a licence under section 11A.

2.26 An appeal may be brought by a “*relevant licence holder*” within the meaning of section 11A and by certain other persons or bodies (section 11C(2) EA 1989). SSEN Transmission is a “*relevant licence holder*” as defined in section 11A as it is the holder [of a particular licence, the conditions of which are to be modified by the Decision].

2.27 Permission to appeal: Section 11C(3) EA 1989 provides that:

The permission of the CMA is required for the bringing of an appeal under this section.

2.28 In the case of an appeal brought by a relevant licence holder, section 11C(4)(d) provides that the CMA may only refuse permission to appeal on the following grounds:

- (i) that the appeal is brought for reasons that are trivial or vexatious;
- (ii) that the appeal has no reasonable prospect of success.

2.29 Neither of these potential bases for refusal of permission is applicable to any of the grounds raised by SSEN Transmission in this appeal.

2.30 Determination of an appeal: Section 11E(2) EA 1989 provides that:

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—

- (a) in the carrying out of its principal objective under section 3A;
- (b) in the performance of its duties under that section; and
- (c) in the performance of its duties under sections 3B and 3C.

2.31 Fresh evidence: Section 11E(3) EA 1989 provides that, in determining the appeal, the CMA:

- (a) may have regard to any matter to which [GEMA] was not able to have regard in relation to the decision which is the subject of the appeal; but
- (b) must not, in the exercise of that power, have regard to any matter to which [GEMA] would not have been entitled to have regard in reaching its decision had it had the opportunity of doing so.

2.32 Thus, the CMA may consider evidence not considered by GEMA in making its final decision, where such evidence was not previously available. There is no restriction as to fresh evidence as is found in, say, the Court of Appeal⁸⁹. On the contrary, the CMA may have regard to any matter to which GEMA was not able to have regard, provided only that GEMA *would* have been entitled to have regard to the matter. This is reinforced by other provisions in the EA 1989 and in the CMA Energy Licence Modification Appeals Rules⁹⁰:

⁸⁹ Under *Ladd v Marshall* [1954] 1 WLR 1489, 1491, NOA-1 / Tab 71.

⁹⁰ CMA Appeal Rules, NOA-1 / Tab 49.

- (a) The CMA can by notice call for (a) documents and (b) economic evidence (Schedule 5A, paragraph 6(1)(a) and (b) EA 1989). These may obviously be materials which were not before GEMA. They may even be required to be generated specifically for the appeal. They may be sought by the CMA of its own initiative.
 - (b) The appellant may adduce evidence (Rule 5.3(b) of CMA Appeal Rules) as may GEMA (Rule 9.2(b) of CMA Appeal Rules) and/or interested third parties (Rule 10.4(g) of CMA Appeal Rules). This might include expert evidence, and indeed the CMA may itself appoint its own experts (Rule 14.2(f) of CMA Appeal Rules).
 - (c) Parliament expressly envisaged the giving of evidence (on oath) at an oral hearing (Schedule 5A, paragraph 7(1) EA 1989) with cross-examination (Schedule 5A, paragraph 7(4) EA 1989).
- 2.33 Taken together, these provisions envisage fresh evidence being given as part of a fact-finding and evaluative enquiry by the CMA.
- 2.34 Grounds of appeal: Section 11E(4) EA 1989 provides that the CMA may allow appeal to the extent that it is satisfied that the decision appealed against was wrong on one or more of the grounds set out at (a) to (e). These are addressed in more detail below.
- 2.35 Remedial powers: The CMA’s powers on allowing an appeal are set out at section 11F EA 1989. In a price control appeal, the CMA must do one or more of the following: (a) quash the decision (to the extent the appeal is allowed); (b) remit the matter to GEMA for reconsideration and determination in accordance with any directions given by the CMA; and (c) substitute the CMA’s decision for that of GEMA (to the extent the appeal is allowed) and give any directions to GEMA or any other party to the appeal (section 11F(2) EA 1989). By contrast, no power of substitution is available to the CMA in respect of appeals against other licence modification decisions.
- 2.36 The availability of a substitutionary remedy in price control appeals reflects the Government’s position when introducing the appeal provisions that “*for price control matters our view is that the appeal body would need the additional power to substitute a new price control determination for that of Ofgem, due to the in-depth nature of the investigations required to determine the issue*”. As the Government noted: “*Price controls are fundamental decisions for network companies, and it is important to ensure that the framework does not discourage investment. The complex nature of these decisions may suggest that they should be subject to closer levels of scrutiny on appeal.*”⁹¹
- 2.37 As explained in further detail at 2.54 below, the CMA must consider whether GEMA “*properly*” had regard to any of the relevant matters (ground (a)) and whether GEMA gave them “*the appropriate weight*” (ground (b)). By requiring

⁹¹ Department of Energy and Climate Change (DECC), ‘Implementation of the EU Third Package: Consultation on licence modification appeals’, NOA-1 / Tab 79 / Paras 2.5 and 2.20, available at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/43240/586-eu-third-package-condoc2.pdf

the CMA to consider for itself questions of “*regard*” and “*weight*”, Parliament has required the CMA to evaluate for itself the centrally significant judgments arrived at by GEMA.

- 2.38 *Time limits for determining appeals*: An appeal against a price control decision is subject to a longer time limit for the CMA to determine the appeal compared to other appeals – six months instead of four months (section 11G(1) EA 1989), in each case with the possibility of a one month extension if there are special reasons justifying this (section 11G(2)-(4) EA 1989). As the Government made clear when introducing the appeal provisions, this is because “*the complexity of the price control decisions and the impact they have on companies’ financial position*” means that “*they should be capable of being subject to a longer and more in-depth investigation than decisions relating to other licence modifications*”.⁹²

E. The standard of review to be applied and the approach to be followed by the CMA when considering whether to allow an appeal

- 2.39 The CMA gave guidance as to the standard and nature of its review in the ED1 Appeal made under the appeals regime in the EA 1989.
- 2.40 *Merits review*: In the ED1 Appeal, the CMA made clear that the applicable standard of review was a merits review, going beyond judicial review, and stated that:

We agree that we are not limited to reviewing the decision on conventional judicial review grounds and that we are 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.⁹³

- 2.41 The same point was made in the subsequent Firmus Energy and SONI Appeals, where the CMA referred with approval to the approach taken in the ED1 Appeal:

We agree that we are not limited to reviewing the UR’s decision on conventional judicial review grounds. The question for us to determine is whether the decision of the UR under appeal was wrong on one or more of the statutory grounds and in order to do that the merits of the decision must be taken into account.⁹⁴

The question for us to determine is whether the Price Control Decision was wrong on one or more of the statutory grounds and, in order to do that, we have taken the merits of the decision under appeal into account.⁹⁵

⁹² DECC, ‘Summary and Evaluation of Responses’, in *Implementation of the EU Third Internal Energy Package: Government Response*, NOA-1 / Tab 94 / Paras 2.20 and 2.35, available here: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/43266/1163-eu-third-package-gov-response.pdf.

⁹³ *British Gas Trading Limited v Gas and Electricity Markets Authority Final Determination* (29 September 2015) (*ED1 BGT Appeal*), NOA-1 / Tab 57 / Para 3.24; *Northern Powergrid (Northeast) Limited and Northern Powergrid (Yorkshire) plc v Gas and Electricity Markets Authority Final Determination* (29 September 2015) (*ED1 NPg Appeal*), NOA-1 / Tab 60 / Para 3.23 (both determinations together, the *ED1 Appeal*).

⁹⁴ *Firmus Energy Appeal*, NOA-1 / Tab 58 / Para 3.16.

⁹⁵ *SONI Limited v Northern Ireland Authority for Utility Regulation Final Determination* (13 November 2017) (*SONI Appeal*), NOA-1 / Tab 61 / Para 3.26.

- 2.42 The ED1 Appeal also refers to the Government’s response to the Department of Energy and Climate Change’s consultation on the “Implementation of the Third Internal Energy Package” (which led to the introduction of the appeals regime), stating the Government’s intention that the appeals regime should “*enable the appeal body to take into account the merits of the case*”⁹⁶.
- 2.43 Noting the approach of the Supreme Court in *BT v Telefonica O2 UK*⁹⁷ concerning the equivalent appeals regime in the Communications Act 2003, the CMA also held in the ED1 Appeal that it had the power to make “*certain factual judgments*” and should not limit itself to considerations of errors of law or the approach in judicial review⁹⁸. On this basis, SSEN Transmission does not believe that there is any serious dispute that the CMA is required to consider the merits of the decision under appeal, including making its own factual judgments on the basis of the evidence before it on appeal where appropriate to address. In the ED1 Appeal, the CMA also emphasised that it would “*engage with the merits of the decision under appeal and ... conclude whether it was right or wrong in accordance with the statutory requirements*”.
- 2.44 Materiality: In the ED1 Appeal, the CMA stated that:
- We understand that it was common ground between the parties that we [the CMA] should only interfere with the Decision if we consider that the error identified is material, and this approach is obviously correct. ...
- We consider that an error will not be a material error where it only has an insignificant or negligible impact in relative terms on the overall level of price control that has been set by GEMA.
- Whether an error is material must be decided on a case-by-case basis taking into account the particular circumstances of each case. Relevant factors would include the impact of the error on the overall price control, 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. This list is not intended to be exhaustive.⁹⁹
- 2.45 The same test of materiality was referred to by the CMA in the Firmus Energy and SONI Appeals¹⁰⁰.
- 2.46 None of the matters raised in this appeal could properly be characterised as having only an insignificant or negligible impact on the price control set by GEMA. Indeed, each is clearly material individually and collectively to GEMA’s Decision. In relation to each of the errors by GEMA set out below, SSEN Transmission has sought to identify the approximate financial impact of the error.

F. The specific statutory grounds of appeal

⁹⁶ DECC, ‘Implementation of the EU Third Internal Energy Package: Government Response’ (January 2010), NOA-1 / Tab 94 / Para 2.24.

⁹⁷ *BT v Telefonica O2 UK* [2014] UKSC 42, NOA-1 / Tab 69.

⁹⁸ *ED1 BGT Appeal*, NOA-1 / Tab 57 / Para 3.41; *ED1 NPg Appeal*, NOA-1 / Tab 60 / Para 3.40.

⁹⁹ *ED1 BGT Appeal*, NOA-1 / Tab 57 / Paras 3.58-3.61; *ED1 NPg Appeal*, NOA-1 / Tab 60 / Paras 3.56-3.58; *SONI Appeal*, NOA-1 / Tab 61 / Paras 3.37-3.39.

¹⁰⁰ *Firmus Energy Appeal*, NOA-1 / Tab 58 / Paras 3.22-3.25; *SONI Appeal*, NOA-1 / Tab 61 / Paras 3.37-3.39.

2.47 Section 11E(4) of EA 1989 provides as follows:

The CMA may allow the appeal only to the extent that it is satisfied that the decision appealed against was wrong on one or more of the following grounds:

- (a) that [GEMA] failed properly to have regard to any matter mentioned in subsection (2);
- (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 11A(7)(b);
- (e) that the decision was wrong in law.

2.48 This section goes on to consider each of the grounds listed under section 11E(4), against the background of the general submissions above regarding the standard of review.

Sections 11E(4)(a) and (b) EA 1989: GEMA failed properly to have regard to, or give the appropriate weight to, the matters to which it must have regard in carrying out its principal objective and/or in performing its statutory duties

The relevant “matters”

2.49 Grounds (a) and (b) both refer to the matters mentioned at section 11E(2) EA 1989, namely the matters to which GEMA must have regard “(a) in the carrying out of its principal objective under section 3A; (b) in the performance of its duties under that section; and (c) in the performance of its duties under sections 3B and 3C”.

2.50 The main “matters” in this regard can be summarised as follows:

- (a) The principal objective: The key relevant matter is the need to protect the interests of existing and future consumers (section 3A(1) EA 1989), which are to be taken as a whole, including their interests in the reduction of electricity-supply emissions of targeted greenhouse gases, in the security of the supply of electricity to them, and in GEMA fulfilling the objectives set out in Article 36(a) to (h) of the Electricity Directive (section 3A(1A) EA 1989). This includes having regard to the interests of the groups identified in section 3A(3) (individuals who are disabled or chronically sick, those of pensionable age, those with low incomes, and those residing in rural areas). A further relevant matter is that, in seeking to further the principal objective, GEMA must wherever appropriate do so by promoting effective competition (section 3A(1B) EA 1989).
- (b) The section 3A duties: The key relevant matters are the need to secure that all reasonable demands for electricity are met (section 3A(2)(a) EA 1989), the need to secure that all licence holders are able to finance their

activities (section 3A(2)(b) EA 1989) and the need to contribute to the achievement of sustainable development (section 3A(2)(c) EA 1989).

- (c) The section 3B and 3C duties: The key relevant matters are, respectively, the Social and Environmental Guidance issued by the Secretary of State (section 3B(2) EA 1989) and any advice about any electrical safety issue given by the Secretary of State, the Health and Safety Executive or the Office for Nuclear Regulation (section 3C(3)-(4) EA 1989).

2.51 In addition, other matters can also be identified to which GEMA must have regard in the carrying out of its principal objective and in the performance of the above duties:

- (a) Subject to sections 3A(1B) and 3A(2) EA 1989, GEMA must carry out its functions in the manner it considers is best calculated to: (a) promote efficiency and economy on the part of licence holders and the efficient use of electricity conveyed by distribution or transmission systems; (b) protect the public from the dangers arising from the generation, transmission, distribution or supply of electricity, and (c) secure a diverse and viable long-term energy supply (section 3A(5) EA 1989).
- (b) In carrying out its functions, GEMA must have regard to the principles under which regulatory activities should be transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed, and any other principles which appear to represent the best regulatory practice (section 3A(5A) EA 1989).

2.52 In principle, an appeal by reference to grounds (a) and/or (b) of section 11E(4) could rely on any of the above matters as being matters to which GEMA failed properly to have regard or to give the appropriate weight. In this appeal, the key relevant matter in section 3A(2)(b) EA 1989 engaged by SSEN Transmission's grounds of appeal is the need to secure that all licence holders are able to finance their activities, since it is inherent in a price control decision that it limits or controls the charges on or the revenue of the licence holder (see the section 11F(7) definition of "price control decision").

The level of scrutiny on an appeal on grounds (a) or (b) in section 11E(4) EA 1989

2.53 Where these grounds of appeal are invoked, the CMA must consider whether GEMA "*properly*" had regard to any of the relevant matters (ground (a)) and whether GEMA gave them "*the appropriate weight*" (ground (b)). The language chosen by Parliament is important. It could have set the threshold at whether GEMA had "*reasonably*" had regard to relevant matters or given them "*reasonable*" weight, but instead made a deliberate choice to apply a stricter standard which GEMA must satisfy. The words "*properly*" and "*appropriate*" recognise that regard and weight are matters for the CMA to consider for itself with appropriate scrutiny and rigour and is not simply assessing the reasonableness of GEMA's position (see paras 2.40-2.43 above).

2.54 By requiring the CMA to consider for itself questions of "*regard*" and "*weight*", Parliament has required the CMA to evaluate for itself the centrally

significant judgments arrived at by GEMA. It is also relevant to note that Parliament provided in section 11E(2) EA 1989 that “[i]n determining an appeal” the CMA is itself under the same duty to “have regard, to the same extent as is required of the Authority” to the matters to which GEMA was obliged to have regard.

- 2.55 In the present appeal, SSEN Transmission submits that GEMA has failed properly to have regard to and/or failed to give the appropriate weight to certain of the relevant matters identified above, in particular the need to secure that SSEN Transmission is able to finance its activities.

Section 11E(4)(c) EA 1989: the decision was based, wholly or partly, on an error of fact

- 2.56 The ground in section 11E(4)(c) EA 1989 refers to “*error of fact*”. The CMA’s jurisdiction on matters of fact is at large, untrammelled by restrictive preconditions. Any question of “*fact*”, on which GEMA has to any extent “*based*” its decision, is challengeable on appeal before the CMA (subject only to issues of materiality). Moreover, it is challengeable by reference to fresh evidence, presented by the parties and/or obtained by the CMA itself (see paras 2.31-2.32(c) above).
- 2.57 In this regard, it is notable that there is a very close relationship between “*facts*” and “*merits*”. In judicial review, “*the merits issues ... are for the factual judgment of the*” decision-maker under review¹⁰¹. But since errors of factual judgment are a ground of appeal, it follows that the CMA cannot avoid becoming involved in the “*merits issues*” and indeed there is no serious dispute that the CMA should engage with the merits of the decision in price control appeals.¹⁰² This is also reinforced by the very close relationship between “*facts*” and questions of “*relevance*” and “*weight*” generally (i.e. beyond the section 11E(2) matters), since “[t]he weight to be given to a relevant consideration is ... always a question of fact”¹⁰³.
- 2.58 In the ED1 Appeal and the SONI Appeal¹⁰⁴, the CMA adopted the approach to errors of fact of the appellate courts that was set out by the Court of Appeal in *Azzicurazioni Generali Spa v Arab Insurance Group*¹⁰⁵:

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 inferences from primary fact that the judge made or drew and the claimants challenge, while (b) reminding ourselves that, so far as the appeal raises issues of judgment on unchallenged primary findings and

¹⁰¹ *Bowen-West v Secretary of State for Communities & Local Government* [2012] EWCA Civ 321, NOA-1 / Tab 67 / Para 45.

¹⁰² See *ED1 BGT Appeal*, NOA-1 / Tab 57 / Para 3.24; *ED1 NPg Appeal*, NOA-1 / Tab 60 / Para 3.23.

¹⁰³ *Secretary of State for the Home Department v AP (No.1)* [2010] UKSC 24 [2011] 2 AC 1, NOA-1 / Tab 77 / Para 12.

¹⁰⁴ *ED1 BGT Appeal*, NOA-1 / Tab 57 / Para 3.30; *SONI Appeal*, NOA-1 / Tab 57 / Para 3.30.

¹⁰⁵ *Azzicurazioni Generali Spa v Arab Insurance Group* [2003] 1 WLR 577, NOA-1 / Tab 66 / Para 17.

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.

- 2.59 Thus, it is for the CMA to determine for itself whether any challenged findings of primary fact or inferences from primary fact are correct.

Section 11E(4)(d) EA 1989: the modifications fail to achieve, in whole or in part, the effect stated by GEMA by virtue of section 11A(7)(b) EA 1989

- 2.60 Section 11A(7)(b) EA 1989 requires GEMA to “*state the effect of the modifications*” of licence conditions. The ground in section 11E(4)(d) EA 1989 requires the CMA to consider for itself whether the modifications “*fail to achieve ... the effect stated by the Authority*”.
- 2.61 Whether a modification will achieve a particular outcome is a prospective question of judgement and educated prediction, which Parliament has specifically required the CMA to evaluate. Again there is a contrast with judicial review, where the Court “*should be very slow to impugn decisions of fact made by an expert and experienced decision-maker*” and “*must surely be even slower to impugn his educated prophesies and predictions for the future*”¹⁰⁶. But here, that is precisely the role of the CMA under ground (d). The CMA must consider for itself with appropriate scrutiny and rigour whether or not the modifications achieve the effect stated by GEMA, albeit that it will not simply substitute its own view in place of the view reached by GEMA (see paras 2.40-2.43 above).

Section 11E(4)(e) EA 1989: the decision was wrong in law

- 2.62 GEMA’s decision will be wrong in law where for example GEMA has made an error as to the scope of its principal objective or as to its duties in making the decision, or where the decision is disproportionate to the aim pursued.¹⁰⁷ Mathematical errors can also be considered “*wrong in law*”¹⁰⁸. The Competition Commission’s decision in *E.ON* made it clear that the standard of “*wrong in law*” also includes the public law duties to act in accordance with natural justice and procedural fairness¹⁰⁹. The CMA has similarly held that a failure of process that is sufficient to undermine the substance of GEMA’s decision (i.e. that meets the materiality test as set out at para 2.44 above) will render that decision wrong in law¹¹⁰.

G. Conclusion

- 2.63 For reasons explained in Grounds 1 to 4 of this Notice of Appeal, GEMA’s Decision has failed properly to have regard to and/or give the appropriate weight to its principal objective to protect the interests of existing and future consumers in the reduction of electricity-supply emissions of targeted greenhouse gases

¹⁰⁶ *R v DGT ex p Cellcom Ltd* [1999] ECC 314, NOA-1 / Tab 76 / Para 26.

¹⁰⁷ *ED1 BGT Appeal*, NOA-1 / Tab 57 / Para 6.134.

¹⁰⁸ *Danae Air Transport v Air Canada* [2000] 1 WLR 395, NOA-1 / Tab 70 / Page 406.

¹⁰⁹ *E.ON v Gas and Electricity Markets Authority* (10 July 2007) (*E.ON*), NOA-1 / Tab 64 / Para 5.18.

¹¹⁰ *ED1 BGT Appeal*, NOA-1 / Tab 57 / Para 7.55.

and in the security of the supply of electricity, including the need to secure that all licence holders are able to finance their activities; was based on errors of fact and law, and failed to achieve its own stated effects. The CMA must, in exercise of its remedial powers after a merits review, correct these errors.

Section 3: GEMA's overall decision on allowed return

- 3.1 As GEMA recognises,¹¹¹ the current price control period will require a step change in investment for electricity transmission to support the green economic recovery, the successful delivery of which will require significant support and investment in the business from funding providers including international equity and debt investors. GEMA's decision on allowed return is a critical element of the price control for enabling the much-needed investment over the price control period.¹¹²
- 3.2 The WACC represents the weighted average of: (i) the cost of equity; and (ii) the cost of debt, where the weighting is provided by the gearing ratio¹¹³ to arrive at the overall WACC.¹¹⁴ This reflects the fact that the licence holders are funded by a combination of both debt and equity. In setting the allowed return, GEMA employed the CAPM.¹¹⁵ CAPM is an established methodology with well-understood theoretical and evidential foundations – its application relies heavily on the use of observable market data.¹¹⁶
- 3.3 The CoE is a core component of the WACC and estimates the rate of return a shareholder requires for investing equity into a transmission business. Under the approach followed by GEMA in RIIO-2, the equity allowance was determined according to a three-step methodology, each of which was vitiated by errors, namely:
- (a) *Step 1*: the CAPM analysis. In line with the standard approach taken by UK economic regulators, the CAPM model relates the CoE to the RFR, the TMR, and a firm-specific measure of investors' exposure to systematic risk i.e. "beta".¹¹⁷
 - (b) *Step 2*: cross-checks for the CoE figure obtained at Step 1, which included MARs for UK utility stocks and OFTO rates of return, in order to assess whether the Step 1 figure appeared to fall within an appropriate range.¹¹⁸
 - (c) *Step 3*: an unconventional consideration of the likelihood of outperformance against the CoE (i.e. that *actual* returns would exceed allowed returns) and the application of an adjustment to the overall CoE level calculated under Step 1 and 2 in order to take account of such

¹¹¹ RIIO-2 - Final Determination, Electricity Transmission System Annex – NOA-1 / Tab 10 / Para 2.145.

¹¹² See Alkirwi-1 / Section 7.

¹¹³ The gearing ratio measures the proportion of a company's debt to its equity.

¹¹⁴ The gearing ratio is defined as the proportion of debt in overall capital structure of a company. In this case, the gearing ratio is defined in notional terms; that is, an unobserved amount that represents the optimal funding mix for companies in the business of interest.

¹¹⁵ Competition and Markets Authority, 'Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations - Provisional Findings', NOA-1 / Tab 55 / Para 79.

¹¹⁶ Competition and Markets Authority, 'Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations - Provisional Findings', NOA-1 / Tab 55 / Para 79.

¹¹⁷ Competition and Markets Authority, 'Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations - Provisional Findings', NOA-1 / Tab 55 / Para 9.11.

¹¹⁸ RIIO-2 - Final Determination, Finance Annex, NOA-1 / Tab 12 / Pages 52-55.

expected outperformance,¹¹⁹ including “aiming up” when selecting the point estimate within the CoE in line with recent guidance from the CMA.¹²⁰

The RIIO-2 Final Determination decided on these parameters as follows:¹²¹

Table 2: GEMA RIIO-2 Final Determination on CoE (at 60% gearing)

		CMA PR19 Provisional Findings	GEMA RIIO-2 Final Determination
Step 1 - The CAPM model	RfR	-0.96%	-1.58%
	TMR	6.95%	6.50%
	Asset beta	0.33	0.349 ¹²²
	Debt beta	0.04	0.075
	Equity beta	0.76	0.759
	Gearing	60.00%	60.00%
	Allowed CoE	5.08%	4.55%
Step 2 - cross-checks and assessed cost of equity			GEMA considered its cross-checks suggest a mid-point CoE of 4.4% but decided not to revise the above figures on that basis.
Step 3 - application of outperformance adjustment			Baseline allowed CoE reduced to 4.30% , reflecting a 0.25% expected outperformance adjustment mechanism for SSSEN Transmission. ¹²³

3.4 GEMA’s overall decision on WACC¹²⁴ is wrong for reasons explained in the Section 4 and Section 5. In summary:

- (a) **Section 4 (Ground 1)** explains that GEMA has made demonstrable methodological errors in calculating the CoE, in particular in its choice of proxy for the RFR (**Ground 1A**), in its incorrect approach to estimating the TMR, including reliance upon flawed back cast CPI data (**Ground 1B**), its errors of approach to calculate the beta (**Ground 1C**), its failure to aim up in its CoE range (**Ground 1D**) and its errors of approach to CoE cross-checking (**Ground 1E**).
- (b) **Section 5 (Ground 2)** explains that GEMA’s decision to apply an outperformance adjustment is wrong in both principle and in practice,

¹¹⁹ RIIO-2 - Final Determination, Finance Annex, **NOA-1 / Tab 12 / Pages 60-69**.

¹²⁰ Competition and Markets Authority, ‘Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations - Provisional Findings’, **NOA-1 / Tab 55**; CMA (2021), PR19 January Working Papers – Point Estimate, **PH-1 / Tab 49**.

¹²¹ RIIO-2 - Final Determination, Finance Annex, **NOA-1 / Tab 12 / Page 24**. See also Table 23 for each year of the price control.

¹²² These figures are not directly comparable given the different debt beta assumptions in the row below.

¹²³ At 55% gearing, this translates to an allowed cost of equity of 4.25%, expected outperformance of 0.22% and therefore allowed return on equity of 4.02% - see Table 13, RIIO-2 - Final Determination, Finance Annex, **NOA-1 / Tab 12 / Page 71**.

¹²⁴ Implemented through Special Licence Conditions 2.1.11, 2.3 and the Price Control Financial Handbook, which refer to the WACC as set by GEMA contained in the Price Control Financial Model.

which is a highly problematic substitute for using existing regulatory tools for setting a good price control and stands to have a serious long-term detriment to investment, and ultimately, consumer interests.

Section 4: Ground 1 – Methodological errors in the calculation of cost of equity

- 4.1 As noted at paragraph 3.3(a) above, Step 1 of GEMA’s decision-making on CoE involved applying the CAPM model. In summary, as a result of demonstrable errors, GEMA’s decision at Step 1 has failed properly to have regard to and/or give the appropriate weight to the interests of existing and future consumers, including in relation to its Financeability Duty and Net Zero Duty, by setting the CoE range too low based on observable market evidence. This error has been compounded by failing to aim up within the range at Step 3.
- 4.2 In arriving at its overall figure, GEMA has made errors of fact and/or law by taking an incorrect approach to several specific elements of the CoE; failed to properly take into account the evidence put before it by SSEN Transmission (and others); and disregarded the position adopted on the correct application of the CAPM model from the CMA in its recent PR19 redeterminations published prior to the Final Determination which supports SSEN Transmission’s position. The specific errors, each of which is material, that resulted in GEMA’s decision on CoE being wrong include the following:
- (a) **Ground 1A:** errors in the choice of proxy for the RFR;
 - (b) **Ground 1B:** errors in estimating the TMR;
 - (c) **Ground 1C:** errors of approach to calculating beta estimates;
 - (d) **Ground 1D:** failure to aim up in the CoE range; and
 - (e) **Ground 1E:** errors in the CoE cross-checks conducted by GEMA.

A. Ground 1A: Errors in RFR

- 4.3 The RFR is the return an investor could expect on an investment that carries zero risk, and it is an important element within the CAPM. The RFR is a hypothetical number, as in reality no investment has absolutely zero risk, so appropriate proxies need to be selected. GEMA selected an RFR forecast in the Final Determination of **-1.58%** (60% gearing, CPIH-real).¹²⁵ However, the evidence before GEMA clearly indicated that an appropriate CPIH-real RFR range should be between **-0.99% and -0.96%** (CPIH-real).¹²⁶
- 4.4 GEMA’s decision setting the RFR was flawed because it relied entirely on evidence based on the spot yield of ILGs as a proxy for the RFR for RIIO-2,¹²⁷ and disregarded other relevant evidence, including data relating to AAA-rated corporate bonds. This error led GEMA to significantly underestimate the true RFR.¹²⁸ GEMA’s decision to set the RFR without adjusting for the “convenience premium” embedded in the ILG evidence on which it solely relied

¹²⁵ CPIH is a measure of inflation that is a variant of the Consumer Prices Index (CPI) that includes owner occupiers’ housing costs and Council Tax, which are excluded from the CPI. Gearing refers to the ratio of a company’s debt to equity and shows the extent to which a company’s operations are funded by lenders versus shareholders. A gearing ratio of 60% shows that a company’s debt levels are 60% of its assets. RIIO-2 - Final Determination, Finance Annex, **NOA-1 / Tab 12 / Page 24**.

¹²⁶ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Para 5.72**.

¹²⁷ RIIO-2 - Final Determination, Finance Annex, **NOA-1 / Tab 12 / Page 28-31**.

¹²⁸ RIIO-2 - Final Determination, Finance Annex, **NOA-1 / Tab 12 / Page 30**.

while, at the same time, disregarding more relevant evidence on AAA corporate bonds was an error in principle. Furthermore, GEMA failed to consider the latest approach adopted by the CMA in its PR19 Provisional Findings in the water price control re-determination which expressly decided that evidence relating to AAA-rated corporate bonds is relevant evidence for setting the RFR for regulated utilities and that such evidence should be taken into account.¹²⁹ GEMA therefore disregarded the best evidence available to it and relied on less appropriate evidence to set the RFR. There is no reason either in principle, or related to the available evidence, that justified GEMA disregarding AAA-rated corporate bonds or its departure from the approach recently adopted by the CMA in PR19.

4.5 GEMA made the following key errors:

- (a) GEMA’s decision to set the RFR solely based on the spot yield of ILGs is wrong in principle as it failed to account for the significant convenience premium embedded in government bonds (**section 1A.i**);¹³⁰
- (b) GEMA’s approach to setting RFR failed to properly account for the gap between corporate and sovereign risk-free rates (**section 1A.ii**);¹³¹
- (c) GEMA has failed to take into account relevant evidence of AAA-rated corporate bond indices as proxies to the RFR based on incorrect critiques of these indices which, contrary to GEMA’s view, did not invalidate the use of this evidence (**section 1A.iii**);¹³² and
- (d) GEMA has incorrectly adopted the SONIA swap rates as a “cross-check”, which are inappropriate proxies for the RFR for RIIO-2 (**section 1A.iv**).¹³³

4.6 **Section 1A.v** explains why the approach taken by the CMA in PR19 supports SSEN Transmission’s submissions above. **Section 1A.vi** explains why GEMA’s decision is wrong on RFR on the statutory grounds in section 11E of EA 1989 and, in **section 1A.vii**, SSEN Transmission outlines its request for relief for RFR.

1A.i. GEMA failure to account for the significant convenience premium embedded in government bonds

4.7 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 account for the significant convenience premium embedded in government bonds. The convenience premium pushes yields on government bonds below the true RFR relevant to TOs such as SSEN Transmission, meaning that they do not represent an accurate proxy.

¹²⁹ RIIO-2 - Final Determination, Finance Annex, NOA-1 / Tab 12 / Page 28.

¹³⁰ Oxera, Cost of Equity Report, PH-1 / Tab 1 / Section 5B.

¹³¹ Oxera, Cost of Equity Report, PH-1 / Tab 1 / Sections 5C and 5D.

¹³² Oxera, Cost of Equity Report, PH-1 / Tab 1 / Section 5E.

¹³³ Oxera, Cost of Equity Report, PH-1 / Tab 1 / Section 5F.

- 4.8 As explained in section 5B of Oxera’s expert report],, investors in ILGs enjoy additional benefits relative to equivalent investments in other instruments such as swaps, as government bonds offer money-like convenience services which have special characteristics that investors value, relating to safety, liquidity and wide acceptability¹³⁴. These special properties increase the value to investors relative to a non-government security, which decreases yields.¹³⁵ This leads to a reduction in the returns expected by investors on those ILGs, compared with non-government securities the amount of which is known as the “convenience yield”. As explained by Oxera, there is a wide-ranging body of evidence for the existence of this premium and for the consequent need to make an adjustment to account for it in estimating the RFR in a CAPM exercise in the context of price control decisions for regulated utilities.¹³⁶
- 4.9 Oxera’s expert report refers to the significant body of academic literature which recognises that yields on ILGs are likely to be below the “true” RFR for the purposes of setting the WACC in regulatory price control decisions.¹³⁷ As Oxera explains, it is well-recognised in the literature relating to the application of the CAPM that “[t]reasury interest rates are not an appropriate benchmark for ‘riskless’ rates”¹³⁸, and that it is appropriate to use an RFR above the yield on government bonds for the CAPM because “a company with a beta of zero cannot raise funds at the Treasury rate”.¹³⁹
- 4.10 This principle is also supported by observed empirical evidence from both the UK and the US, which shows that the correlation between government bond returns and equity returns has been consistently and significantly negative. In other words, as government bond returns fall, equity returns tend to increase. Rather than being a zero-beta asset, government bonds behave like a negative-beta asset. This further demonstrates the existence of a convenience premium for government bonds and that government bonds have returns lower than the risk-free asset assumed by the CAPM.¹⁴⁰ Accordingly, there is a significant body of evidence which demonstrates that the correct RFR for the purposes of setting the WACC is higher than a rate derived solely from data on government bonds.
- 4.11 According to Oxera’s analysis, the size of the convenience premium embedded in US Treasuries in recent periods is approximately +60 bps over the longest maturity of 9.3 years.¹⁴¹ On this basis, Oxera’s expert opinion is that an upward

¹³⁴ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Section 5B**.

¹³⁵ Bond prices and yields are inversely related.

¹³⁶ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Section 5B**.

¹³⁷ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Section 5B**; and Oxera, ‘Draft Determinations Response - The Cost of Equity for RIIIO-2 (ENA report)’, **NOA-1 / Tab 7**.

¹³⁸ Krishnamurthy, A. and Vissing-Jorgensen, A. (2012), ‘The Aggregate Demand for Treasury Debt’, *Journal of Political Economy*, 120:2, April, **PH-1 / Tab 7 / Pages 233–67**.

¹³⁹ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Section 5B.1**.

¹⁴⁰ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Section 5B.2**.

¹⁴¹ Oxera, Cost of Equity Report, **PH-1 / Tab 1, Para 5.14**.

adjustment of 50-100 bps to the spot yield of 20-year ILGs is required to produce a more accurate estimate of RFR for the purposes of the CAPM.¹⁴²

- 4.12 GEMA's decision to set the RFR based solely on evidence relating to government bonds was therefore wrong as it failed properly to have regard to the clear and cogent evidence that there is a "convenience yield" which makes government bond yields lower than the RFR. No account was taken by GEMA of this convenience premium which is observed empirically and widely acknowledged in relevant academic literature resulting in an error of fact.

1A.ii. GEMA failed to properly account for the gap between corporate and sovereign risk-free rates

- 4.13 GEMA's approach to setting RFR fails to properly account for the gap observed in practice between risk-free borrowing (or shorting) and lending rates. An important assumption on which the CAPM is based is that investors can borrow and lend at the RFR. However, it is clearly not the case that SSEN Transmission or other regulated transmission operators, as non-sovereign agents, are able to borrow at the same interest rates as governments. Even the non-sovereign investors with the highest credit-worthiness face significantly higher borrowing rates than those faced by governments with high credit ratings – a fact widely recognised in corporate finance literature.¹⁴³ This further demonstrates that GEMA was wrong to use the spot yield of ILGs as a proxy to the RFR for RIIO-T2.
- 4.14 In practice, as a sensible cross-check, equity analysts use RFRs for the CAPM model that are higher than yields on government bonds.¹⁴⁴ As shown in Figure 5.3 of Oxera's Cost of Equity Report below, RPI-deflated RFRs adopted by equity analysts covering listed UK utilities from October 2019 to April 2020 are, overwhelmingly, significantly higher than the spot yields on 10-year ILGs, with the difference ranging from 69 to 214 bps, and an average of 135 bps.¹⁴⁵

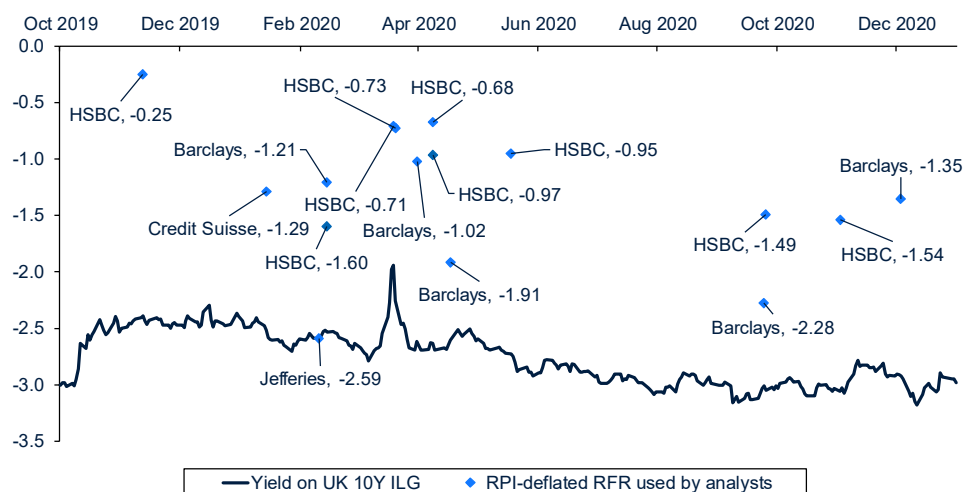
¹⁴² Oxera, Cost of Equity Report, **PH-1 / Tab 1, Para 5.14.**

¹⁴³ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Section 5C.1.**

¹⁴⁴ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Section 5C.**

¹⁴⁵ As Jeffries does not adjust from the ILG yield, this outlier data point is excluded.

Figure 1 Daily yields on 10-year ILGs and RPI-deflated risk-free rates adopted by sell-side analysts on the Oxera UK comparators



Notes / Sources – Oxera Cost of Equity Report, Figure 5.3

- 4.15 The above empirical evidence demonstrates that there is a clear gap between corporate and sovereign risk-free rates. GEMA's decision failed to give appropriate weight to this evidence. This was wrong as GEMA made an error of fact in relying on a theoretical construct rather than observed market conditions; failed to have proper regard to the available evidence; and failed to give appropriate weight to the evidence before it in erroneously preferring a theoretical construct over substantial real world data and prevailing academic opinion.

1A.iii. GEMA failed to take account of AAA-rated corporate bond indices as proxies to the RFR

- 4.16 Oxera's expert report explains that, in the absence of making an adjustment directly for the convenience premium inherent in government bonds, GEMA should in the alternative have taken account of the evidence relating to AAA-rated corporate bond indices.¹⁴⁶ 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. This evidence was consistently referred to by SSSEN Transmission in the consultation leading to GEMA's Final Determination but has been ignored by GEMA.¹⁴⁷

¹⁴⁶ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Section 5E**.

¹⁴⁷ See for example: SSSEN Transmission, Response to RIIO-T2 Draft Determination - Main Response Document, **NOA-1 / Tab 3 / Page 48-49**; Oxera, Cost of Equity for RIIO-2 (Q3 2020 update), 4 September 2020, **PH-1 / Tab 28 / Section 2.1**.

- 4.17 GEMA claims that using yields on AAA-rated bond indices would depart from previous regulatory practice. This is not a principled basis for maintaining a demonstrably flawed approach. The fact that an error may have been made in the past in this respect does not justify persisting in the same error now.
- 4.18 As shown in Figure 5.4 of Oxera's Cost of Equity Report, prior to 2019 regulatory allowances for the RFR were set well above the spot yields on government bonds.¹⁴⁸ Therefore previous regulatory decisions did not suffer from the same error that GEMA has made in the decision under appeal.
- 4.19 Thus, although previous regulatory decisions setting RFR allowances were not explicitly designed to compensate for the convenience premium and the gap between corporate and sovereign risk-free financing rates, their effect inadvertently mitigated the consequences of the error of using spot yields of ILGs as a proxy for RFR (a point that the CMA has expressly recently recognised as having merit¹⁴⁹). However, this error has now been fully exposed by GEMA's reliance on that proxy for RFR in RIIO-T2 without any mitigating effects. Given that relevant data on AAA bond yields is available to GEMA, it was an error not to take this into account in setting the RFR. The reasons given by GEMA do not justify this omission.

1A.iv. GEMA incorrectly adopted long-term SONIA swap rates as a cross-check, which are inappropriate proxies for the RFR for RIIO-T2

- 4.20 In its RIIO-2 Final Determination, GEMA stated that the 20-year SONIA swap rate is a potential measure of the nominal RFR.¹⁵⁰ The SONIA rate is an overnight interest rate benchmark produced by the Bank of England, based on actual market rates and reset on a daily basis in arrears. Therefore, it is a proxy for risk-free borrowing for the duration of one business day only. GEMA attempted to convert this into a long-term risk-free rate by using futures markets and looking at long-term 20-year SONIA swap rates, and relied on the resulting rate as a "cross-check" of its RFR estimation. However, as explained in Oxera's Report, yields on long-term SONIA swap rates are not an appropriate cross-check for the RFR in a price control context, and GEMA erred in relying on it, for the following reasons:
- (a) As recognised by the Bank of England, there are severe data quality issues with longer-term SONIA swap rates, especially beyond the five-year horizon due to the relatively limited liquidity in SONIA swap contracts of that maturity.¹⁵¹ Since the Bank of England had expressed concerns regarding the reliability of the data, it was inherently unreliable for use by GEMA whether as a "cross-check" or otherwise. In the Final Determination, GEMA relied on a 20-year SONIA swap rate of 0.34%,

¹⁴⁸ With an average gap of 149 bps over 10-year ILGs and 131 bps over 20-year index-link gilts.

¹⁴⁹ Competition and Markets Authority, 'Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations - Provisional Findings', NOA-1 / Tab 55 / Para 9.87.

¹⁵⁰ Oxera, Cost of Equity Report, PH-1 / Tab 1 / Section 5F.

¹⁵¹ RIIO-2 - Final Determination, Finance Annex, NOA-1 / Tab 12 / Table 8; and Oxera, Cost of Equity Report, PH-1 / Tab 1 / Section 5F.

which is 46 bps lower than the zero-coupon yield of the 20-year nominal gilt published by the Bank of England.¹⁵² As set out above, government yields already contain a convenience premium and are lower than the true RFR. Accordingly, evidence of SONIA swap rates that fall below government bond yields strongly suggests an incorrect downward bias in the data and the inherent unreliability of this “cross-check”. Therefore, GEMA’s reliance on a 20-year SONIA swap rate in the Final Determination was inappropriate because it underestimated the true RFR.¹⁵³

- (b) Oxera explains that GEMA did not take account of the wide range of factors specific to swap instruments that are likely to have been driving the negative SONIA swap rates observed by GEMA which rendered this data particularly inappropriate for use as a “cross-check” of GEMA’s RFR estimate. These factors include, for example:¹⁵⁴
 - (i) exogenous factors such as increased swapping of fixed-rate into floating-rate debt and increased demand by insurance and pension funds to match extending durations of their liabilities as longer-term government yields declined;
 - (ii) demand-driven pressure (e.g. from underfunded pension plans) on swap spreads, especially for swaps on long-maturity bonds; and
 - (iii) capital market inefficiencies / frictions which may limit the size of dealers’ fixed income portfolios and prevent the elimination of negative swap spreads through arbitrage.

These swap-specific factors are a further reason that SONIA swap rates are an unsuitable proxy for RFR for use in the CAPM framework. Moreover, the distorting effect of these swap-specific factors is more pronounced for long-maturity swaps, such that GEMA’s reliance on the 20-year swap data was particularly inappropriate.¹⁵⁵

- 4.21 Accordingly, GEMA’s purported cross-check of its RFR estimate relied on SONIA data which had been called into question by the Bank of England. Furthermore, the swaps data GEMA relied on was inherently affected by the distorting effect of the swap-specific factors referred to in Oxera’s expert report. GEMA’s decision to rely on such data, whether as a “cross-check” or otherwise, was therefore a further error of fact.

1A.v. GEMA disregarded clear recent position from the CMA on the correct approach to the RFR

- 4.22 The CMA has recently considered the RFR in price control decisions for regulated utilities in its PR19 Provisional Findings (published prior to GEMA’s

¹⁵² Oxera, Cost of Equity Report, PH-1 / Tab 1 / Section 5F.

¹⁵³ Oxera, Cost of Equity Report, PH-1 / Tab 1 / Section 5F.

¹⁵⁴ Oxera, Cost of Equity Report, PH-1 / Tab 1 / Section 5F.3.

¹⁵⁵ Oxera, Cost of Equity Report, PH-1 / Tab 1 / Section 5F.

Final Determination). The CMA's position supports SSEN Transmission's position in this appeal. GEMA was aware of the CMA's PR19 Provisional Findings at the time it took the decision under appeal but chose to disregard the position adopted by the CMA. In particular, the CMA expressly rejected the approach, followed by GEMA, of relying solely on ILG evidence. The CMA's PR19 Provisional Findings state:

It is our assessment that **ILGs closely but imperfectly** match the key requirements of the RFR within the CAPM model. They are very low risk but their yields demonstrate that **the government can borrow at rates substantially lower than even higher-rated non-government market participants**. As such, the yield on ILGs is likely to sit below the 'true' estimate of the theoretical RFR, if the RFR is expressed as the yield on a 'zero beta' asset. Given this, **we use the 20-year maturity ILG as a lower bound** for our estimate of the RFR, but we expect that the returns on low beta assets are likely to be higher than implied by a CAPM model which uses this rate as the RFR.

[...]

It is our assessment that **AAA-rated non-gilt yields closely but imperfectly** match the key requirements of the RFR within the CAPM model. These bonds trade at yields that are closer to the rate that would be available to all (relevant) market participants but do have some inflation and default risk over time. As such, the yield on AAA-rated non-government bonds is likely to sit above the 'true' estimate of the theoretical RFR. Given this, **we use the yield on the average of the IHS iBoxx £ Non-Gilt AAA 10+ and 10-15 indices as the upper bound** for our estimate of the RFR.¹⁵⁶

- 4.23 GEMA's failure to follow the CMA's methodology in the PR19 Provisional Findings further underlines that GEMA mistakenly based its decision on RFR solely on evidence relating to ILGs. The CMA expressly recognised that the approach which GEMA followed would underestimate the correct value of the RFR and that it is an error to fail to recognise the evidential value of AAA-rated non-gilt yields in its analysis.
- 4.24 In the RIIO-2 Final Determination, GEMA seeks to justify its decision by selectively quoting from the above passage of the CMA's Provisional Determination by only including the phrase: "*ILGs closely but imperfectly match the key requirements of the RFR*", and seeks to draw the wholly incorrect conclusion from this that the CMA considers that the "*using ILGs is not necessarily wrong*".¹⁵⁷ In the light of the CMA's findings as a whole (quoted above) this conclusion is unsustainable.
- 4.25 GEMA's approach disregarded the CMA's finding that "*the yield on ILGs is likely to sit below the 'true' estimate of the theoretical RFR*". On this basis the CMA considered that evidence on ILGs should be taken into account only as a lower bound, with AAA-rated non-gilt yields as the upper bound. As explained by the CMA, any decision to rely solely on ILG evidence would underestimate the true value of the RFR.

¹⁵⁶ Competition and Markets Authority, 'Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations - Provisional Findings', NOA-1 / Tab 55 / Paras 9.135-9.137.

¹⁵⁷ RIIO-2 - Final Determination, Finance Annex, NOA-1 / Tab 12 / Para 3.10.

1A.vi. Statutory grounds of appeal for Ground 1A

4.26 For the reasons stated above, GEMA’s decision on RFR, and accordingly its decision to proceed with the licence modification under section 11A of EA 1989 on that basis, is wrong on the following statutory grounds:

- (a) GEMA’s decision was based on errors of fact and/or law (in particular the public law duty to reach reasonable decisions). GEMA made clear errors of approach and fact in determining the appropriate level for RFR by relying entirely on the spot yield of ILGs as a proxy to the RFR for RIIO-2, and disregarding other relevant evidence, including data relating to AAA-rated corporate bonds. GEMA has failed to take account of this relevant evidence, including from SSEN Transmission and supported by the position taken by the CMA in the PR19 Provisional Findings which was published prior to its Final Determination. **[sections 11E(4)(c) and (e) EA 1989]**
- (b) GEMA’s errors result in a CoE which is too low to attract the critical investment needed during the price control period.¹⁵⁸ Therefore, GEMA has failed properly to have regard to and/or to give the appropriate weight to: (i) the interests of existing and future consumers, in particular their interests in the delivery of a secure electricity supply and in reducing electricity-supply emissions of targeted greenhouse gases (sections 3A(1)-(1A) EA 1989); (ii) the need to secure that all licence holders are able to finance their activities (section 3(2)(b) EA 1989); and/or (iii) the Social and Environmental Guidance issued by the Secretary of State and the related Net Zero Duty (section 3B(2) EA 1989). **[section 11E(4)(a) and (b) EA 1989]**
- (c) By setting a flawed RFR, GEMA’s decision fails to achieve the effect stated by GEMA to set an “*appropriate balance of risk and return*”,¹⁵⁹ to set a WACC “*consistent with current evidence and market conditions*”¹⁶⁰ and to fairly compensate investors for the risks they face by setting an appropriate TMR.¹⁶¹ **[section 11E(4)(d) EA 1989]**

1A.vii. Relief sought for Ground 1A

4.27 As shown in Oxera’s analysis,¹⁶² the appropriate RFR for SSEN Transmission that GEMA should have adopted, in line with the CMA’s recent approach in PR19, is derived by adopting both:

- (a) a bottom-up approach, namely estimating the RFR by applying an upward adjustment to the spot yields on ILGs, in order to account for the

¹⁵⁸ Alkirwi-1 / Page 9 et seq.

¹⁵⁹ RIIO-2 - Final Determination, Core Document, NOA-1 / Tab 9 / Page 52; see also RIIO-2 - Draft Determination, Core Document (9 July 2020), NOA-1 / Tab 1 / Para 6.1.

¹⁶⁰ RIIO-2 - Final Determination, Core Document, NOA-1 / Tab 9 / Para 6.3; see also RIIO-2, Draft Determinations – Finance Annex (9 July 2020), NOA-1 / Tab 1 / Para 1.10.

¹⁶¹ RIIO-2 - Final Determination, Core Document, NOA-1 / Tab 9 / Page 53; see also RIIO-2, Draft Determinations – Core Document (9 July 2020), NOA-1 / Tab 1 / Para 2.1.

¹⁶² Oxera, Cost of Equity Report, PH-1 / Tab 1, Section 5G.

convenience premium. Specifically, Oxera applies the lower bound of its estimates of the convenience premium submitted in its report to the CMA as part of the PR19 process (i.e. +50bps) the spot yield on the 20-year ILG as at 31 December 2020 (being -2.58% RPI-real, or -1.63% CPIH-real, deflated using breakeven inflation); and then applies a forward rate adjustment of +14 bps (estimated using GEMA's methodology set out in the Final Determination WACC allowance model and assuming a cut-off date of 31 December 2020). This leads to an RFR estimate of **-0.99%**; and/or

- (b) a top-down approach that starts with a rate unaffected by the convenience yield, namely the AAA-rated bond yields, and then deflates it by factors that specifically affect AAA bond yields such as liquidity premia and default risk. Specifically, Oxera deflates the nominal yields on the iBoxx £ Corp AAA 15+ index using the breakeven RPI inflation rates, and applies a 0.98% RPI-CPIH wedge (based on the November forecast by the Office for Budget Responsibility (**OBR**)) to derive the CPIH real values. Then, Oxera takes the 180-day trailing average of the CPIH-deflated yield on the AAA bond index, and makes a downward adjustment of 13 bps for expected loss and 12 bps for liquidity premium. This leads to an RFR estimate of **-0.96%**.

4.28 In those circumstances, SSEN Transmission respectively requests that the CMA should correct GEMA's decision and set the RFR between **-0.99%** and **-0.96%**. As GEMA arrives at an estimate of -1.58% using ILGs, to correct for GEMA's errors, the CMA should either: (i) add 0.6% to GEMA's RFR when indexing the CoE; or (ii) use the iBoxx £ Corp AAA 15+ index for CoE indexation, after adjusting for premium on expected loss and liquidity.

4.29 By correcting this error, the CMA would prevent a financial impact on SSEN Transmission of [CONFIDENTIAL]. In other words, if those errors remain uncorrected, that is the sum by which SSEN Transmission will be underfunded as a result of GEMA's Decision.

B. Ground 1B: TMR

4.30 TMR is a measure of returns on the whole market for UK equities and represents the total return that investors require for investing in equities. GEMA chose a range of **6.25-6.75%** for TMR (CPIH-real) with a mid-point of 6.5%,¹⁶³ which is too low and not supported by the relevant evidence – GEMA should have adopted a range of **7.0-7.5%** for TMR (CPIH-real).¹⁶⁴

4.31 GEMA's decision to set the TMR at 6.25%-6.75% was wrong for a number of reasons, individually and collectively:

- (a) GEMA incorrectly relied on data relating to the “back cast” CPI as a measure of inflation, rather than the RPI measure, because RPI is a better reflection of historical investor expectations that is required for

¹⁶³ RIIO-2 - Final Determination, Finance Annex, **NOA-1 / Tab 12 / Para 3.86**.

¹⁶⁴ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Section 6D**.

estimating real TMR. Further, GEMA used inherently unreliable “back cast” CPI data and applied a defective historical methodology (**section 1B.i**);¹⁶⁵ and

- (b) GEMA has incorrectly relied on the geometric average plus a subjective uplift rather than the directly observed arithmetic average when calculating historical equity returns which inherently produces a downwardly biased estimate of TMR (**section 1B.ii**).¹⁶⁶

4.32 **Section 1B.iii** explains why GEMA’s decision is wrong for TMR on the statutory grounds in section 11E of the EA 1989 and, in **section 1B.iv**, SSEN Transmission outlines its request for relief for TMR.

1B.i. GEMA incorrectly relied on the back cast CPI as a measure of inflation rather than RPI

4.33 In order to set the TMR, GEMA conducted an analysis of historical realised returns. This methodology required GEMA to control for inflation over time in order to identify expected real returns. GEMA incorrectly chose to rely upon so called CPI “back cast” data, which is a retrospectively-created and synthetic estimate of historical CPI rates that does not correspond to the contemporaneous investor expectation of inflation.¹⁶⁷ SSEN Transmission and Oxera in a report submitted on behalf of the ENA,¹⁶⁸ explained to GEMA why this approach was flawed given the unreliability and uncertainty associated with the CPI historical inflation dataset.¹⁶⁹ The flaws with the dataset included the following:

- (a) By using (back casted) CPI data, GEMA relied on an incorrect measure of inflation that did not correspond to the contemporaneous investor expectation of inflation. Whilst market returns are expressed in nominal terms, investors require compensation in real terms, that is, after considering their loss in purchasing power after accounting for inflation. Since historical realised inflation data (i.e. RPI) was collected and was available to GEMA for the purpose of calculating real historical returns GEMA should have taken this data into account rather than the synthetically constructed “back casted” and methodologically inconsistent CPI inflation series produced by the Office for National Statistics (*ONS*). Data on the RPI-based measure for calculating historic inflation represents the same measure relied on by investors in their original price formation, and is therefore the best evidence available.¹⁷⁰ GEMA’s decision to disregard the best evidence available i.e. RPI and instead rely on a recently created “back cast” CPI inflation series, which

¹⁶⁵ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Section 6A**.

¹⁶⁶ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Section 6B**.

¹⁶⁷ RIIO-2 - Final Determination, Finance Annex, **NOA-1 / Tab 12 / Pages 48-49**.

¹⁶⁸ Oxera, The cost of equity for RIIO-2 (prepared for the ENA), September 2020, **PH-1 / Tab 28 / Page 17**.

¹⁶⁹ SSEN Transmission, Response to RIIO-T2 Draft Determination - Main Response Document, **NOA-1 / Tab 3 / Page 46-47** – see here: <https://www.ssen-transmission.co.uk/media/4704/ssen-transmission-response-to-riio2-draft-determination-main-response-document.pdf>

¹⁷⁰ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Section 6A**.

was not available to investors at the time, and hence was not used by them in their investment decisions or in price formation, was wrong.

- (b) Moreover, the ONS's historic CPI data series (on which GEMA relies) is unreliable and suffers from data quality problems relating to the "back cast" exercise that the RPI data do not. As recently recognised by the CMA in the PR19 Provisional Findings, the historical series of CPI is an experimental construct developed for research purposes. It is not suitable for use in regulatory decision-making. The problems with the CPI data have been recognised by the ONS which has previously had to correct the data for identified errors. However, those corrections were not fully taken into account in the data on which GEMA relied. GEMA's decision therefore was based on a back cast data series which contained errors. Furthermore, in light of the problems identified with the "back cast" data relied on by GEMA, the ONS is currently in the process of entirely replacing the "back cast" CPI data series with a newly modelled series, and there continues to be active debate within the UK Statistics Authority on how to correct the back cast CPI series. In contrast, the historical RPI series, which GEMA ignored, is not subject to similar problems or unreliability and is therefore a more reliable basis for the purpose of calculating real returns to inform the estimate of future returns. The unreliability of the CPI back cast data was well known and pointed out to GEMA. However, GEMA incorrectly proceeded to rely on this data and to place no weight on the more reliable and stable RPI inflation data.
- (c) In addition, as explained in Oxera's expert report, CPI estimates are likely to materially overestimate historical inflation and will therefore lead to underestimates of real return over all of the periods taken into account by GEMA: 1900-50, 1950-88 and 1988-96.¹⁷¹ The historical RPI series is not subject to such estimation biases.
- (d) Therefore, GEMA should have used published RPI data, rather than CPI back cast data, which would have led to a more accurate value for the real expected equity return. This is reinforced by the downward revision by the OBR in December 2019 of its estimates of both the RPI-CPI inflation wedge and the formula effect.¹⁷²

4.34 As a result, Oxera's expert report explains that the *official* RPI dataset is the appropriate dataset for GEMA to use to set the TMR.¹⁷³ It was an error for GEMA to ignore this superior dataset and instead use an unreliable and inconsistent CPI inflation measure.

4.35 The fact that GEMA's approach was wrong is supported by the position taken by the CMA in the PR19 Provisional Findings which recognised the flaws in

¹⁷¹ Oxera, The cost of equity for RIIO-2 (prepared for the ENA), September 2020, **PH-1 / Tab 28 / Page 17**.

¹⁷² Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Section 6A**.

¹⁷³ SSN Transmission, Response to RIIO-T2 Draft Determination - Main Response Document, **NOA-1 / Tab 3 / Page 47** – see here: <https://www.ssn-transmission.co.uk/media/4704/ssn-transmission-response-to-riio2-draft-determination-main-response-document.pdf>

the CPI dataset and places weight on the RPI historical inflation series in its TMR analysis.¹⁷⁴

- 4.36 The CMA noted as follows in relation to the flaws of the CPI series and why it is incorrect to rely only on “back cast” CPI data:

“we observe that **the CPI data series has some issues** in terms of its coverage of goods and services, notably its exclusion of housing costs, and, more importantly, is comprised of a mix of actual and modelled data. With respect to the latter, we note that the researchers who carried out the backcast highlighted that ‘[t]he method provide[d] only approximate results and there is no way to determine how accurate [it]... is as sufficient data to calculate the CPI do not exist prior to 1987.’

As a result of these reservations about the CPI data available to us over the historic period, and taking into account the fact that actual RPI inflation data has been collected and an inflation series produced on this basis over the whole post-1950 period, we believe it is appropriate to take into account both CPI- and RPI-deflated estimates of the TMR.”¹⁷⁵

- 4.37 Given that the CMA’s views were published prior to the RIIO-2 Final Determination, GEMA’s decision to ignore the CMA’s position was a further error.
- 4.38 In the RIIO-2 Final Determination Finance Annex, GEMA stated that its approach is “*not necessarily wrong*” because the CMA describes its TMR range of 5.25-6.25% (RPI-real) – c. 6.25-7.25% (CPI-real)¹⁷⁶ – as “*comfortably at the top end of investors’ current expectations*”.¹⁷⁷ However, GEMA unreasonably disregarded the most cogent and reliable evidence available to it. Nothing in this statement explains why GEMA used unreliable back cast CPI data which was plagued with data problems when reliable RPI data was available to it. In addition, it is clear that GEMA’s approach was inconsistent with the CMA’s approach. The CMA chose a range for TMR that it considered appropriate for use in regulatory decision-making, having carefully assessed all the evidence relating to CPI and RPI. In view of its own statutory duties in PR19, the CMA did not, and could not, adopt a value that it considered to be overly generous.
- 4.39 Instead of having due regard to the CMA’s approach in the PR19 Provisional Findings, GEMA instead seeks to rely on the earlier decision of the CMA in the NATS (En Route) Plc determination (*NATS*) which in GEMA’s view “*better reflects the available evidence on TMR*”.¹⁷⁸ GEMA’s purported reliance on the NATS decision is a further error. The CMA’s procedure in the NATS case was unexpectedly curtailed due to the COVID-19 pandemic. As a result of the exceptional circumstances arising from the COVID-19 pandemic, the CMA was

¹⁷⁴ Competition and Markets Authority, ‘Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations - Provisional Findings’, NOA-1 / Tab 55 / Para 9.166.

¹⁷⁵ Competition and Markets Authority, ‘Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations - Provisional Findings’, NOA-1 / Tab 55 / Paras 9.165-9.166.

¹⁷⁶ Estimated assuming a 1% CPI-RPI wedge.

¹⁷⁷ RIIO-2 - Final Determination, Finance Annex, NOA-1 / Tab 12 / Paras 3.95-3.98.

¹⁷⁸ RIIO-2 - Final Determination, Finance Annex, NOA-1 / Tab 12 / Para 3.97.

not in a position to complete its full consideration of all the evidence relating to TMR and, in particular, did not have the time to fully take into account responses to the PR19 Provisional Findings on WACC in that case.¹⁷⁹ Subsequently, in PR19, the CMA has considered key issues and available evidence relevant to WACC in much greater detail. By ignoring the CMA's PR19 Provisional Findings, and by placing undue reliance on one single decision which was taken in highly exceptional circumstances, GEMA has reached unsustainable conclusions. GEMA's failure to take RPI data into account notwithstanding the clear recent guidance from the CMA that this evidence was relevant was wrong.

1B.ii. GEMA incorrectly relied upon the geometric average plus a subjective uplift rather than the directly observed arithmetic average

4.40 An arithmetic average is the simple average of annual returns for the period under consideration. A geometric average provides a compounded annual return over the same period.

4.41 A simplified example can illustrate the differences. Consider the following expected cash flows:

Year	Price	Return
0	50	-
1	100	100%
2	60	-40%

4.42 Applying the formula for an arithmetic average is straightforward (i.e. it is a simple unweighted average):

$$\frac{100\% + (-40\%)}{2} = 30\%$$

4.43 Applying the formula for a geometric mean is less so (i.e. it is calculated by adding 1 to each return, taking the product of the result, raising it to the power of the inverse of the number of returns being averaged, and finally subtracting 1 from the result):

$$\sqrt{\frac{60}{50}} - 1 = 9.54\%$$

4.44 Oxera's expert report explains that GEMA incorrectly relied upon the geometric average plus a subjective uplift rather than the directly observed arithmetic average when calculating the TMR.¹⁸⁰ By using the geometric average with a subjective uplift to estimate the TMR, GEMA is proposing to set a return lower

¹⁷⁹ Competition and Markets Authority (23 July 2020), 'NATS (En Route) Plc / CAA Regulatory Appeal: Final report', **NOA-1 / Tab 59**.

¹⁸⁰ RIIO-2 - Final Determination, Finance Annex, **NOA-1 / Tab 12 / Page 46**.

than the actual arithmetic average observed in empirical data and thereby embedding an inappropriate downward bias to the value of the expected return.

4.45 Oxera is only aware of one suggestion in the relevant literature (from Wright & Mason) that geometric averages may be more appropriate in price controls given a degree of predictability and/or negative serial correlation¹⁸¹ of returns. However, this tentative suggestion, “*depending on the extent to which regulators wish to take account of serial correlation of returns*”, is not capable of providing a cogent and solid basis for GEMA’s decision to disregard the standard approach of arithmetic averaging. Moreover, this suggestion could only be relevant, as Oxera explains,¹⁸² on the basis of strong assumptions that “*both the expected return and the variance of returns are constant over time and that returns are not serially correlated*”.¹⁸³ However, as Oxera explains, there is no conclusive evidence either that returns are predictable or of a negative serial correlation of returns. Therefore, there is no empirical evidence that would justify the use in price control setting of the geometric averaging approach or that the strong assumptions on which Wright & Mason’s tentative suggestion is based hold in practice. Indeed, Wright & Mason acknowledge these deficiencies: even if it is accepted that there is qualitative evidence of return predictability, “*...it is much harder to point to an agreed quantitative methodology that could be employed to capture this feature in a methodology that is both implementable and defensible*”.

4.46 GEMA therefore made an error in using the geometric average of historical equity returns plus a subjective uplift which produces an erroneously lower estimate rather than the standard directly observed arithmetic average.¹⁸⁴

1B.iii. Statutory grounds of appeal for Ground 1B

4.47 GEMA’s decision on TMR, and accordingly its decision to proceed with the licence modification under section 11A of EA 1989 on this basis, is therefore wrong on the following statutory grounds:

- (a) The decision was based on errors of fact and/or law (in particular the public law duty to reach reasonable decisions). GEMA made methodological errors in determining the specific parameters of CoE in relation to TMR by relying on CPI back cast data and using the geometric average. GEMA has failed to take account of relevant evidence in setting the parameters which was provided by SSEN Transmission during the price control and the position taken by the CMA in the PR19 Provisional Findings which was published prior to its Final Determination. [section 11E(4)(c) and (e) EA 1989]

¹⁸¹ Serial correlation is the statistical term used to describe the relationship of the same variable across specific periods. If a variable is serially correlated, future observations are affected by past observations and therefore, to some degree, predictable

¹⁸² Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Section 6B**.

¹⁸³ Appendix of Schaefer, S. (2020), ‘Using Average Historical Rates of Return to set Discount Rates’, contained within Oxera (2020), ‘Deriving unbiased discount rates from historical returns’, 14 February, **PH-1 / Tab 40**.

¹⁸⁴ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Section 6B**.

- (b) The errors by GEMA have resulted in a CoE which is too low to attract the critical investment needed during the price control.¹⁸⁵ Therefore, GEMA has failed properly to have regard to and/or to give the appropriate weight to: (i) the interests of existing and future consumers, in particular their interests in the delivery of a secure electricity supply and in reducing electricity-supply emissions of targeted greenhouse gases (sections 3A(1)-(1A) EA 1989); (ii) the need to secure that all licence holders are able to finance their activities (section 3(2)(b) EA 1989); and/or (iii) the Social and Environmental Guidance issued by the Secretary of State and the related Net Zero Duty (section 3B(2) EA 1989). **[section 11E(4)(a) and (b) EA 1989]**
- (c) By setting a flawed TMR, GEMA's decision fails to achieve the effect stated by GEMA to set an "*appropriate balance of risk and return*",¹⁸⁶ to set a WACC "*consistent with current evidence and market conditions*"¹⁸⁷ and to fairly compensate investors for the risks they face by setting an appropriate TMR.¹⁸⁸ **[section 11E(4)(d) EA 1989]**

4.48 Furthermore, as explained in further detail below in Ground 2 (at **sections 1E.vi, 1E.vii and 1E.viii**), GEMA's approach to conducting its cross-check for TMR is flawed because it inappropriately uses investment manager forecasts as a cross-check for TMR, inappropriately uses TMR in USD as a cross-check and fails to take account of Oxera's cross-check evidence using the dividend discount model (that points to a higher TMR estimate than GEMA's). Ground 2 therefore supports the conclusions that GEMA's decision was wrong for the reasons set out above.

1B.iv. Relief sought for TMR

- 4.49 Correcting for GEMA's errors in TMR, Oxera's expert report concludes that GEMA should have set the TMR in the range of **7.0-7.5%** (CPIH-real).¹⁸⁹ The estimation is based on the arithmetic average of RPI-real returns, converted into CPIH using the implied OBR inflation wedge. The forward-looking evidence is used as a primary cross-check, supporting the adoption of 7.0-7.5% as a range.
- 4.50 Accordingly, SSEN Transmission respectfully requests that the CMA correct GEMA's flawed estimate of TMR by setting TMR between **7.0%** and **7.5%**.
- 4.51 By correcting this error, the CMA would prevent a financial impact on SSEN Transmission of [CONFIDENTIAL]. In other words, if those errors remain

¹⁸⁵ Alkirwi-1 / Page 9 et seq.

¹⁸⁶ RIIO-2 - Final Determination, Core Document, **NOA-1 / Tab 9 / Page 52**; see also RIIO-2 - Draft Determination, Core Document (9 July 2020), **NOA-1 / Tab 1 / Para 6.1**.

¹⁸⁷ RIIO-2 - Final Determination, Core Document, **NOA-1 / Tab 9 / Para 6.3**; see also RIIO-2 - Draft Determination, Finance Annex (9 July 2020), **NOA-1 / Tab 2 / Para 1.10**.

¹⁸⁸ RIIO-2 - Final Determination, Core Document, **NOA-1 / Tab 9 / Page 53**; see also RIIO-2 - Draft Determination, Core Document (9 July 2020), **NOA-1 / Tab 1 / Para 2.1**.

¹⁸⁹ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Section 6D**.

uncorrected, that is the sum by which SSEN Transmission will be underfunded as a result of GEMA's Decision.

C. Ground 1C: Beta

4.52 Beta is a measurement of the systematic risk of an investment compared to the market and, therefore, measures the amount of the equity risk premium needed to account for the higher or lower relative risk of that investment.¹⁹⁰ A higher premium is required for investors to bear additional systematic risk. The beta that would be faced by investors in relation to a company's assets is often called the asset beta – this is a function of the equity beta¹⁹¹ (i.e. the exposure of *shareholders* to systematic risk), and debt beta¹⁹² (i.e. the exposure of *bond holders* to systematic risk). GEMA's decision has reduced asset beta from mid-point of **0.365** at the Draft Determination stage to **0.349** at the Final Determination stage.¹⁹³ This is far lower than the range that can be supported by the evidence, which Oxera explains in its expert report is in the range of **0.37-0.40**.¹⁹⁴ The Oxera range is based on a lower debt beta (0.05) than the value assumed by GEMA (0.075), and if stated using a debt beta of 0.075, the Oxera asset beta range would have been even higher.

4.53 GEMA's decision on the asset beta was wrong for a number of reasons, individually and collectively:

- (a) GEMA wrongly relied on water companies to estimate the beta of energy networks, despite the fact that water companies have fundamentally different asset risk profiles and consistently show lower asset betas in empirical evidence (**section 1C.i**);¹⁹⁵
- (b) GEMA used an incorrect sample of European energy networks as comparators in estimating the asset beta which included clear outliers with low equity liquidity that should have been excluded in order to produce a robust and meaningful comparison (**section 1C.ii**);¹⁹⁶

¹⁹⁰ The beta which would be faced by investors in a company's assets is often called the asset beta. However, investors normally invest in securities (which are able to call on returns earned on those assets), rather than directly investing in the assets themselves. Where this is the case, the asset beta can then be split into equity beta, the exposure of shareholders to systematic risk, and debt beta, the exposure of bondholders to systematic risk. In calculating asset beta, debt and equity betas are weighted by the proportion of debt and equity within the capital structure. For a fully equity-financed firm, the asset beta is the same as the equity beta. However, for a firm with significant amounts of debt financing, the asset beta and the equity beta may be very different.

¹⁹¹ Equity beta is typically measured by comparing a company's share price movements to movements of the whole market. See Competition and Markets Authority (23 July 2020), 'NATS (En Route) Plc / CAA Regulatory Appeal: Final report', **NOA-1 / Tab 59 / Para 13.21**.

¹⁹² Debt beta is generally more difficult to measure than equity beta, as bonds are less well traded than equities. However, in principle, the value of debt should also be affected by systematic risk which will affect the probability of default or could result in a change in the credit quality of the debt. See Competition and Markets Authority (23 July 2020), 'NATS (En Route) Plc / CAA Regulatory Appeal: Final report', **NOA-1 / Tab 59 / Para 13.22**.

¹⁹³ RIIO-2 - Final Determination, Finance Annex, **NOA-1 / Tab 12 / Table 9**.

¹⁹⁴ Oxera, 'Draft Determinations Response - The Cost of Equity for RIIO-2 (ENA report)', September 2020, **NOA-1 / Tab 7 / Page 48**. Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Section 7E**.

¹⁹⁵ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Section 7A.1**.

¹⁹⁶ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Section 7A.2**.

- (c) GEMA incorrectly compared the French energy sector with its fundamentally different regulatory and economic conditions to the UK energy sector which means that the beta range provided to the French energy regulator cannot be used in the UK context (**section 1C.iii**);¹⁹⁷
- (d) GEMA incorrectly relied on long-term estimation windows of 10+ years as opposed to two years and five years, as it has failed to recognise a significant break in the time series for UK utilities in September / October 2008 that indicates structural shifts, as well as other changes in the beta risk of a company over a longer period of time due to M&A activities and shift in market demand and perceptions (**section 1C.iv**);¹⁹⁸ and
- (e) GEMA overestimated the higher end of the debt beta range due the high degree of uncertainty over the assumptions used in the spread decomposition approach and material mistakes contained in the underlying analysis (**section 1C.v**).¹⁹⁹

4.54 **Section 1C.vi** explains why GEMA’s decision on asset and equity beta is wrong on the statutory grounds in section 11E of the EA 1989 and, in **section 1B.vii**, SSEN Transmission outlines its request for relief for beta.

1C.i. GEMA has wrongly relied on water companies to estimate the beta of electricity networks

4.55 GEMA relied on a comparator sample that includes three water companies (Severn Trent, United Utilities and Pennon) in addition to one energy network companies (National Grid) to justify its asset beta estimate. However, GEMA’s inclusion of the water companies and its decision to attribute equal weights to them as to the one energy firm comparator is not appropriate because energy networks face greater fundamental risks compared with water companies due to the rapid technological change and increased focus on Net Zero in the energy sector. The differences in the risk profiles between water and energy is noted by investment analysts and the CMA alike. The CMA states in its January point estimate working paper issued in the PR19 redeterminations that: “[t]he risks associated with water are different to energy, and there is no direct comparator to the cost of ‘blackouts’”.²⁰⁰ Investec, in its recent broker report, states that “we maintain our belief that energy should attract a higher return than water given the risks and certainties”.²⁰¹

4.56 The below Figure 2 presents a comparison between the asset betas for energy networks and UK water companies.

¹⁹⁷ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Section 7B**.

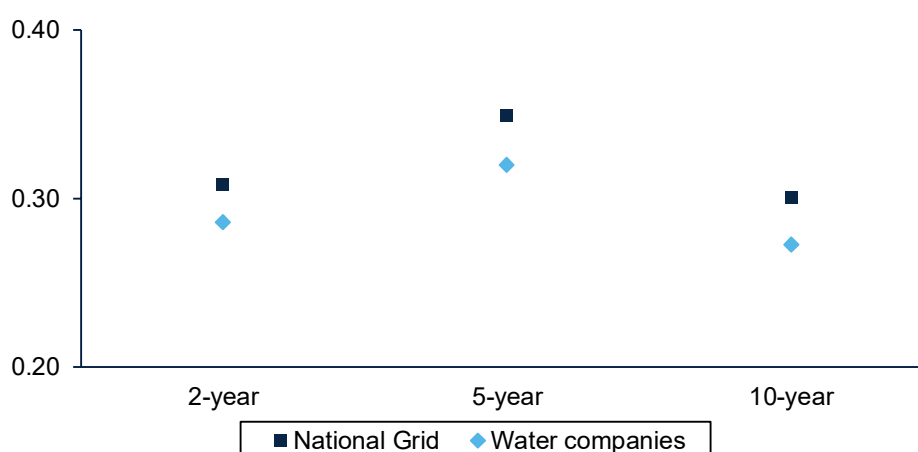
¹⁹⁸ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Section 7C**.

¹⁹⁹ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Section 7D**.

²⁰⁰ CMA (2021), PR19 January Working Papers – Point Estimate, **PH-1 / Tab 49 / Para 47**.

²⁰¹ Investec (2021), ‘SSE Net Zero a considerable opportunity’, 26 January, **MA-1 / Tab 27 / Page 7**.

Figure 2 Comparison of asset betas for energy networks and UK water companies



Note: For consistency with how GEMA presents asset beta estimates in Table 10 of the Final Determination – Finance Annex, the figure assumes a debt beta of zero.

- 4.57 As shown in empirically observable evidence (see Figure 2 above) and based on GEMA’s own analysis,²⁰² the average asset beta for energy networks (i.e. National Grid) has been consistently higher than the average asset beta of the two pure-play²⁰³ water comparators (United Utilities and Severn Trent) across all estimation windows.²⁰⁴ The difference is economically significant. As a result, placing equal weight on all of the companies in the sample of comparators proposed by GEMA would result in a significant underestimation of the true asset beta faced by energy networks.²⁰⁵
- 4.58 Mr Alkirwi’s witness statement provides further support for the conclusion that energy networks display higher levels of risk than water, referring both to quantitative measures as well as qualitative measures of risk that exist in the energy sector which make it riskier than water including (*inter alia*) the rapid technological change ongoing in energy, the high risk of failure of assets, the significant number of uncertainty mechanisms in energy, and the increased focused on decarbonisation and the political and industry pressure to deliver a transition to Net Zero.²⁰⁶

1C.ii. GEMA used an incorrect sample of European energy networks as comparators

- 4.59 While SSEN Transmission agrees that it is appropriate to include European comparators to generate an adequately-sized representative sample for cross-checking the beta, GEMA made further errors by failing to identify a representative sample of European listed energy networks which appropriately

²⁰² RIIO-2 - Final Determination, Finance Annex, December 2020, NOA-1 / Tab 11 / Table 10.

²⁰³ Meaning companies that operate exclusively in the sector of interest.

²⁰⁴ Oxera, Cost of Equity Report, PH-1 / Tab 1 / Section 7A.1.

²⁰⁵ Oxera, Cost of Equity Report, PH-1 / Tab 1 / Section 7A.1.

²⁰⁶ Alkirwi-1 / Page 19 et seq.

reflects the asset risk in the UK energy sector and which can therefore properly be used as a robust and reliable comparator for estimating asset beta in the UK.

- 4.60 In addition to identifying listed European comparators that are likely to face similar business risk profiles as UK energy networks, it is important to ensure that there is sufficient liquidity in their equity so that the beta estimate derived from their equity returns is statistically reliable. An illiquid stock would introduce downward bias in its beta estimates and make them statistically less reliable.
- 4.61 GEMA's sample of European comparators includes Enagas, Red Eléctrica, Snam, Terna, REN and Elia. However, as shown in Oxera's analysis, GEMA should have excluded REN and Elia who are clear outliers based on their low share turnovers (at 0.06-0.08%) and high average bid-ask spread (0.21-0.22%) of closing price.²⁰⁷ In comparison, the UK listed energy and water companies (National Grid, Severn Trent and United Utilities) have a much higher share turnover (0.18-0.32%) and lower average bid-ask spread (0.03-0.07%).²⁰⁸ As these firms appear largely illiquid according to these key liquidity metrics, their inclusion in GEMA's sample of European comparators has the effect of producing an erroneously low beta estimate.
- 4.62 According to Oxera's analysis using a sample of EU energy comparators after excluding outlier data points from illiquid firms, the market data points to a five-year beta of 0.33-0.39 which is significantly higher than the range of 0.27-32 for UK water firms.²⁰⁹

1C.iii. GEMA incorrectly used research in the French energy market

- 4.63 GEMA further erred by purporting to rely on the beta range in Oxera's analysis for the French energy regulator, which was produced in the context of its October 2020 tariff consultation for RTE, the French electricity transmission system operator. GEMA has failed to recognise the fundamental difference between the French and British regulatory systems. The French regulatory system is more protective of investors than the British system in important ways, which translates to lower risks for investors and therefore a lower beta range. For example, the French regulatory regime foresees protective measures against discrepancies in operating expenditure (*opex*) and capital expenditure (*capex*), and the French law requires that regulated tariffs cover almost all of its sole electricity transmission system operator's efficient costs.
- 4.64 As a result of these differences, exposure to cost risk is significantly lower for French networks as compared with SSEN Transmission. This higher regulatory protection for investors is also evidenced by the fact that rating agencies typically allow French operators to have higher leverage than those in Britain. As a result, the beta range provided to the French regulator is not reflective of

²⁰⁷ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Para 7.20**.

²⁰⁸ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Para 7.20**.

²⁰⁹ Including pure-play firms (Severn Trent and United Utilities). Oxera, Cost of Equity Report, **PH-1 / Tab 1, Para 7.22**.

the asset risks of the British sector and GEMA erred by taking it out of context and relying on it as supporting GEMA's flawed debt beta decision.²¹⁰

1C.iv. GEMA made inappropriate choice of estimation windows

- 4.65 GEMA has stated that it placed “*more weight on larger samples of data, such as the 10-year estimation window or the 10-year average of the smaller windows*” to estimate the asset beta.²¹¹ Although a longer estimation window increases the number of observations in the regression, thereby reducing the standard error in the beta estimates, there is clear academic literature that warns against using data samples over long estimation windows where there is statistical evidence of structural shifts during the period – which is the case in the UK utilities data series as Indepen found significant breaks in the time series in September / October 2008.²¹² Furthermore, the beta risk of a company also changes over time for a variety of reasons related to external factors such as M&A activities, shifts in market demand and perception of the company's business activities. As Oxera concludes, GEMA should therefore have placed more weight on a five-year estimation window which would be more reliable and accurate for the purposes of calculating the asset beta.²¹³

1C.v. GEMA overestimated the high end of the debt beta range

- 4.66 GEMA has overestimated the high-end debt beta of 0.15 as a result of material methodological errors, which when corrected would support a debt beta estimate no greater than 0.05.²¹⁴ These errors stem from GEMA's reliance on an inaccurate application of the “decomposition approach” (in evidence presented in a UKRN report and the CMA's provisional range from its PR19 Provisional Findings, which in turn reflects evidence presented by Europe Economics to Ofwat).
- 4.67 “Decomposition” means disaggregating credit spreads into various components. These components include the systematic component and non-systematic components such as expected loss and liquidity premium. The systematic component derived from this approach is used to estimate debt beta.
- 4.68 However, the approach – as implemented by Europe Economics – has a number of methodological and mathematical mistakes which are fully explained in Oxera's expert report. In summary:
- (a) The model's risk-free rate incorrectly (for the reasons set out above) relies on government bonds as a proxy.

²¹⁰ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Section 7B**.

²¹¹ RIIO-2 - Final Determination, Finance Annex, December 2020, **NOA-1 / Tab 11 / Para. 3.74**.

²¹² Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Section 6C**; and Indepen (2018), ‘Ofgem Beta Study – RIIO-2, Main Report, Final’, December, **PH-1 / Tab 1 / Page 6**.

²¹³ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Para 7.32**.

²¹⁴ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Para 7.45**.

- (b) Expected loss – which reflects what an investor is expected to lose over the life of a debt instrument – is underestimated because of incorrect probability of default and loss on default estimates.
 - (i) The model assumes a probability of default of **0.2%** whereas empirical findings such as Feldhütter and Schaefer (2018)²¹⁵ on the probability of default for companies with the credit rating assumed by GEMA reflect a range of probabilities with a midpoint at **0.5%**.²¹⁶
 - (ii) The model assumes a loss on default of **20%** (claiming without evidence that it is a “*typical estimate of ‘costs of bankruptcy’ across many sectors*”) whereas empirical findings²¹⁷ suggest a loss on default of **60%**.²¹⁸
- (c) The model’s liquidity premium (0.3%) is inconsistent with regulatory precedent from the Competition Commission (0.5%).²¹⁹
- (d) The formula that GEMA relied upon for attributing observed credit spreads to systematic and idiosyncratic components is inconsistent with that used by regulatory precedent – for instance, see the Competition Commission’s approach for setting the debt beta for BAA.²²⁰

4.69 As illustrated below, when these errors are corrected, the debt beta obtained from the decomposition approach significantly reduces from 0.15 from 0.05.

²¹⁵ Feldhütter, P. and Schaefer, S.M., (2018) ‘The myth of the credit spread puzzle’, *The Review of Financial Studies*, 31 8, **PH-1 / Tab 69**.

²¹⁶ See Moody’s (2019), ‘Annual default study: Defaults will rise modestly in 2019 amid higher volatility’, 1 February, **PH-1 / Tab 70 / Exhibit 28**. Moody’s report the recovery rates i.e. the amount recovered by investors as a percentage of face value in the event of a default. Therefore, to obtain the loss given default, one has to subtract the recovery rate from 1 to obtain the loss given default i.e. Loss given default (%) = 1-Recovery rate (%).

²¹⁷ See Moody’s (2019), ‘Annual default study: Defaults will rise modestly in 2019 amid higher volatility’, 1 February, **PH-1 / Tab 70 / Exhibit 28**. Moody’s report the recovery rates i.e. the amount recovered by investors as a percentage of face value in the event of a default. Therefore, to obtain the loss given default, one has to subtract the recovery rate from 1 to obtain the loss given default i.e.

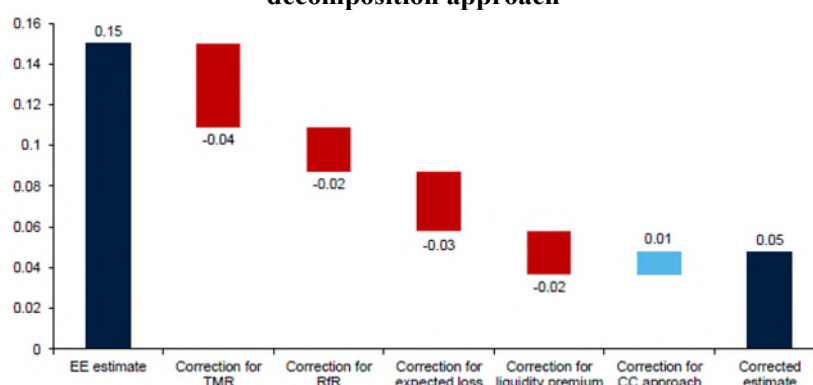
$$\text{Loss given default (\%)} = 1 - \text{Recovery rate (\%)}$$

²¹⁸ Ibid.

²¹⁹ Competition Commission (2010), ‘Bristol Water plc price determination’, Appendices, **NOA-1 / Tab 63 / Appendix N / Page 54**.

²²⁰ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Section 7D / Para 7.40**, see, for example, Competition Commission (2007), ‘Reference of Heathrow Airport to the Competition Commission’, Appendix F, 3 October, **NOA-1 / Tab 65 / Page 24**.

Figure 3 Impact on debt beta of correcting errors in Europe Economics' decomposition approach



Note: Note: The figures presented reflect the average debt beta estimates since 2010. For the CC approach, a 33% expected loss was assumed. The cut-off date for our analysis is 31 December 2019.

Source: Oxera analysis.

- 4.70 Therefore, there is no reliable evidence supporting a debt beta range greater than 0.05 and GEMA has made an error in assuming a debt beta of 0.075 for regulated utilities.

1C.vi. Statutory grounds of appeal for Ground 1C

- 4.71 GEMA's decision on beta, and accordingly its decision to proceed with the licence modification under section 11A of EA 1989, is therefore wrong on the following statutory grounds:
- (a) The decision was based on errors of fact and/or law (in particular the public law duty to reach reasonable decisions). GEMA's asset beta estimate has incorrectly relied on beta ranges relating to water companies and the French energy sector which have fundamentally different and lower risk profiles. GEMA has used an incorrect sample of European energy networks as comparators which included clear outliers that should have been excluded. Furthermore, GEMA has overestimated the debt beta as a result of material mistakes and flaws in its methodology. These errors have resulted in an erroneously low beta. **[section 11E(4)(c) and (e) EA 1989]**
 - (b) The erroneously low beta estimate has resulted in a CoE which is too low to attract the critical investment needed during the price control.²²¹ Therefore, GEMA has failed properly to have regard to and/or to give the appropriate weight to: (i) the interests of existing and future consumers, in particular their interests in the delivery of a secure electricity supply and in reducing electricity-supply emissions of targeted greenhouse gases (sections 3A(1)-(1A)); (ii) the need to secure that all licence holders are able to finance their activities (section 3(2)(b)); and/or (iii) the Social and Environmental Guidance issued by

²²¹ Alkirwi-1 / Page 9 et seq.

the Secretary of State and the related Net Zero Duty (section 3B(2)).
[section 11E(4)(a) and (b) EA 1989]

- (c) By setting a flawed beta, GEMA’s decision fails to achieve the effect stated by GEMA to set an “*appropriate balance of risk and return*”,²²² to set a WACC “*consistent with current evidence and market conditions*”,²²³ and to fairly compensate investors for the risks they face by setting an appropriate beta.²²⁴ [section 11E(4)(d) EA 1989]

1C.vii. Relief sought for beta

- 4.72 Correcting GEMA’s errors results in significant changes to the asset beta for UK energy networks. The corrected estimates are presented in Table 7.5 in Oxera’s Cost of Equity Report reproduced below.

Table 3 Asset Betas

	Five-year
National Grid	0.37
Average water UK	0.35
Enagas	0.37
Red Eléctrica	0.37
Snam	0.45
Terna	0.43
Average energy EU	0.40

Note: UK water companies include Severn Trent and United Utilities. National Grid and UK water company equity betas were estimated relative to the FTSE All-share index, using daily data. European energy company equity betas were estimated relative to the Eurostoxx TMI index, using daily data. A debt beta of 0.05 is assumed. We present the spot averaging period for all estimation windows. The cut-off date is 31 December 2019.

Source: Oxera analysis based on Bloomberg data.

- 4.73 As shown in Table 3 above, there is a significant difference in asset risks between the water sector (with a beta of 0.35 for UK water companies) and the energy sector (with a beta of 0.40 for EU energy networks). An asset beta range that uses National Grid’s five-year asset beta as the low-end and the comparator average five-year asset beta as the high-end will translate to a beta range of 0.37 to 0.40. After the Modigliani-Miller (*MM*) cross-check adjustment, the asset beta range proposed by Oxera translates to an equity beta range of 0.83 to 0.91 (and, as explained above, Oxera recommends using a debt beta of 0.05).²²⁵

²²² RIIO-2 - Final Determination, Core Document, NOA-1 / Tab 9 / Page 52; see also RIIO-2 - Draft Determination, Core Document (9 July 2020), NOA-1 / Tab 1 / Para 6.1.

²²³ RIIO-2 - Final Determination, Core Document, NOA-1 / Tab 9 / Para 6.3; see also RIIO-2 - Draft Determination, Finance Annex (9 July 2020), NOA-1 / Tab 2 / Para 1.10.

²²⁴ RIIO-2 - Final Determination, Core Document, NOA-1 / Tab 9 / Page 53; see also RIIO-2 - Draft Determination, Core Document (9 July 2020), NOA-1 / Tab 1 / Para 2.1.

²²⁵ Oxera, Cost of Equity Report, PH-1 / Tab 1 / Section 7E.

- 4.74 Further, the asset betas for energy companies have increased post-COVID. Oxera's methodology avoids capturing this period but this is a further reason why the asset beta is too low on a forward-looking basis for RIIO-T2.
- 4.75 Accordingly, SSEN Transmission respectfully requests that the CMA correct GEMA's beta range by setting the equity beta between **0.83** and **0.91**.
- 4.76 By correcting this error, the CMA would prevent a financial impact on SSEN Transmission [CONFIDENTIAL]. In other words, if those errors remain uncorrected, that is the sum by which SSEN Transmission will be underfunded as a result of GEMA's Decision.

D. Ground 1D: Choice of a point estimate and “aiming up”

- 4.77 Arriving at a CoE figure requires GEMA to take account of multiple data sources. For this reason, GEMA presents its CoE estimate as a range before then deciding on a point within that range as the applicable CoE for the RIIO-T2 price control period.
- 4.78 In selecting the point estimate, GEMA must therefore then decide which point in the range it will select. In RIIO-2, GEMA disregarded the widely accepted principle in UK economic regulation, and the CMA's own recent approach, that economic regulators should “aim up” within the CoE range to avoid the risk that the CoE is set too low, thereby reducing investment and ultimately causing detrimental impacts for customers. In particular, GEMA failed to properly take into account the need to attract the significant investment necessary in the RIIO-T2 period to meet Net Zero objectives and other energy-specific risk factors which may harm consumers.
- 4.79 GEMA's decision is wrong for the following key reasons, both individually and collectively:
- (a) GEMA has misunderstood the purpose and rationale for the principle of aiming up and the importance of the principle for ensuring future investment, as widely recognised by regulators and the CMA (**section 1D.i**);²²⁶
 - (b) contrary to its assertions, GEMA has not in fact aimed up in the CoE range (**section 1D.ii**);²²⁷
 - (c) consumer welfare is likely to be harmed as a result of increased risks of underinvestment stemming from CoE that is not set in accordance with the principle of aiming up (**section 1D.iii**);²²⁸ and
 - (d) GEMA underestimates the full level of risk faced by UK energy networks, including frequent political and regulatory risks (**section 1D.iv**).²²⁹

²²⁶ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Section 8A and B**.

²²⁷ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Section 8A**.

²²⁸ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Section 8C**.

²²⁹ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Section 8E**.

- 4.80 GEMA's failure to apply the established principle of aiming up represents a further reason as to why GEMA has significantly underestimated the CoE point estimate for SSN Transmission in RIIO-2 and its decision was therefore wrong.

1D.i. GEMA has adopted an approach which is wrong in principle

- 4.81 As explained in Oxera's expert report, the importance of aiming up is widely accepted by regulators.²³⁰ If the CoE is set too low, the risk of a regulated company not being able to carry out its investment programme increases, risking underinvestment in the sector which will ultimately lead to welfare costs to consumers. However, GEMA's position on aiming up in RIIO-T2 reveals that it has wholly misunderstood the basis and rationale underlying this principle.
- 4.82 GEMA states that "[the flexibility in RIIO-2 investment incentives] weakens the argument that allowed returns should **materially exceed the cost of capital**" (emphasis added).²³¹ However, that is a fundamental mischaracterisation of the rationale for aiming up within the CoE range. The effect of aiming up in the range, and the underlying principle behind this established practice in UK regulation, is not designed to result (and nor does it in fact result) in allowed returns "*materially exceeding the cost of capital*". Rather, the basis of the principle is that the range selected by the regulator is an appropriate range of realistic values within which to set the CoE parameter of the cost of capital which could, in principle, include the top end of the range. Even the top end of the range does not therefore "materially exceed" the cost of capital. Having selected a range of realistic and appropriate values, the established regulatory practice is to select a higher value **within** an appropriate CoE range as, the most realistic and appropriate outcome.
- 4.83 The CMA recognised in its PR19 Provisional Findings that aiming up in the CoE range is aligned with consumers' interests and indeed proposed aiming above the midpoint in the CoE range in its PR19 Provisional Findings (and repeated this in its most recent PR19 January 2021 Working Papers).²³² The CMA also specifically recognised that it is appropriate to aim up in the range to avoid the risks of underinvestment both in its PR19 Provisional Findings²³³ and PR19 recent January 2021 Working Papers – for instance, when it stated:

In respect of the incentives on firms to identify new capital and grow the RCV where it benefits customers, **there remains a risk that a WACC that is too low will not provide these incentives.**²³⁴

²³⁰ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Section 8A**.

²³¹ RIIO-2 - Final Determination, Finance Annex (December 2020), **NOA-1 / Tab 11 / Para 3.183**.

²³² Competition and Markets Authority, 'Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations - Provisional Findings', **NOA-1 / Tab 55 / Para 9.662**; CMA (2021), PR19 January Working Papers – Point Estimate, **PH-1 / Tab 49 / Section 6**.

²³³ CMA (2021), PR19 January Working Papers – Point Estimate, **PH-1 / Tab 49 / Para 106**.

²³⁴ Competition and Markets Authority, 'Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations - Provisional Findings', September 2020, **NOA-1 / Tab 55**; CMA (2021), PR19 January Working Papers – Point Estimate, **PH-1 / Tab 49 / Para 105-106**.

[...]

our updated view remains that **there are a number of benefits from choosing a point estimate above the middle of the range**. Our view is that this will result in an **appropriate balance of risk in the round across the determination**.²³⁵

[...]

We continue **to be concerned that there needs to be an appropriate level of caution in making significant changes to the cost of capital**. The midpoint of our cost of equity range in PFs was around 30% lower than in AMP6, with much of this reduction due to changes in the methodology for calculating the cost of equity.²³⁶

- 4.84 The CMA is not alone in recognising the appropriateness of aiming up in this context. The New Zealand Commerce Commission (to which the CMA indirectly referred in its PR19 Provisional Findings²³⁷) explicitly adopts the same reasoning behind aiming up set out above, noting that: “...*it is appropriate to use a WACC significantly above the mid-point estimate...because the potential costs of under-investment from a WACC that is too low are **likely to outweigh the costs** (including any over-investment) arising from a WACC that **is too high***.” (emphasis added).²³⁸ In that case, the Commerce Commission was estimating the WACC range for electricity lines and gas pipelines services where it aimed up at the 67th percentile of the estimated WACC range.
- 4.85 GEMA’s approach is therefore contrary to the approach recognised by UK and international regulators over many previous price controls – and by the CMA in the PR19 Provisional Findings and the PR19 January 2021 Working Papers.²³⁹ GEMA’s approach wrongly overlooks the importance of selecting a point estimate at a level commensurate with attracting the necessary investment at a particularly critical time for SSSEN Transmission given the significant investment needed to achieve Net Zero objectives over the forthcoming price control (and beyond).

1D.ii. GEMA has, contrary to its assertions, not aimed up

- 4.86 In the Final Determination, GEMA concludes that:

Our final view in these FDs is **arguably consistent with a degree of aiming up**. 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%. In Step 3, we believe that the evidence supports expected outperformance of more than 0.25%.

²³⁵ CMA (2021), PR19 January Working Papers – Point Estimate, **PH-1 / Tab 49 / Para 115**.

²³⁶ CMA (2021), PR19 January Working Papers – Point Estimate, **PH-1 / Tab 49 / Para 105-106**.

²³⁷ Competition and Markets Authority, ‘Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations - Provisional Findings’, **NOA-1 / Tab 55 / Page 662**.

²³⁸ Commerce Commission (2014) ‘Amendment to the WACC percentile for price-quality regulation for electricity lines services and gas pipeline services: Reasons Paper’, 30 October, **PH-1 / Tab 78 / Para X17**.

²³⁹ Competition and Markets Authority, ‘Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations - Provisional Findings’, September 2020, **NOA-1 / Tab 55**; CMA (2021), PR19 January Working Papers – Point Estimate, **PH-1 / Tab 49**.

However, our final view uses the minimum value of 0.25%. We supplement this with an ex post adjustment mechanism in favour of investors.²⁴⁰

- 4.87 GEMA's statement that its decision is consistent with aiming up is a mischaracterisation of its approach to the selection of the point estimate. In fact, its estimate of 4.55% represents a point estimate which is well below an appropriate level for attracting the much-needed investment which SSEN Transmission requires over the RIIO-2 period.
- 4.88 As explained above in Section 1E above (and more fully in the Oxera report),²⁴¹ there are a number of significant flaws in GEMA's cross-checks of CAPM-implied cost of equity (or "Step 2" evidence). GEMA itself acknowledged that this evidence was "*not as strong as [they] believed*".²⁴² However, GEMA arrives at its point estimate in reliance on these flawed cross-checks (see ground 1E below). The established approach of aiming up must be applied within the range obtained from a properly conducted CAPM assessment, which GEMA should have done in its "Step 1". Instead of aiming up within the range, GEMA purported to rely on its "cross-checks" to 'narrow the range' of the CAPM-implied cost of equity:

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 [cross-checks on the cost of equity].²⁴³

- 4.89 In reality, GEMA used its cross-checks to '*aim down*' by decreasing the CAPM-estimated cost of equity range from 3.85-5.24% to 3.80-5.00%.
- 4.90 As shown below, once this '*aiming down*' is corrected for, GEMA's point estimate of 4.55% was the exact mid-point of the CAPM estimated cost of equity range (of 3.85%-5.24%).

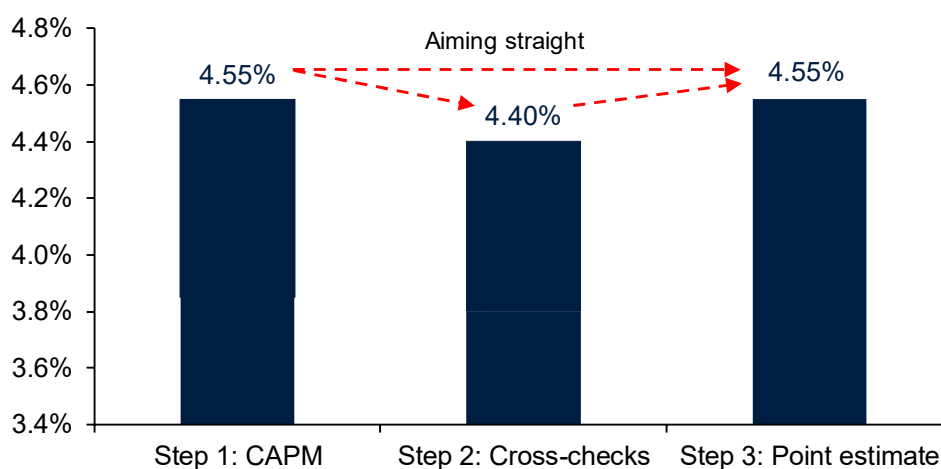
²⁴⁰ RIIO-2 - Final Determination, Finance Annex, NOA-1 / Tab 12 / Page 69.

²⁴¹ Oxera, Cost of Equity Report, PH-1 / Tab 1 / Section 9.A1;

²⁴² RIIO-2 - Final Determination, Finance Annex, NOA-1 / Tab 12 / Para 3.121.

²⁴³ RIIO-2 - Final Determination, Finance Annex, NOA-1 / Tab 12 / Para 3.121.

Figure 4: GEMA’s use of CAPM and cross-checks in deriving a point estimate



Source: Oxera analysis based on GEMA’s Table 12 of the RIIO-2 - Final Determination, Finance Annex.

- 4.91 The above Figure shows that GEMA did not, in fact, aim up within the CAPM range. Instead, it “aimed straight” and selected a point estimate at the mid-point of its CAPM range.

1D.iii. Consumer welfare is likely to be harmed from the risks of underinvestment arising from GEMA’s approach

- 4.92 The rationale for the established principle of aiming up is to reduce the risk of underinvestment by increasing the likelihood that the selected cost of capital is not set below the true cost of capital. It is widely accepted that, if investors do not expect a return at least as high as the cost of capital, they will underinvest on average and that in turn this can have a detrimental impact on consumer welfare.
- 4.93 Oxera uses a UKRN model in its expert report to model the optimal level of aiming up and associated impact on consumer welfare. Using assumptions on demand elasticities in line with the CMA’s approach in its energy market investigation, the analysis demonstrates that even using the conservative ranges from the model, regulators should aim high above the midpoint to minimise detriment to consumer welfare.²⁴⁴ Furthermore, this analysis only takes account of consumer welfare in terms of trade-offs between current prices and the effect on consumer welfare for future periods in economic terms. An additional investment-related reason to “aim up” is that energy companies are encouraged to invest in ‘green’, Net Zero investment in RIIO-T2 (and future) periods – since newer, uncertain green technology is also likely riskier than the existing technology, there is a higher risk that if the cost of capital is set too low firms will also underinvest in green technology (as explained in the witness statement of Mr Alkirwi²⁴⁵). Therefore, in addition to future economic losses, consumers

²⁴⁴ Oxera, Cost of Equity Report, PH-1 / Tab 1 / Section 8C.

²⁴⁵ Alkirwi-1 / Page 10.

will suffer social welfare losses in future periods due to missed Net Zero goals. Aiming up is therefore even more important in electricity transmission, and at the current time when SSEN Transmission is making transformative investment to support Net Zero, than in other regulated sectors or at other times.

- 4.94 Furthermore, the CMA has recently noted in its PR19 January 2021 Working Papers that – unlike in water – blackouts are a tangible risk in the energy sector due to potential long-term underinvestment from aiming too low in the range.²⁴⁶ The 2021 Texas power crisis is chilling evidence of the far reaching consequences of blackouts on society through not only blackouts themselves, but also supply interruptions to other essential utilities such as water, gas, telecommunications and emergency services, resulting in deaths, asset damages and extreme high prices for consumers. Oxera explains in its Cost of Equity report how this is supported by the formal academic literature which highlights the importance of preventing such market breakdowns via aiming up.²⁴⁷ As Oxera highlights in its report, even small levels of underinvestment in the electricity transmission sector risks creating inefficient and outdated infrastructure in future years resulting in higher costs to future consumers and possible service interruptions in the form of blackouts.²⁴⁸ Oxera’s expert report models the potential costs associated with underinvestment caused by setting the cost of capital too low. Oxera finds that this could potentially cost the UK economy between £6.3bn and £31.6bn annually.²⁴⁹
- 4.95 Additionally, the Oxera report quantifies the risk of single extreme incidents of network failure arising from underinvestment. Representative examples of such events can cost significant amounts to the economy of countries which suffer from such events – Oxera estimates, based on representative examples from single incidents in the past, that similar events in the United Kingdom could potentially cost between c.£10bn-£25bn.²⁵⁰
- 4.96 The high costs for consumers and wider society which are associated with outages drive SSEN Transmission’s desire to achieve 100% network reliability. The witness statement of Mr Alkirwi explains that SSEN Transmission plans to make investments of over £1bn in improving the resilience and health of the electricity transmission network over RII0-T2, which requires efficient delivery of challenging and complex infrastructure, in order to deliver this ambition.²⁵¹
- 4.97 GEMA failed to take these risks into account both in terms of the risk of failing to achieve green objectives, as well as the risks that blackouts and outages can have on the wider economy. These factors should have been, but were not, taken into account by GEMA when setting an appropriate CoE point estimate to ensure that electricity transmission networks can continue to attract the

²⁴⁶ CMA (2021), PR19 January Working Papers – Point Estimate, **PH-1 / Tab 49 / Para 47**.

²⁴⁷ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Section 8C**

²⁴⁸ Sharing this concern, the CMA has noted that blackouts are a tangible risk from long-term underinvestment. See CMA (2021), PR19 January Working Papers – Point Estimate, **PH-1 / Tab 49 / Para 47**.

²⁴⁹ Converted into UK GBP terms. See Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Section 8C**; see also **Alkirwi-1 / Section 7**.

²⁵⁰ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / para 8.34**.

²⁵¹ **Alkirwi-1 / Para. 7.19(c)**.

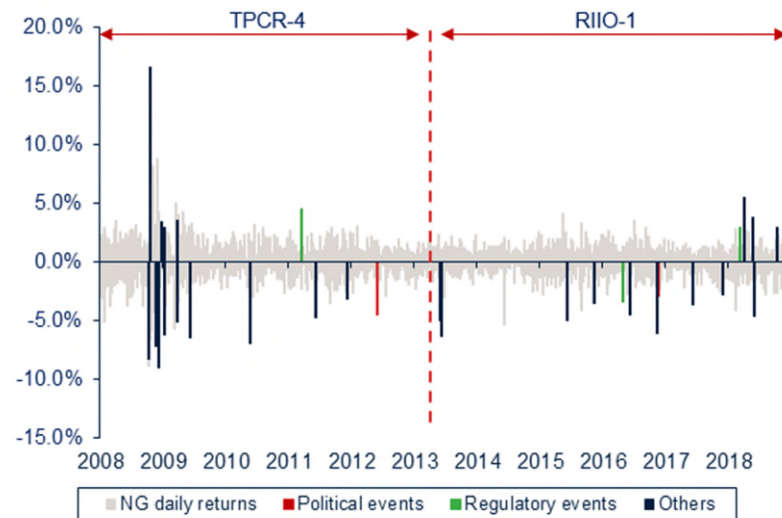
necessary investment and minimise the risk of detrimental harm to consumers arising from these types of risks.

1D.iv. The beta calculated in accordance with standard CAPM principles underestimates the full level of risk faced by UK energy networks

- 4.98 In addition to the risks set out above, in previous studies,²⁵² Oxera has examined the political and regulatory risks UK regulated utilities face. The evidence shows that the beta in the CAPM equation is unlikely to reflect the full level of risk faced by UK regulated utilities – Oxera examined this particularly closely in the energy sector. Specifically, Oxera found that there are:
- (a) more frequent political and regulatory news events triggering share price falls (i.e. sharp declines in reaction to news);
 - (b) an increase in share price volatility since 2016—a period during which the UK Labour party asserted its policy of renationalising utilities if it were to come to power;
 - (c) a decline in the status of National Grid and other regulated utilities as ‘defensive stocks’; and
 - (d) an increased focus on regulatory and political risk as a valuation driver in analyst assessments.
- 4.99 Oxera’s analysis in the Figure below shows the extent of National Grid’s share price movements against the reaction of FTSE All-share index to the same political and regulatory events over a 10-year period.

²⁵² Oxera (2019), ‘Assessment of political and regulatory risk’, prepared for National Grid Group, 4 March; Oxera (2020), ‘The Cost of Equity for RIIO-2’, September, **PH-1 / Tab 83**.

Figure 5: NG's share price reaction (a sharp increase or decrease in price relative to the FTSE All-share), 2008–18



Note: The highlighted statistically significant observations (two standard deviations away from the long-run historical average) represent extreme movements in NG's share price, where its share price deviated substantially from that of the FTSE All-share. Events are categorised based on a qualitative assessment of the news content. 'Others' includes systematic, company-specific and safe haven events.

Source: Oxera analysis based on Thomson Reuters data.

Such rapid declines in stock prices relative to the market is a concept known as negative skew. Negative skewness is illustrative of a riskier environment for investors in the energy sector, compared to other sectors, from which they demand a commensurate risk premium.²⁵³ The existence of such risks in the energy sector is an additional reason that GEMA was not justified in departing from the established principle of “aiming up” in its Decision.

1D.v. Statutory grounds of appeal for Ground 1D

4.100 GEMA's decision on aiming up, and accordingly its decision to proceed with the licence modification under section 11A of EA 1989, is therefore wrong on the following statutory grounds:

- (a) The decision was based on errors of fact and/or law (in particular the public law duty to reach reasonable decisions). It is an error to assert that the approach taken by GEMA to selecting a point estimate constitutes “*aiming up*”. GEMA has failed to take account of evidence demonstrating these errors, including from SSEN Transmission and supported by the position taken by the CMA in the PR19 Provisional Findings which was published prior to its Final Determination. **[section 11E(4)(c) and (e) EA 1989]**
- (b) The errors by GEMA have resulted in a CoE which is too low to attract the critical investment needed during the price control.²⁵⁴ Therefore,

²⁵³ Harvey, C. and Siddique, A. (2000), “Conditional Skewness in Asset Pricing Tests”, *Journal of Finance*, 55, **PH-1 / Tab 84 / Pages 1263–1296**.

²⁵⁴ Alkirwi-1 / Page 9 et seq.

GEMA has failed properly to have regard to and/or to give the appropriate weight to: (i) the interests of existing and future consumers in the delivery of a secure electricity supply and in reducing electricity-supply emissions of targeted greenhouse gases (sections 3A(1)-(1A) EA 1989); (ii) the need to secure that all licence holders are able to finance their activities (section 3(2)(b) EA 1989); and/or (iii) the Social and Environmental Guidance issued by the Secretary of State and the related Net Zero Duty (section 3B(2) EA 1989). **[section 11E(4)(a) and (b) EA 1989]**

- (c) By failing to aim up, GEMA’s decision fails to achieve the effect stated by GEMA to set an “*appropriate balance of risk and return*”,²⁵⁵ to set a WACC “*consistent with current evidence and market conditions*”,²⁵⁶ and to fairly compensate investors for the risks they face by setting an appropriate beta.²⁵⁷ **[section 11E(4)(d) EA 1989]**

4.101 GEMA’s point estimate is currently far below even the lower end of Oxera’s CoE range which corrects the other errors made by GEMA. For all the reasons stated above, SSEN Transmission submits that the correct approach is for the CMA to “aim up” in the corrected CoE range in order to offset the future risks to energy infrastructure and optimise consumer welfare.

1D.vi. Relief sought for Ground 1D

- 4.102 GEMA’s failure to aim up was an error in principle and further resulted in a material underestimation of the CoE.
- 4.103 Oxera has collected a large amount of primary evidence to form a corrected CoE range based only on data that they consider to be robust. As Oxera explains in its expert report, the correct approach would be to aim up within the corrected range of 5.61%-6.78% (for 60% gearing).²⁵⁸ For SSEN Transmission, with 55% gearing, the range would be 4.98%-6.02%.²⁵⁹ GEMA has adopted a point estimate of 4.25% within a range of 3.62%-4.86% at 55% gearing. The difference between the middle of the Oxera range and the GEMA point estimate is 125 bp and therefore, on a standalone basis (i.e. assuming that the other errors in GEMA’s CoE parameters have not been corrected), GEMA should have aimed up by at least 125 bps in order to have aimed up within the Oxera range.
- 4.104 By correcting this error, the CMA would prevent a financial impact on SSEN Transmission of at least [CONFIDENTIAL]. In other words, if those errors remain uncorrected, that is the sum by which SSEN Transmission will be underfunded as a result of GEMA’s Decision.

²⁵⁵ RIIO-2 - Final Determination, Core Document, **NOA-1 / Tab 9 / Page 52**; see also RIIO-2 - Draft Determination, Core Document (9 July 2020), **NOA-1 / Tab 1 / Para 6.1**.

²⁵⁶ RIIO-2 - Final Determination, Core Document, **NOA-1 / Tab 9 / Para 6.3**; see also RIIO-2 - Draft Determination, Finance Annex (9 July 2020), **NOA-1 / Tab 2 / Para 1.10**.

²⁵⁷ RIIO-2 - Final Determination, Core Document, **NOA-1 / Tab 9 / Page 53**; see also RIIO-2 - Draft Determination, Core Document (9 July 2020), **NOA-1 / Tab 1 / Para 2.1**.

²⁵⁸ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Table 9.1**.

²⁵⁹ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Table 9.1**.

E. Ground 1E: Errors in the cross-checks carried out regarding the cost of equity figure

- 4.105 As noted at paragraph 3.3(b) above, Step 2 in GEMA's decision-making on CoE involved applying cross-checks for the CoE figure obtained by applying the traditional CAPM approach at Step 1, in order to assess whether the Step 1 figure appeared to it to fall in an appropriate range GEMA has purported to undertake a cross-checking process, on the basis of which it has reduced the midpoint of the CoE produced by its CAPM analysis from 4.55% to 4.40%. The effect of GEMA's decision in this respect was to "aim down" on its own CAPM analysis on the basis of its purported cross-checks.²⁶⁰
- 4.106 However, GEMA's approach to cross-checking is flawed and cannot justify its decision on CoE. In summary, GEMA has made the following errors in its cross-checks each of which result in its decision in this respect being wrong:
- (a) **CoE – Asset Risk Premium and Debt Risk Premium (ARP-DRP):** GEMA has failed to properly take into account directly observable market evidence including the asset risk premium v. debt risk premium (ARP – DRP) cross-check which demonstrates that its CoE estimate is materially lower than market evidence justifies (**section 1E.i**);
 - (b) **CoE – Modigliani-Miller (MM) Theory:** GEMA's cross-check using the CoE implied from the MM theory suffers from material flaws as it misinterprets academic literature and applies assumptions inconsistent with the MM theory. When corrected for these errors, the parameters used in GEMA's cross-check violates the MM Theory and therefore cannot support GEMA's CoE (**section 1E.ii**);
 - (c) **CoE – MARs:** GEMA incorrectly concluded that the MARs of two listed water and two listed energy firms support the CoE range in Ofwat's PR19 price control and GEMA's own CoE range, as it fails to account for factors not related to the price control that are more than sufficient to explain the share prices and MARs of these firms (**section 1E.iii**);
 - (d) **CoE – infrastructure funds:** GEMA erroneously used the discount rates of thirteen infrastructure funds as a cross-check for its CAPM-derived CoE because those funds have fundamentally different and lower risk profiles than regulated energy networks. GEMA was wrong to assume that any premia over those funds are solely attributable to an overestimation of CoE, and further cross-checks conducted by Oxera using observable data on these funds produce unreasonably and volatile results that render them inappropriate as a cross-check (**section 1E.iv**);
 - (e) **CoE – OFTO returns:** GEMA erroneously used OFTO returns as a cross-check to benchmark the CoE of onshore energy networks because

²⁶⁰ RIIO-2 - Final Determination, Finance Annex, NOA-1 / **Tab 12 / Table 12** and conclusion in **Para 3.121** which states that: "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".

it is a fundamentally different asset class with different risk profiles, financing parameters, tax structures and other data uncertainties that has the effect of erroneously lowering the allowed CoE (**section 1E.v**);

- (f) **CoE and TMR – investment managers forecasts:** GEMA placed inappropriate weight on the TMR forecasts produced by investment managers as a cross-check for its CoE estimate, and failed to exclude outlier data, which in combination has the effect of erroneously lowering the allowed CoE (**section 1E.vi**);
- (g) **TMR – Dividend Discount Models:** GEMA has failed to take account of Oxera’s cross-check evidence using expected market return derived from the Dividend Discount Model which points to a higher TMR estimate than the historical average equity market returns (**section 1E.vii**); and
- (h) **TMR - TMR in USD:** GEMA incorrectly used TMR expressed in USD as a cross-check, misreading the underlying data series as evidence for its use of CPI as an inflation measure (**section 1E.viii**).

1E.i. CoE - Asset Risk Premium and Debt Risk Premium²⁶¹

- 4.107 GEMA has failed properly to take into account directly observable evidence including the asset risk premium (**ARP**) vs debt risk premium (**DRP**) cross-check²⁶² to inform its CAPM estimate on the CoE as the ARP-DRP cross-check is based on market data.²⁶³ A proper assessment of the ARP-DRP data demonstrates that GEMA’s estimate is materially lower than market evidence clearly justifies.²⁶⁴
- 4.108 As shown in Oxera’s analysis,²⁶⁵ the ARP-DRP differential implied by the CoE in both the Draft Determination and Final Determination falls significantly below contemporaneous market evidence, which further reinforces that GEMA has materially underestimated the CoE, despite its clear intent to set an allowed return “*consistent with current evidence and market conditions*”.²⁶⁶

²⁶¹ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Section 9.A1F**.

²⁶² The ARP measures the excess return required by investors in return for providing capital to risky assets, while the DRP measures the excess return required by investors in return for acquiring risky debt. By comparing the differential between ARP and DRP against contemporaneous evidence on UK energy bonds, the ARP-DRP differential can be used as a cross-check for the appropriate level of the allowed CoE.

²⁶³ Oxera, Asset risk premium relative to debt risk premium, **PH-1 / Tab 90**.

²⁶⁴ SSEN Transmission, Response to RIIO-T2 Draft Determination - Main Response Document, **NOA-1 / Tab 3 / Page 53**, available here: <https://www.ssen-transmission.co.uk/media/4704/ssen-transmission-response-to-riio2-draft-determination-main-response-document.pdf>.

²⁶⁵ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Section 9.A1F**.

²⁶⁶ RIIO-2 - Final Determination, Core Document, **NOA-1 / Tab 9 / Para 6.3**; see also RIIO-2 - Draft Determination, Finance Annex (9 July 2020), **NOA-1 / Tab 2 / Para 1.10**.

1E.ii. CoE - Modigliani-Miller Theory²⁶⁷

- 4.109 GEMA uses CoE implied from the MM model as a cross-check through a two-step procedure:²⁶⁸
- (a) **first**, GEMA estimates the WACC of UK utilities using their observed gearing and assuming a 1.74% cost of debt; and
 - (b) **second**, GEMA uses the estimated WACC values to derive the cost of equity assuming a notional gearing ratio of 60%, using the MM theory assumption that WACC is invariant to gearing.
- 4.110 Based on this analysis, GEMA concluded that for companies with a gearing ratio close to 60% (i.e. United Utilities and Pennon), the CoE is similar to the observed CoE. GEMA relied on this conclusion to justify its reduction of the CoE by 10 bps as part of its cross-checks.
- 4.111 However, GEMA has erroneously applied the MM theory by using assumptions that are inconsistent with the MM theory. In particular:
- (a) GEMA applied the incorrect CoD in the model by relying on historical evidence instead of a forward-looking CoD that is assumed by the MM model. A more appropriate figure such as the spot iBoxx AAA/B or the Utilities 10+ should have been used.
 - (b) As explained in Ground 1A.i, GEMA erred in relying on UK gilts as a benchmark for “riskless” rates instead of a more realistic benchmark such as the AAA corporate bond yields, which as shown in Oxera’s analysis also contributes to the violation of the MM theory.
 - (c) As explained in Grounds 1B and 1C, GEMA has underestimated the TMR and the debt beta, which also contributes to the violation of the MM theory.
- 4.112 As a cross-check it is possible to consider whether WACC is positively correlated with gearing (i.e. if the ‘re-gear’d estimates yield a higher WACC) in which case the MM theory is violated. As shown in Oxera’s replication of GEMA’s analysis, the ‘re-gear’d estimations yield a higher WACC, with the difference being considerably greater than zero. This shows that GEMA’s analysis violates the MM theory.

²⁶⁷ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Section 9.A1A**.

²⁶⁸ RIIO-2 - Final Determination, Finance Annex, **NOA-1 / Tab 12 / Page 53**.

Table 4 Violation of the MM theory by GEMA

	SSE	NG	PNN	SVT	UU
Observed gearing					
Equity β (5Y)	0.81	0.61	0.67	0.66	0.69
Equity β (10Y)	0.65	0.55	0.59	0.59	0.58
WACC (5Y)	3.81%	2.71%	2.95%	2.76%	2.83%
WACC (10Y)	2.98%	2.39%	2.59%	2.47%	2.39%
Notional gearing (60%)					
Equity β (5Y)*	1.29	0.84	0.90	0.79	0.78
Equity β (10Y)*	1.04	0.73	0.79	0.69	0.64
WACC (5Y)	4.48%	3.18%	3.38%	3.02%	2.99%
WACC (10Y)	3.70%	2.80%	3.01%	2.70%	2.54%
Difference WACC					
5Y	0.67%	0.47%	0.44%	0.26%	0.16%
10Y	0.72%	0.42%	0.43%	0.24%	0.15%

Note:*Assuming a 0.075 debt beta. The CoD is set at 1.82% for NG, PNN, SVT and UU. The CoD is set at 1.59% for SSE. CPIH real numbers.

Source: Oxera analysis based on Ofgem and Thomson Reuters data.

- 4.113 When these errors by GEMA are corrected, the difference in WACC across the companies used in GEMA's sample is significantly reduced. In sum, the parameters presented by GEMA (as shown in the table above) violate the fundamental proposition of the MM theory and are therefore incapable of supporting GEMA's CoE in its Final Determination.²⁶⁹

1E.iii. CoE – MARs²⁷⁰

- 4.114 GEMA has used evidence from MARs²⁷¹ for the two listed water companies (Severn Trent and United Utilities) and two listed energy companies (National Grid and SSE) as a cross-check for its allowed return at the Final Determination. For the energy companies, GEMA also observed the share price movements of these firms following the CMA's provisional findings in the PR19 price control redeterminations and concluded that both National Grid and SSE's share price reactions indicate that investors interpreted the PR19 Provisional Findings as an 'unexpected' signal for higher returns.²⁷²

- 4.115 However, GEMA's MARs and share prices cross-check suffers from the following errors:

²⁶⁹ Oxera, Cost of Equity Report, PH-1 / Tab 1 / Section 9.A1A.

²⁷⁰ Oxera, Cost of Equity Report, PH-1 / Tab 1 / Section 9.A1B.

²⁷¹ The Market to Asset Ratio represents the ratio between the market value of a regulated business and its regulated asset base (RAB).

²⁷² At the Draft Determination, GEMA presented evidence for SVT, UU, and PNN, while at the Final Determination, GEMA presented evidence for SVT, UU, NG, and SSE. GEMA considered the share price reaction only for NG and SSE after the CMA's PR19 Provisional Findings. See RIIO-2 - Final Determination, Finance Annex, NOA-1 / Tab 12 / Paras 3.117 to 3.119.

- (a) 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,²⁷³ factors not related to the price control such as value of non-regulated business activities, PR14 reconciliations, accrued dividends and expected take-over premium²⁷⁴ can more than explain the MAR premia of the listed UK water companies.
- (b) 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. In particular, taking Ofwat's allowed return of 4.19% (CPIH real) and adding an illustrative 50 bps for subsequent price controls helps to explain the currently observed premia. No recourse to Ofwat's current allowed return is needed to explain the currently observed premia. Oxera's illustrative assumption for the allowed return in future price controls (4.19% + 50 bps = 4.69%) is conservative – it is approximately 40 bps lower than the CMA's provisional finding of 5.08%.
- (c) 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. As GEMA itself recognised in the Sector Specific Methodology Decision, *"listed share prices could [...] particularly in the short term, be influenced heavily by wider market 'noise'"*, especially given the market volatility caused by COVID-19.
- (d) GEMA's analysis suffers from estimation problems for the two listed energy companies (National Grid and SSE) as there is no sensitivity analysis for different values of the companies' non-UK regulated business activities. Furthermore, GEMA has not disclosed its empirical MAR analysis for the two listed energy companies. Rather, it has disclosed some stylised modelling that suffers from the same limitations as described above.

4.116 Mr Alkirwi also highlights in his witness statement as to why 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 – the witness statement provides a practical example comparing Equity Analyst Target Price for SSE vs Share Prices to demonstrate why MAR data should be approached with a high degree of caution.²⁷⁵

²⁷³ RIIO-2 - Sector Specific Methodology Consultation, Finance Annex, 18 December, NOA-1 / Tab 24 / Page 44 / Para. 3.127.

²⁷⁴ Oxera (2020), 'What explains the equity market valuations of listed water companies?' 20 May, NOA-1 / Tab 92.

²⁷⁵ Alkirwi-1 / Page 72.

1E.iv. CoE – Infrastructure funds discount rates²⁷⁶

4.117 GEMA considers infrastructure fund discount rates as an appropriate cross-check for its CoE estimate. As shown in Oxera’s report of March 2019²⁷⁷, the discount rates of these funds are not an appropriate cross-check for GEMA’s CAPM-derived CoE range for the following reasons:

- (a) **First**, the asset compositions of the infrastructure funds used by GEMA are fundamentally different from those of energy networks, which mean these funds are less risky. Fund managers are able to hedge greater revenue or volume risks than energy networks using long-term or availability-based contracts and/or government subsidies e.g. renewable obligation certificates (ROCs). For example, those funds include wide-ranging asset categories beyond regulated energy networks, including for example social housing, PFI, schools, health facilities, military housing and others.
- (b) **Second**, GEMA conducted its cross-check using an “implied IRR”, which is calculated by deflating each fund’s discount rate using market premium to the latest reported net asset value (*NAV*). GEMA assumed that any premium above NAV means that the fund is overestimating its own cost of capital. However, as explained in para 4.115 above, this assumption is flawed as there are multiple reasons for a market premium which are unrelated to an overestimation of cost of capital.
- (c) **Third**, a cross-check using observable beta, CoE and RFR of these funds produces implied TMRs that are unreasonably high with high variation and lacks consistency with their own betas and CoE. This demonstrates that these funds are not appropriate cross-checks for regulated energy networks.

1E.v. CoE – OFTO returns²⁷⁸

4.118 GEMA considered the implied equity internal rate of returns (*IRRs*) from winning OFTO bids as a cross-check to its CoE estimate. Using the latest OFTO tender round bids, GEMA arrived at a nominal equity IRR of 7.0% and a CPIH-real equity IRR of 4.9%.

4.119 GEMA’s OFTO returns cross-check is flawed for the following reasons:

- (a) **First**, the data used by GEMA is confidential and not open to public scrutiny, making it inappropriate for use in a regulatory process. Mr Alkirwi explains that SSEN Transmission has made requests for information regarding OFTOs which have been denied by GEMA and the data therefore suffers from lack of visibility.²⁷⁹

²⁷⁶ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Section 9.A1C**.

²⁷⁷ Oxera (2019), ‘Infrastructure Funds Discount Rates’, March, **PH-1 / Tab 88**.

²⁷⁸ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Section 9.A1D**.

²⁷⁹ **Akirwi-1 / Section 9**.

- (b) **Second**, OFTO projects are operational assets with little capital and replacement expenditure and have a fundamentally different risk profile from onshore networks. In particular, OFTO net cash flows are largely fixed in real terms over the duration of the OFTO tender revenue stream. Therefore, any comparison of asset risk between OFTO and RIIO-T2 networks is likely to significantly underestimate the cost of capital for a network that undertakes capital and replacement expenditure in addition to operational expenditure. For example, under the OFTO regime, developers bid their desired return and the winning bid is chosen as the competitive outcome, while for onshore transmission networks, the returns are set by GEMA under the price control. Therefore, unlike OFTOs, there is a relative financeability risk for onshore networks if the return is set too low.²⁸⁰
- (c) **Third**, GEMA assumes a terminal value of zero at the end of the expected project life. However, it is implausible to assume investors expect zero terminal value for OFTO assets beyond the end of the tender revenue stream. If the successful bidders assumed positive net cash flows after the end of the contracted revenue period, the implied IRR would be higher. Moreover, they also may have different tax structures and their bids may factor in expected outperformance, further underestimating the anticipated IRR.

1E.vi. CoE and TMR – investment manager forecasts²⁸¹

4.120 GEMA has used TMR estimates published by investment managers as a cross-check, as well as the rates of return prescribed by the FCA for the purposes of marketing retail financial products, in relation to both the TMR range and the CAPM-implied CoE.

4.121 GEMA's cross-check using these data is flawed for the following reasons:

- (a) **First**, as Oxera noted in their 2018 report,²⁸² the TMR forecasts produced by investment managers are produced for the primary purpose of providing prudent estimates of future returns for their clients, which is subject to a ceiling imposed by the FCA Conduct of Business Sourcebook (COBS) rules to protect consumer investors. Therefore, the TMR forecasts produced by investment managers can at best be regarded as a lower-bound figure on the expected compound rate of growth in the value of an investment in the equity market, and therefore not a suitable cross-check for the purpose of estimating TMRs in the RIIO-T2 context.
- (b) **Second**, to the extent these data provide any useful information relevant to the discount rate appropriate for setting the CoE, GEMA has failed to accurately adjust for the downward bias due to the averaging method

²⁸⁰ Akirwi-1 / Section 9.

²⁸¹ Oxera, Cost of Equity Report, PH-1 / Tab 1 / Section 9.A1E.

²⁸² Oxera (2019), 'Review of RIIO-2 finance issues: rates of return used by investment managers', PH-1 / Tab 47 / Page 2.

used. As explained in Cooper (1996)²⁸³, both the geometric and arithmetic averages are likely to be downward-biased estimators of the discount rate. Indeed, GEMA itself agrees with this correction in a 2019 consultation where it noted: “*We contacted investment managers and received confirmation that their published values are in geometric terms. We therefore agree with Oxera that geometric averages may need upward adjustment*”.²⁸⁴ GEMA should therefore have made an upward adjustment of 1.87%, consistent with the DMS (2020) data, to correct these biases in order to arrive at an accurate discount rate. However, GEMA incorrectly has only made an adjustment of 1%, in line with a single broker report by JP Morgan.²⁸⁵

- (c) **Third**, GEMA’s use of the TMR forecasts by investment managers as a cross-check on the CoE range is flawed because it fails to exclude an outlier data point produced by Schroders (based on US rather than UK data),²⁸⁶ which contributed to erroneously lowering its CoE estimate. According to Oxera’s analysis, nearly the entirety of the decline in GEMA’s estimated TMR is due to one single change in the investment horizon for Schroders from 30 years to 10 years to match GEMA’s other data points, which created a new value that is an extreme outlier that should have been disregarded. The Schroders estimates relied on by GEMA are also based on US (rather than UK) data, rendering them inconsistent with the rest of the sample (which is composed of UK data). Given these biases, the Schroders data should have been excluded by GEMA.

1E.vii. TMR – Dividend Discount Model

- 4.122 GEMA has failed to take account of Oxera’s cross-check evidence using expected market return derived from the Dividend Discount Model (**DDM**) (as considered by the CMA in its PR19 Provisional Findings²⁸⁷) which points to a higher TMR estimate than the historical average equity market returns. Despite this evidence being provided in response to the Draft Determination, GEMA did not engage with it at all.²⁸⁸ DDMs are an important cross-check to estimate expected future equity returns, as today’s market price must equal expected future dividends and buybacks, discounted by the TMR.
- 4.123 DDMs are used to infer the discount rate applied to future cash flows; under the DDM theory, the expected market return is the discount rate at which the present

²⁸³ Cooper, I. (1996), ‘Arithmetic versus geometric mean estimators: Setting discount rates for capital budgeting’, *European Financial Management*, 2:2, **PH-1 / Tab 37**.

²⁸⁴ RIIO-2 - Sector Specific Methodology Decision, Finance Annex, **NOA-1 / Tab 40 / Para 3.90**.

²⁸⁵ RIIO-2 - Sector Specific Methodology Consultation, Finance Annex, 18 December, **NOA-1 / Tab 24 / Page 37 / Para. 3.90**.

²⁸⁶ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Section 9.A1E**.

²⁸⁷ Competition and Markets Authority, ‘Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations - Provisional Findings’, September 2020, **NOA-1 / Tab 55 / Paras 9.208–9.212**.

²⁸⁸ GEMA fails to address the points raised by Oxera on the forward-looking evidence on the TMR. RIIO-2 - Final Determination, Finance Annex, **NOA-1 / Tab 12 / Appendix 2**.

value of future dividends is equal to the current market price. The DDM used by Oxera is composed of three parameters:

- (a) dividend yield, which is observed in the market;
- (b) share buybacks, which are also observed in the market; and
- (c) the growth rate of dividends and buybacks, which needs to be assumed.

4.124 The result of the DDM is the expected market return (or total market return), which is equal to the sum of the three components above. Evidence from this primary cross-check, the DDM, considers the historical dividend yield and share buybacks of the FTSE All-Share Index, and different growth rate forecasts. The analysis (set out in detail in the Oxera Cost of Equity report²⁸⁹) show results that, based on the five-year average, the expected CPI-real equity return is 6.7% based on UK GDP growth forecasts, and – when a weighted sample of countries is considered representing where the FTSE All-Share companies earn their revenues – the expected real market return is 8.4%. These results support Oxera’s position that the TMR should be in a range between 7% to 7.5%.

1E.viii. TMR – TMR in USD²⁹⁰

4.125 GEMA uses UK returns expressed in USD terms as a cross-check of TMR and in support of its choice of CPI (rather than RPI) as an inflation measure because it claims: (a) that US CPI is a more accurate measure of inflation than UK inflation indices; and (b) that exchange rates reflect the difference in inflation between two currencies (also known as the Purchasing Power Parity theorem). Both these claims are unsupported by the evidence and finance theory:

- (a) Oxera’s analysis indicates that the apparent comparability of real return in GEMA’s analysis is driven more by the choice of averaging period than by the inflation index. As shown in Table 5 below, return deflated using the DMS inflation index are identical to the USD-based returns for the 1899-2012 period, but the 2012 DMS data used RPI to calculate real market returns from 1947 onwards, and a narrowly defined index of retail prices before that. CPI is not used at all in this series, therefore lending no support of the use of CPI over RPI. Furthermore, as shown in Table 5, there are differences in the returns expressed in GBP and USD over the 2000-2012, 1955-2012 and 1899-2000 periods. Due to the instability of this relationship over different time periods, GEMA’s analysis is not a useful cross-check.

²⁸⁹ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Section 6C.1.**

²⁹⁰ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Section 9.A2B.**

Table 5 – Average real UK market returns measured in GBP and USD, based on DMS (2012) and deflated using RPI inflation

Period	DMS real returns (£)	DMS real returns (\$)
1899–2012	5.23%	5.23%
1899–2000	5.78%	5.61%
2000–2012	0.67%	2.08%
1955–2012	6.58%	7.32%

Note: Historical geometric average of real UK market returns in GBP and USD, deflated using the DMS (2012) inflation series and nominal market returns dataset.

Source: Oxera analysis, based on the DMS (2012) dataset, and cross-checked against Table 1.1 in Wright, S. and Smithers, A. (2014), ‘The Cost of Equity Capital for Regulated Companies: A Review for Ofgem’, p. 7.

- (b) Further, as Oxera explains, the underlying assumption of purchasing power parity (that GEMA relies on to justify the use of TMR expressed in USD as a cross-check) is far from a universally accepted principle. A recent meta-study found at least 60 academic articles empirically documenting violations of the principle.²⁹¹

1E.ix. Statutory grounds of appeal for Ground 1E

4.126 GEMA’s approach to cross-checks, and accordingly its decision to proceed with the licence modification under section 11A of EA 1989 on this basis, is therefore wrong on the following statutory grounds:

- (a) Due to the errors made by GEMA in applying the cross-checks, GEMA’s decision fails to achieve the effect stated by GEMA to set an “appropriate balance of risk and return”,²⁹² to set a WACC “consistent with current evidence and market conditions”²⁹³ and to fairly compensate investors for the risks they face by setting an appropriate beta.²⁹⁴ **[section 11E(4)(d) of EA 1989]**
- (b) The decision was based on errors of fact and/or law (in particular the public law duty to reach reasonable decisions). GEMA made incorrect use of cross-checks and has also failed to take account of relevant evidence of these errors. **[section 11E(4)(c) and (e) of EA 1989]**

²⁹¹ Tica, J. & Druzic, I. (2006), “The Harrod–Balassa–Samuelson Effect: A Survey of Empirical Evidence”, EFZG Working Paper Series 0607, **PH-1 / Tab 94**.

²⁹² RIIO-2 - Final Determination, Core Document, **NOA-1 / Tab 9 / Page 52**; see also RIIO-2 - Draft Determination, Core Document (9 July 2020), **NOA-1 / Tab 1 / Para 6.1**.

²⁹³ RIIO-2 - Final Determination, Core Document, **NOA-1 / Tab 9 / Para 6.3**; see also RIIO-2 - Draft Determination, Finance Annex (9 July 2020), **NOA-1 / Tab 2 / Para 1.10**.

²⁹⁴ RIIO-2 - Final Determination, Core Document, **NOA-1 / Tab 9 / Page 53**; see also RIIO-2 - Draft Determination, Core Document (9 July 2020), **NOA-1 / Tab 1 / Para 2.1**.

- (c) GEMA's errors have resulted in a CoE which is too low to attract the critical investment needed during the price control.²⁹⁵ Therefore, GEMA has failed properly to have regard to and/or to give the appropriate weight to: (i) the interests of existing and future consumers in the delivery of a secure electricity supply and in reducing electricity-supply emissions of targeted greenhouse gases (sections 3A(1)-(1A) EA 1989); (ii) the need to secure that all licence holders are able to finance their activities (section 3(2)(b) EA 1989); and/or (iii) the Social and Environmental Guidance issued by the Secretary of State and the related Net Zero Duty (section 3B(2) EA 1989) [section 11E(4)(a) and (b) of EA 1989].

1E.x. Relief sought for Ground 1E

- 4.127 As explained above, GEMA has relied on cross-checks for reducing the midpoint of the CoE produced by its CAPM analysis from 4.55% to 4.40% and therefore in justifying its decision to adopt a CoE point estimate which is too low.²⁹⁶ In particular, in reducing the midpoint of its range to 4.40%, GEMA then uses this to suggest that it then "aimed up" by selecting a point estimate of 4.55%²⁹⁷ which – for the reasons explained in section 1Dii above – is clearly inaccurate.
- 4.128 The financial impact of the errors identified in this ground of appeal is not additional to the impact of the errors identified in the rest of Ground 1 above. Rather, the errors in cross-checking reinforce that GEMA was wrong to approach CoE in the way it did, in each of the respects identified in Ground 1A-1D.

²⁹⁵ Alkirwi-1 / Page 9 et seq.

²⁹⁶ Section 1Dii above.

²⁹⁷ RIIO-2 - Final Determination, Finance Annex, NOA-1 / Tab 12 / Page 69.

Section 5: Ground 2 – Flawed outperformance adjustment

- 5.1 In Step 3 in its decision-making on CoE, GEMA applied a specific reduction to the CoE level calculated at Steps 1 and 2 to reflect GEMA’s expectation of outperformance. GEMA refers to this approach as the “*outperformance adjustment*”.
- 5.2 On this basis, GEMA further reduced the allowed return for SSEN Transmission by 22 bps below its (already too low) estimate of the CoE to reflect what it saw as a likelihood that SSEN Transmission would earn some of investors’ required returns via outperformance of costs. If this outperformance does not materialise at individual company level, GEMA states that affected TOs will potentially receive a ‘top-up’ allowance of up to 22 bps.²⁹⁸
- 5.3 There is no regulatory precedent for deducting potential outperformance ex-ante from a company’s allowed return in a price control in this manner. Using the wide array of regulatory tools available to it, and taking account of all relevant evidence, GEMA should have set an appropriately calibrated price control, in which case there would be no need or justification for any such ex-ante deduction. Indeed, GEMA has applied a stringent and exacting approach to all aspects of its Decision, scrutinising and reducing cost allowances where it considered it should do so. GEMA did not adopt an approach of allowing “head room” on cost allowances or any other aspect of its Final Determination. Accordingly, there was no proper basis for reducing SSEN Transmission’s CoE in this way.
- 5.4 Moreover, GEMA’s decision runs contrary to a key underlying principle of UK economic regulation and its own guidance on the implementation of RIIO: that companies should be encouraged to outperform for the benefit of consumers. This principle is inherent to the RIIO framework: RIIO stands for “*Revenue = Incentives + Innovation + Outputs*” (emphasis added).²⁹⁹ The importance of giving companies the incentive to outperform (by allowing them to benefit from outperformance) is a guiding principle in the founding documents of the RIIO model, including GEMA’s Handbook for Implementing the RIIO Model (the *Implementation Handbook*). For example, the Implementation Handbook (which informs stakeholders “*how the RIIO model works in practice*”),³⁰⁰ explains that “[t]he way the price control will be set is intended to ensure that network companies will earn **higher returns for good performance** in line with consumer expectations and lower returns for poor performance. Incentives will be calibrated to ensure they provide long-term value for money...” (emphasis added).³⁰¹ GEMA assures stakeholders that “**investors and consumers will share the benefits** when the company delivers outputs for less money than Ofgem envisaged when setting the price control” (emphasis added).³⁰²

²⁹⁸ RIIO-2 - Final Determination, Finance Annex, NOA-1 / Tab 12 / Para 3.169.

²⁹⁹ GEMA (2010), ‘Handbook for Implementing the RIIO Model’, October, NOA-1 / Tab 89 / Page 1.

³⁰⁰ GEMA (2010), ‘Handbook for Implementing the RIIO Model’, October, NOA-1 / Tab 89 / Page 1.

³⁰¹ GEMA (2010), ‘Handbook for Implementing the RIIO Model’, October, NOA-1 / Tab 89 / Para 5.7.

³⁰² GEMA (2010), ‘Handbook for Implementing the RIIO Model’, October, NOA-1 / Tab 89 / Para 10.6.

- 5.5 By undermining incentives to perform and invest, the outperformance adjustment stands to have a seriously detrimental impact on long-term productivity of the energy sector and on the interests of existing and future consumers, which GEMA has failed to consider, contrary to its own implementation guidance. The outperformance adjustment would set a highly unattractive precedent for regulated utilities in the UK, and electricity transmission operators in particular, dampening the key “*incentive*” part of the incentive-based regime.
- 5.6 Below, SSEN Transmission explains why:
- (a) applying an outperformance adjustment departs from established regulatory best practice and is an error in principle (**section 2.i**);³⁰³
 - (b) in any event, the adjustment for expected outperformance is particularly ill-suited in the context of RIIO-T2’s already challenging price control (**section 2.ii**);³⁰⁴ and
 - (c) the expected outperformance adjustment will have an adverse impact on incentives³⁰⁵ and investments³⁰⁶ in RIIO-T2 *and* in subsequent price reviews (**section 2.iii**).
- 5.7 **Section 2.iv** explains why GEMA’s decision on the outperformance adjustment is wrong on the statutory grounds in section 11E of the EA 1989 and, in **section 2.v**, SSEN Transmission outlines its request for relief for the outperformance adjustment.
- 2.i. GEMA’s outperformance adjustment departs from established regulatory best practice and is an error in principle***
- 5.8 GEMA’s stated intent behind the adjustment is to remedy an alleged information asymmetry between regulators and companies as to the latter’s ability to outperform cost allowances.³⁰⁷ The underlying basis of GEMA’s approach is to treat company outperformance as a “*cost*” to consumers which it purports to “*remedy*” by (i) using historical data to estimate expected future outperformance by operators; and (ii) deducting this estimate from the CoE.
- 5.9 However, GEMA’s decision in this respect is entirely unorthodox and there is no regulatory precedent for deducting expected outperformance ex-ante from a price control. GEMA’s treatment of outperformance as a cost is inconsistent with its own guidance in the Implementation Handbook (see above).
- 5.10 It is also a shared view among economic regulators that the unorthodox approach of adjusting for outperformance is not well-suited to resolving any information asymmetries (the problem GEMA purports to solve with the adjustment). In a study by John Earwaker and Nick Fincham who interviewed

³⁰³ Oxera, Expected Outperformance Adjustment Report, **PH-2 / Tab 1 / Section 3A**.

³⁰⁴ Oxera, Expected Outperformance Adjustment Report, **PH-2 / Tab 1 / Section 3B**.

³⁰⁵ Oxera, Expected Outperformance Adjustment Report, **PH-2 / Tab 1 / Sections 4A and 4B**.

³⁰⁶ Oxera, Expected Outperformance Adjustment Report, **PH-2 / Tab 1 / Section 4C**.

³⁰⁷ RIIO-2 - Sector Specific Methodology Decision, Finance Annex, **NOA-1 / Tab 40 / Para 3.281**.

32 former regulators (including former Ofgem officials) to assess the impact of information asymmetry between regulators and operators, the authors report:

...[T]here was little acceptance of the notion that regulated companies understand what is possible and the regulators do not. Instead, it seems more realistic to approach questions about regulatory design with the attitude that neither regulators nor regulated companies can be fully aware of what the future holds. It follows that **modern-day regulators should not consider that they are doomed to fail and with a toolkit that is brimming with modern day regulatory weaponry, ought to have the self-belief that they are capable of making balanced, and well-justified choices when they calibrate price controls**

Provided that a regulator grounds its judgment in evidence, including...an appropriate reading of history, we do not think that the scales will always tilt in the direction of shareholders or that there is a reason to conclude that it is necessary to make a final, lump-sum cut to mop up regulatory error. Indeed, we would say to **anyone that is contemplating such an overlay that they will needlessly leave themselves vulnerable to appeal if they omit to use the discretions that are afforded to them as a regulator and show a preference instead for a fix that our sample of experienced regulatory practitioners has indicated is open to challenge.**³⁰⁸ (emphasis added).

- 5.11 The potential “*fix*” that the sample of regulatory officials in Earwaker and Fincham’s study concluded was open to challenge and vulnerable to appeal was “*a final lump-sum deduction from allowed revenues to capture otherwise overlooked scope for the regulated firm to make cost savings and/or output improvements*”;³⁰⁹ in other words, an outperformance adjustment.
- 5.12 Of 32 interviewed former officials, 25 either disagreed or strongly disagreed with the suggestion that an outperformance adjustment should be adopted by economic regulators as a final step in price review. The study also highlighted that there was a strong feeling among those interviewed that “*earned rewards are part and parcel of a healthy regulatory regime and must not be subsequently rebadged...as a symptom of regulatory failure*”.³¹⁰ Outperformance does not mean a regulator has made an error in the price control. It more likely means companies have responded positively to incentives, with resulting benefits being shared between investors and consumers.³¹¹
- 5.13 The study observes that “*the idea that a regulator should, with one hand, strive hard to set fair expenditure allowances and output targets yet, with the other, concede that it is doomed to fall short – crucially without any contemporaneous*

³⁰⁸ National Grid (2020), ‘Draft Determination Supporting Document NGET - Finance Annex Earwaker report’, August, NOA-1 / Tab 83 / Para 27.

³⁰⁹ Earwaker and Fincham (2020), ‘Information asymmetry and the calibration of price controls’, August, NOA-1 / Tab 80 / Page 17.

³¹⁰ Earwaker and Fincham (2020), ‘Information asymmetry and the calibration of price controls’, August, NOA-1 / Tab 80 / Page 26.

³¹¹ Earwaker and Fincham (2020), ‘Information asymmetry and the calibration of price controls’, August, NOA-1 / Tab 80 / Page 21.

*evidence to support this conclusion – left the vast majority of [interviewed] regulatory experts feeling very uncomfortable”.*³¹²

- 5.14 This discomfort underlines the fact the existing regulatory tools that GEMA has available are capable of being used to set an appropriately calibrated price control. GEMA had a wealth of information before it from SSEN Transmission and engaged in a lengthy process of scrutiny of SSEN Transmission’s Business Plan in advance of its Final Determination. GEMA does not suggest that it lacks the powers it needs to scrutinise SSEN Transmission’s plans and give SSEN Transmission appropriate allowances in light of those plans. There is therefore no reasonable basis for GEMA to resort to an unorthodox deduction of “expected” future outperformance from the CoE figure.³¹³
- 5.15 Oxera’s expert report demonstrates that GEMA’s decision to apply the outperformance adjustment was based on a number of empirical errors:³¹⁴
- (a) GEMA incorrectly assumed that historic performance in previous price controls is a good indicator of expected performance in the RIIO-T2 period. This assumption is flawed given the diversity in the design of previous price controls and of the conditions in which outperformance was observed. There is no sound empirical basis for GEMA’s assumption that past performance is a reliable basis of future performance in the RIIO-T2 period.
 - (b) GEMA’s 22 bp adjustment was based on flawed analysis of historical cost performance relative to regulatory allowances in price controls (from as early as the 1990s) across energy, airport, air traffic control, and water sectors which are of limited relevance to expected returns for energy networks in RIIO-T2.

2.ii. The adjustment for expected outperformance is particularly ill-suited in the context of an already challenging price control package

- 5.16 An outperformance adjustment is flawed in principle but is particularly ill-suited in relation to the Decision, which incorporates novel uncertainty mechanisms, tough cost reduction packages and cost indices. Among other measures detailed in the Oxera report:³¹⁵
- (a) GEMA has set an ongoing efficiency challenge of 1.2% of totex per year across most of the transmission sector (compared to just 0.8% in RIIO-1). This toughening of the efficiency challenge that GEMA has set for

³¹² Earwaker and Fincham (2020), ‘Information asymmetry and the calibration of price controls’, August, NOA-1 / Tab 80 / Page 8.

³¹³ Oxera, Expected Outperformance Adjustment Report, PH-2 / Tab 1 / Section 3A.

³¹⁴ Oxera, Expected Outperformance Adjustment Report, PH-2 / Tab 1 / Section 3B.2.

³¹⁵ Oxera, Expected Outperformance Adjustment Report, PH-2 / Tab 1 / Section 3B.1.

SSEN Transmission minimises the scope for potential outperformance over the price control period.

- (b) GEMA's cost efficiency targets were made more stringent in RIIO-T2 (set at the 85th percentile in RIIO-2 compared to 75th percentile in RIIO-1).
- (c) GEMA has linked a greater proportion of expenditure to price control deliverables that allow it to recover revenues if a TO does not deliver a specified output.
- (d) In the event that, despite these significantly tougher efficiency and cost challenges, SSEN Transmission does manage to deliver any outperformance over the RIIO-T2 period, GEMA has reduced the proportion of totex outperformance that is retained by TOs from a higher range of 44% to 50% in RIIO-1 to just 33% to 49% in the RIIO-T2 Final Determination.

5.17 Taken together, these measures make it considerably less likely that licence holders will in practice be able to achieve any outperformance in the price control period. These stringent cost challenges, which were not present in previous price controls either at all or to the same degree, also reinforce the fact that GEMA erred in relying on past performance to estimate future performance over the RIIO-T2 period. GEMA therefore had no cogent basis to assume that SSEN Transmission is likely to outperform over the RIIO-T2 period or that any reduction, far less a reduction of 22 bps, should be made to SSEN Transmission's CoE.

2.iii. The outperformance adjustment will have an adverse impact on incentives and investments in RIIO-2 and in subsequent price reviews

5.18 GEMA's approach gives rise to *increased* (not decreased) costs to consumers because, by deducting expected outperformance ex-ante from a price control, the outperformance adjustment will dampen incentives for companies to outperform in RIIO-T2 and beyond. GEMA's decision to apply the outperformance adjustment was therefore clearly wrong on the grounds that it was in breach of its statutory and public law duties.

5.19 **First**, and critically, the outperformance adjustment undermines the very basis on which the incentive-based RIIO regulatory regime was originally designed. As Oxera explain and as Mr Alkirwi elaborates in his witness statement, the outperformance adjustment incentivises companies **not** to outperform.

5.20 Rationally expecting that any outperformance during RIIO-2 could be considered by GEMA in estimating the size of the outperformance adjustment in RIIO-3, companies will be incentivised to act strategically so as to not display their performance capabilities, which would otherwise be taken into account to set appropriate efficiency challenges in subsequent price reviews.³¹⁶ This results in a ratchet effect that leads to lowered cost benchmarks for future price

³¹⁶ Oxera, Expected Outperformance Adjustment Report, **PH-2 / Tab 1 / Section 4A; Alkirwi-1 / Paras.10.3 – 10.13.**

controls; thereby dampening long-term productivity in the sector and actively harming consumer welfare.

- 5.21 The CMA has signalled agreement with this view (consistent with the Earwaker and Fincham consensus), finding that company outperformance can be desirable (and therefore does not need to be adjusted for) in the context of a ‘repeated game’ (i.e. periodic price reviews). For example, in its recent cost of capital PR19 January 2021 Working Papers, the CMA states:

Incentives are part of normal regulation and operational outperformance is a desirable outcome. If companies are able to outperform, this delivers benefits to customers both from the actual improvements and from Ofwat being able to use the evidence in its comparisons in future periods.³¹⁷

- 5.22 GEMA’s outperformance adjustment decision runs entirely contrary to these principles. Indeed, the Implementation Handbook itself cautions against use of revenue adjustment mechanisms generally, primarily out of a concern for their impact on incentives:

- (a) GEMA “[committed] *not to [make] retrospective adjustments to revenue in the event that costs turn out to be different to what was assumed in the price control itself, save through the application of the efficiency incentive rate*” (emphasis added).³¹⁸
- (b) It informed stakeholders that it “*will only consider using such ‘ex-post adjustments’ if outputs are not delivered or if [it has] a concern that a company has manifestly wasted money*”.³¹⁹ GEMA advances neither of these claims as a justification for the expected outperformance adjustment in RIIO-2.
- (c) GEMA “*will not make discretionary adjustments to ‘claw back’ differences between the base revenue allowances and what a company actually spent*”.³²⁰
- (d) GEMA cautions against the overuse of uncertainty mechanisms as they “*can undermine incentives for efficiency*” which may consequently increase costs.³²¹

- 5.23 Oxera shows empirically the effect that the outperformance adjustment – which ignores the various concerns outlined above – would have on future price reviews. Oxera predicts that if the adverse impact on incentives results in **just**

³¹⁷ CMA (2021), PR19 January Working Papers – Point Estimate, **PH-1 / Tab 49 / Para 81**.

³¹⁸ GEMA (2010), ‘Handbook for Implementing the RIIO Model’, October, **NOA-1 / Tab 89 / Page 27 / Para 5.5**. Available at: <https://www.ofgem.gov.uk/ofgem-publications/51871/riiohandbookpdf>

³¹⁹ GEMA (2010), ‘Handbook for Implementing the RIIO Model’, October, **NOA-1 / Tab 89 / Page 83 / Para 10.3**.

³²⁰ GEMA (2010), ‘Handbook for Implementing the RIIO Model’, October, **NOA-1 / Tab 89 / Para 10.19**.

³²¹ GEMA (2010), ‘Handbook for Implementing the RIIO Model’, October, **NOA-1 / Tab 89 / Page 98, Table 7**.

0.70% increase in allowed totex in RHO-2, it would wipe out all the cost savings from the application of the outperformance adjustment.³²²

- 5.24 **Second**, as Oxera shows,³²³ the ex-post ‘top up’ under the outperformance adjustment also creates reduced incentives for companies to outperform: if companies’ expected outperformance is between 0 and 22 bps, companies do not have the incentive to outperform as the top-up mechanism would reimburse them at the end of the price control if the expected 22 bps outperformance is not achieved.
- 5.25 The Competition Commission shared the concern that regulatory decisions should not dampen incentives. In its final report on Bristol Water plc’s reference of Ofwat’s price review in 2010, the Competition Commission stated that *“a framework that did not provide incentives for companies to carry out their functions properly would have undesirable similarities to a cost-plus system, since it would guarantee a company a return on capital regardless of how poorly it performed”*.³²⁴
- 5.26 **Third**, GEMA has failed to consider the impact of the outperformance adjustment on investment decisions. As Oxera shows,³²⁵ the top-up mechanism inherent in the outperformance adjustment biases investment decisions in favour of lower-risk projects. This distortion of investment incentives will harm efficiency and innovation and is therefore contrary to the interests of consumers.
- 5.27 Accordingly, the possibility of an ex-post top-up allowance – as GEMA envisages for companies that fail to achieve the expected outperformance – **does not** obviate the harm to consumer welfare caused by GEMA’s approach.
- 5.28 Moreover, because GEMA’s decision on CoE is already too low as a result of the other errors identified in Ground 1 above, applying a further deduction to account for *“expected outperformance”* will further hamper investor confidence and investment.
- 5.29 GEMA’s decision to depart from regulatory best practice and apply its outperformance adjustment on the basis of empirically flawed measurements of *“expected outperformance”* thus results in perverse performance and investment incentives that harm consumer welfare. In adopting this unprecedented approach, GEMA has – without basis – prioritised the possibility of short-term bill reductions and overlooked the likely long-term negative impact on outcomes and bills as a result of delayed investments, especially those necessary to achieve the Net Zero target. This approach was not in the interests of consumers, and in particular future consumers, and was not in accordance with GEMA’s Financeability Duty.

³²² Oxera, Outperformance Adjustment Report, **PH-2 / Tab 1 / Section 4A / para. 4.8**.

³²³ Oxera, Outperformance Adjustment Report, **PH-2 / Tab 1 / Section 4B; Alkirwi-1 / Paras. 10.14 – 10.23**.

³²⁴ Competition Commission (2010), Report, Bristol Water plc, Reference under section 12(3)(a) of the Water Industry Act 1991, **NOA-1 / Tab 62 / Para 2.26**.

³²⁵ Oxera, Outperformance Adjustment Report, **PH-2 / Tab 1 / Section 4C**.

2.iv. Statutory grounds of appeal for Ground 2

5.30 GEMA's decision on outperformance adjustment, and accordingly its decision to proceed with the licence modification under section 11A of EA 1989, is therefore wrong on the following statutory grounds:

- (a) GEMA's decision fails to achieve the effect stated by GEMA. Not only does the mechanism fundamentally undermine the principles of the RIIO framework, but also GEMA's three stated objectives for such an ex-post adjustment which were: "*maintaining high confidence in the regulatory regime; fairness for companies and investors; and fairness for consumers.*"³²⁶ For the reasons explained above, the mechanism fails on all three counts. Contrary to regulatory best practice, this mechanism does not achieve a balanced or fair framework for consumers because it disincentivises investment and outperformance by TOs while adversely affecting incentive-based regulation in the current and future price reviews. **[section 11E(4)(d) EA 1989]**
- (b) The expected quantum of outperformance is based on unreliable evidence that does not support a 22 bp adjustment. GEMA's decision was therefore based on an error of fact and/or law, in breach of its public law duty to reach reasonable decisions. **[sections 11E(4)(c) and (e) EA 1989]**
- (c) GEMA has introduced a mechanism that will disincentivise companies from outperforming and investing, therefore resulting in negative consequences for existing and future consumers. GEMA has failed properly to have regard to and/or to give the appropriate weight to: (i) the interests of existing and future consumers in the delivery of a secure electricity supply and in reducing electricity-supply emissions of targeted greenhouse gases (sections 3A(1)-(1A)(a) EA 1989); (ii) the need to secure that all licence holders are able to finance their activities (section 3(2)(b) EA 1989); and/or (iii) the Social and Environmental Guidance issued by the Secretary of State and the related Net Zero Duty (section 3B(2) EA 1989). **[sections 11E(4)(a) and (b) EA 1989]**

2.v. Relief sought for Ground 2

5.31 SSSEN Transmission respectfully requests that the CMA remove GEMA's outperformance adjustment from the CoE.³²⁷

³²⁶ RIIO-2 - Draft Determination, Finance Annex, **NOA-1 / Tab 2 / Para 3.152**; see also RIIO-2 - Final Determination, Finance Annex, **NOA-1 / Tab 12 / Page 66**.

³²⁷ The outperformance adjustment is referred to in Condition 2.3 of the special licence conditions (**NOA-1 / Tab 15**), Chapter 2 of the Price Control Financial Handbook, and also in the Price Control Financial Model. These references would need to be removed if the outperformance adjustment were to no longer apply.

Section 6: Ground 3 – Reserved Powers

A. Overview

- 6.1 As part of GEMA’s framework for RIIO-2, it has put in place numerous wide-ranging mechanisms that allow it to revisit and significantly modify SSEN Transmission’s totex allowances during the course of the price control. The sheer quantity of the allowances affected by these mechanisms, and the hugely material effect that they could have on SSEN Transmission’s totex, is such that, in reality, the Final Determination is in significant respects only a provisional decision with material decisions yet to be made throughout the five-year price control period. In substance, GEMA has deferred its decision-making on key aspects of the price control and has done so in a way that stands to deny SSEN Transmission its statutory consultation and appeal rights.
- 6.2 These adjustment mechanisms can broadly be divided into two categories:
- (a) The **first category** encompasses mechanisms by which SSEN Transmission can ask GEMA to allow the funding of significant projects. These are referred to as “Re-opener” mechanisms. SSEN Transmission’s current estimate of the value of works in respect of which it intends make such a request is at least £1.3 billion and potentially up to £2.8 billion.³²⁸ These include the Shetland Link, Eastern HVDC, and Skye projects, and a range of other connection and infrastructure projects. These schemes and the need for the additional investment were all included in SSEN Transmission’s Business Plan, and GEMA is therefore fully aware of SSEN Transmission’s need to carry them out during RIIO-2.³²⁹
 - (b) The **second category** encompasses mechanisms that allow GEMA, during the course of the price control, to reduce SSEN Transmission’s totex allowance from the level set by GEMA in its Final Determination. These future decisions do not merely cover minor or consequential aspects of the price control. By GEMA’s own estimates, approximately 60% of the £11 billion in baseline totex allowed collectively to the TOs is subject to being reduced by GEMA via such mechanisms.³³⁰ For SSEN Transmission specifically, GEMA’s “Evaluative Price Control Deliverable” or “Evaluative PCD” mechanisms alone allow GEMA to revisit almost £900m of its baseline totex.³³¹ GEMA’s use of these mechanisms thus stands materially to amend the totex-related decisions that it has already made.
- 6.3 In view of the magnitude of totex that is subject to these mechanisms (as set out above), it is plain that the decisions that GEMA makes in their operation will be

³²⁸ Alkirwi-1 / Para 11.1.

³²⁹ Ibid.

³³⁰ RIIO-2 - Final Determination, Electricity Transmission System Annex, NOA-1 / Tab 10 / Para 1.7.

³³¹ Alkirwi-1 / Table 6.

of the utmost importance to SSEN Transmission and could have the effect of fundamentally altering the entire nature of its price control overall.

- 6.4 In substance, GEMA will be taking a price control decision in many stages over the course of the price control period, instead of taking an overall decision at the outset in the usual way. In these circumstances, it is axiomatic that SSEN Transmission (and third parties) have the right to challenge GEMA's totex-adjustment decisions *during the price control* in the same way that it has the right to challenge GEMA's decision to set the (provisional) totex allowance *at the start thereof*, namely via the mandatory statutory process set out in section 11C of EA 1989. Since the substance of material parts of the price control is, in reality, subject to future decisions of GEMA there is no principled basis on which to distinguish these future decisions from the decision to implement the "final" determination.
- 6.5 The important statutory rights and safeguards for licence holders and third parties set out in Section 2 above – in particular, the right to consultation under section 11A and the right of appeal to the CMA under section 11C – only apply in respect of licence modifications. Despite this, however, GEMA has wrongly and unlawfully attempted to circumvent these rights and safeguards in relation to its totex-adjustment decisions, by proposing licence conditions that purport to confer on it the power to amend the licence significantly (or related documents referred to in the licence) in this regard by way of "direction". A key consequence of a decision being taken by GEMA by way of a direction in this context is that SSEN Transmission and the third parties referred to in section 11C(2) will not have a right to appeal the direction to the CMA under section 11C as it would in relation to all other substantive decisions implementing a price control.
- 6.6 The remainder of this Section is set out as follows:
- (a) **Sub-Section B** sets out how GEMA has sought to implement these purported powers in SSEN Transmission's licence.
 - (b) **Sub-Section C** explains why GEMA's attempts to introduce such powers are ultra vires and wrong in law, and therefore fall to be set aside by the CMA under section 11E(4) of EA 1989.
 - (c) **Sub-Section D** sets out the relief that SSEN Transmission is seeking.

B. Reserved Powers in SSEN Transmission's licence

- 6.7 The reserved powers of direction that GEMA has purported to confer upon itself by way of its RIIO-2 licence modifications against which SSEN Transmission appeals (the **Reserved Powers**) are set out in the third column of the table appearing in Annex A to the witness statement of Mr Alkirwi³³². As Mr Alkirwi explains, the Reserved Powers in question are connected to one or more of the following aspects of the price control.

³³² Alkirwi-1 / Annex A.

Re-opener mechanisms³³³

- 6.8 These were introduced by GEMA to allow companies to apply for additional funding during the price control – in effect “re-opening” the Final Determination – to make the necessary investment in their networks towards achieving Net Zero (amongst other things). As noted above, SSEN Transmission intends to apply to GEMA for additional funding of at least £1.8 billion and potentially up to £2.8 billion via the Re-opener mechanisms, to fund a series of significant projects to upgrade the capacity of the transmission network.
- 6.9 There are various Re-opener mechanisms in SSEN Transmission’s licence, though as explained by Mr Alkirwi, their general scheme of operation is much the same³³⁴. In particular, following an application by SSEN Transmission pursuant to such a mechanism, GEMA will be required to make decisions such as whether the needs case for the proposed scheme has been met, and if so what efficient totex allowance SSEN Transmission should be allowed and what the delivery date for the scheme should be. As explained by Mr Alkirwi, these decisions are materially the same as those that GEMA makes at the outset of the price control when determining whether SSEN Transmission should be funded for a given scheme, and, if so, what that funding should be.³³⁵
- 6.10 GEMA’s decisions in relation to the Re-opener mechanisms are to be given effect in the licence by GEMA amending tables appearing therein by “direction”.³³⁶

Evaluative PCDs³³⁷

- 6.11 GEMA has specified that SSEN Transmission must deliver various classes of output during RIIO-2, one of which is “Evaluative PCDs”. If SSEN Transmission fails to deliver any of the outputs falling within this class by the specified delivery date, or an alternative that delivers equivalent or better outcomes for customers, then GEMA may revisit and reduce SSEN Transmission’s corresponding cost allowance for the output in question. GEMA intends this mechanism to ensure that customers pay only for what companies actually deliver during the price control. The value of SSEN Transmission’s totex that is subject to amendment in this way is almost £900m.
- 6.12 As noted by Mr Alkirwi, GEMA’s decision-making on Evaluative PCDs will involve complex (re)assessments of whether any output deviates from that specified in the Final Determination / SSEN Transmission Licence; the value for consumers of the output delivered; whether costs savings achieved were attributable to efficiency or innovation; and what were the efficient costs of

³³³ Alkirwi-1 / Paras 11.13-11.18 and 11.32-11.40.

³³⁴ Alkirwi-1 / Para 11.32 et seq.

³³⁵ Alkirwi-1 / Paras 11.3 and 11.40.

³³⁶ Alkirwi-1 / Para 11.35.

³³⁷ Alkirwi-1 / Paras 11.19-11.26 and 11.36.

delivering the alternative³³⁸. These are all complex assessments that relate to core aspects of the price control decision itself and are substantively the same as the types of decision that GEMA makes at the outset of the price control.³³⁹

- 6.13 SSEN Transmission's amended licence operates so that if GEMA makes a decision to reduce SSEN Transmission's cost allowance for a given Evaluative PCD, then it may specify by "direction" a value for a term used in the calculation of SSEN Transmission's allowed totex, which has the effect of reducing this by that amount.³⁴⁰

Network Asset Risk Metric (*NARM*)³⁴¹

- 6.14 As explained by Mr Alkirwi, the NARM mechanism in SSEN Transmission's licence requires SSEN Transmission to deliver levels of consumer benefit (as quantified in a certain way) in return for the funding that it receives to refurbish and replace its assets. These output targets are referred to as "Baseline Network Risk Outputs", which are calculated in accordance with a "Network Asset Risk Workbook". If SSEN Transmission fails to deliver the targets, then it may incur penalties and/or clawbacks of the associated funding, as determined in accordance with the "NARM Handbook". Moreover, SSEN Transmission's targets may be amended in line with changes to the "NARM Methodology", which governs the procedures necessary to set and measure the targets.
- 6.15 SSEN Transmission's amended licence contains provisions to allow GEMA to change by "direction" the Network Asset Risk Workbook and the NARM Handbook, and to approve by "direction" any changes to the Baseline Network Risk Outputs³⁴². All of these actions have the potential significantly to affect the level of SSEN Transmission's allowed revenue and/or to unjustifiably expose SSEN Transmission to penalties or clawbacks if done inappropriately.

Price Control Financial Instruments³⁴³

- 6.16 As explained by Mr Alkirwi, the "Price Control Financial Instruments" comprise the "Price Control Financial Model" (*PCFM*) and "Price Control Financial Handbook" (*PCFH*) which are principally designed respectively to calculate and govern the calculation of allowed revenue for SSEN Transmission in a given period³⁴⁴. Any change to these documents would directly affect the calculation of SSEN Transmission's allowed revenue and thus could fundamentally alter the basis of SSEN Transmission's price control.
- 6.17 SSEN Transmission's amended licence contains provisions such the PCFM and PCFH can be amended by GEMA by "direction" if it considers that the change

³³⁸ Alkirwi-1 / Para 11.23.

³³⁹ Ibid.

³⁴⁰ Alkirwi-1 / Paras 11.35 and 11.38.

³⁴¹ Alkirwi-1 / Paras 11.27-11.29 and 11.41-11.45.

³⁴² SHET Special Conditions - Clean, NOA-1 / Tab 16 / Special Condition 3.1.

³⁴³ Alkirwi-1 / Paras 11.30 and 11.46.

³⁴⁴ Alkirwi-1 / Paras 11.45.

would not be likely to have a “significant impact” on SSEN Transmission³⁴⁵. However, as addressed further below, GEMA has provided no guidance on what it considers “significant” to be in this context.

SSEN Transmission’s complaint with GEMA’s approach

6.18 As explained by Mr Alkirwi, SSEN Transmission is not appealing the conclusion that certain price control decisions may have to be taken during the period of the RIIO-T2 price control³⁴⁶. SSEN Transmission’s complaint concerns the way in which GEMA has sought to materially change the SSEN Transmission Licence to implement the future price control decisions that it intends to make in connection with those aspects of the licence. As set out in further detail below, rather than implementing these important decisions by way of the mandatory statutory licence modification procedure in section 11A of EA 1989 (with the attendant right of appeal to the CMA under section 11C), GEMA has instead sought to amend the SSEN Transmission Licence to confer upon itself the power to take decisions relating to fundamental aspects of the substance of SSEN Transmission’s price control by way of “direction”. As is clear from the foregoing, GEMA’s proposed self-conferred power of direction would enable it, in future, to:

- (a) substitute a value at its discretion for a value inserted into the licence by means of a price control licence modification decision, thereby altering, potentially materially, values or decisions in a previous licence modification (including the value of SSEN Transmission’s totex allowance in the Final Determination);
- (b) amend the SSEN Transmission Licence to include new totex allowances and/or delivery dates for additional works not accounted for by the RIIO-T2 Decision; and
- (c) issue and amend documents governing the process by which GEMA proposes to determine potentially significant values and allowances in the RIIO-T2 Decision.

6.19 As noted by Mr Alkirwi, these decisions could not only have a significant impact on SSEN Transmission’s allowed revenue during RIIO-2 but could also adversely affect SSEN Transmission’s regulated asset value (*RAV*) and place potentially significant further downward financial pressure on the business³⁴⁷.

C. Legal Grounds on Reserved Powers

6.20 From the details of GEMA’s proposed licence modifications set out in Sub-Section B above it can plainly be seen that GEMA is attempting to reserve to itself extensive powers to make fundamental alterations to SSEN Transmission’s price control by way of unappealable directions.

³⁴⁵ SHET Special Conditions - Clean, NOA-1 / Tab 16 / Special Condition 8.1.

³⁴⁶ Alkirwi-1 / Para 11.11.

³⁴⁷ Alkirwi-1 / Para 11.9.

- 6.21 The sheer number of these purported powers, the nature of the decisions to which GEMA intends to give effect through them, and the magnitude of the totex that is subject to them, together lead unavoidably to the conclusion that the decisions that GEMA is purporting to empower itself to make by way of “direction” during the price control cannot in substance be distinguished from the (provisional) totex determination that GEMA has made at the outset of the price control. Since the substance (and potentially the extent) of the decisions covered by these mechanisms is the same as that in GEMA’s Final Determination, the mandatory statutory scheme for the implementation of price control decisions, including the applicable right to consultation and right of appeal to the CMA, must equally apply to GEMA’s decisions in this regard.
- 6.22 However, as noted by Mr Alkirwi,³⁴⁸ it appears from GEMA’s own statements that it has included the Reserved Powers as a “self-modification procedure” despite the fact that it will have the effect of depriving SSEN Transmission of its statutory consultation and appeal rights:

“In RIIO2 we will use the following processes most commonly:

- full licence modifications using the statutory process.
- self-modification procedure. This will not include the option for licensees to require the Authority to use the statutory process. However, we will make sure self-modification procedures have a remit appropriate for challenge by way of judicial review rather than an appeal to the CMA and where potentially the self-modification procedure has a very wide remit include some curtailment such as the "significant" test in the PCFI condition.
- directions
- consents.”³⁴⁹

- 6.23 As also noted by Mr Alkirwi, insofar as is relevant to this appeal, GEMA’s reference to the test of ‘significance’ above refers to:³⁵⁰

- (a) the limitation on one of GEMA’s Reserved Powers relating to the LOTI Re-opener, such that the direction will be used only if GEMA’s decision is not “significantly different” to the application submitted by SSEN Transmission, otherwise GEMA will make any amendment to the licence following the statutory procedure under s11A of the EA 1989; and
- (b) the “significant impact” test relating to the Price Control Financial Instruments discussed at paragraph 6.17 above.

- 6.24 However, GEMA has provided no explanation of or justification for this approach. In particular: (i) GEMA has provided no explanation of what power it is relying on to justify the introduction of this test of significance, which does

³⁴⁸ Alkirwi-1 / Para 11.47.

³⁴⁹ RIIO-2 Statutory Consultation on the RIIO-2 Licence Drafting modifications– reasons and effects, NOA-1 / Tab 34 / Para 9.19.

³⁵⁰ Alkirwi-1 / Para 11.48.

not appear in the governing statutes; (ii) GEMA has provided no definition of “significant” in these contexts, leaving SSEN Transmission unsighted as to when GEMA would propose to use the statutory process; (iii) GEMA’s approach would involve determining the applicable procedure according to a prior decision on the substance, contrary to the principle of effective consultation, which GEMA has not addressed; and (iv) GEMA has provided no explanation as to why its test of significance should apply only to the two stated mechanisms, given the enormous scale of the totex that is subject to GEMA’s other Reserved Powers.³⁵¹

- 6.25 GEMA provided further explanation of the justification for its position on the Reserved Powers in a letter to SSEN Transmission dated 19 February 2021, in which it continued incorrectly to express the view that it had the power to determine whether the (mandatory) statutory licence modification procedure was appropriate:

“In respect of the self-modification process and associated documents, we consider that the position taken is appropriate bearing in mind the scope of changes subject to the self-modification processes and the content of the associated documents. The RIIO-2 licence includes various self-modification procedures that we expect to be subject to JR rather than CMA appeal. Stat-mod provisions continue to apply where we consider them to be appropriate.

There is a clear statutory basis for the self-modification provisions in s.7(5) Electricity Act 1989, which provides for self modification to co-exist with the statutory licence modification procedure. We disagree that self-modification procedures have the effect of circumventing licensees’ s11A appeal rights.

[...] Given the nature of the conditions to which self-mods apply and their limited scope (e.g. by reference to particular factual triggers for each Re-opener, PCD assessment only being triggered where PCDs are not Fully Delivered) we consider in each case the self-modification procedures have a remit appropriate for challenge by way of judicial review.

The self-mod process will allow us to avoid running two consultations (informal and statutory consultation), which is generally required for the statutory licence modification process, together with the 56 standstill [sic] period before changes take effect. This creates a lengthy change process. [...]”³⁵²

- 6.26 GEMA’s attempt in this letter to play down the scope and significance of the PCD and Re-opener mechanism to justify its proposed use of directions is plainly inconsistent with its statements in Final Determination about the enormous quantum of totex that is subject to adjustment by way of these mechanisms across the RIIO-2 price control (see paragraph 6.2(b) above). Moreover, as will be explained further below, section 7(5) of EA 1989 does not give GEMA the power to implement price control decisions by way of “direction”.

³⁵¹ Alkirwi-1 / Para 11.49.

³⁵² GEMA, Letter to SSEN Transmission dated 19 February 2021, NOA-1 / Tab 95.

6.27 To the contrary, GEMA’s attempt to circumvent the statutory mechanism for the implementation of, or material amendment to, a price control, or any part thereof (a **Price Control Determination**) by way of the Reserved Powers set out in the Special Conditions outlined above is outside GEMA’s statutory powers and moreover unlawfully breaches GEMA’s explicit statutory and wider public law duties and obligations.

6.28 In particular:

(a) The Reserved Powers would introduce a new extra-statutory process that fails to follow the mandatory process set out in primary legislation, from which GEMA has no authority or power to deviate, for implementing Price Control Determinations under EA 1989. EA 1989 sets out a complete statutory code for the process to be followed when making Price Control Determination and does not confer any power on GEMA to use a “direction”, or any process other than a statutory licence modification to do so. Any attempt:

(i) to use a direction to purport to modify the SSSEN Transmission Licence to give effect to a Price Control Determination (or any document that forms an integral part of GEMA’s Price Control Determination or that is required to implement or interpret the licence); or

(ii) to amend the licence by way of the statutory modification procedure to confer upon itself such powers of direction,

would be contrary to EA 1989 and *ultra vires*; and

(b) Use of the Reserved Powers to give effect to Price Control Determinations would unlawfully frustrate licensees’ statutory right to appeal and the remedies provided to licensees by statute.

6.29 These issues are addressed in detail below.

The Reserved Powers fail to follow the proper statutory licence modification procedure for implementing Price Controls Determinations under EA 1989

6.30 By enacting section 11A EA 1989, Parliament created a bespoke statutory regime for making substantive licence modifications such as a price control. Parliament clearly intended that decisions on price control matters should always take effect by way of section 11A(1) modifications – with attendant rights for licensees to be consulted (section 11A(2)-(4A)) and to appeal to the CMA (sections 11C-11H), together with the Secretary of State’s power of veto (section 11A(5)) and the standstill period (section 11A(8)-(9)).

6.31 The obvious intent of Parliament was that it was section 11A, and only section 11A, that should be used for implementing Price Control Determinations. This is reinforced by the separate provision made for appeals against section 11A modification decisions where the appeal relates to a Price Control Determination, as set out at Section 2 above. GEMA cannot lawfully rely on inferior and inappropriate regulatory mechanisms in order to determine the most important decisions that it makes in respect of transmission licensees.

- 6.32 As set out in its letter of 19 February 2021, GEMA is relying on the general provision in section 7 of EA 1989 about the types of condition that a licence may include³⁵³. However, GEMA cannot lawfully implement a Price Control Determination in two stages by:
- (a) relying on the general provision in section 7(1) read with section 7(3)(a) to insert new licence conditions requiring a licensee to comply with directions from GEMA implementing Price Control Determination; and
 - (b) making a “direction” that the licensee must comply with a Price Control Determination.
- 6.33 Nor could this be achieved, as GEMA contends, by relying on section 7(1) read with section 7(5) to insert new licence conditions that make provision for the conditions to be modified if specified circumstances arise in the future (which GEMA terms a ‘self-modification’), where the envisaged modification amounts to implementing a Price Control Determination.
- 6.34 Properly construed, section 7 does not permit the inclusion in a licence of a condition giving GEMA the power to implement a Price Control Determination by way of a section 7(3)(a) “direction” or a section 7(5) ‘self-modification’ and thereby circumvent the important constraints on the exercise of the bespoke section 11A power. Given the very general nature of the section 7 provision regarding directions and modifications, which Parliament did not provide were to be capable of being used to implement Price Control Determinations (let alone to do so for the collateral purpose of bypassing the constraints on the section 11A power), the specific statutory mechanism in section 11A provides the exclusive mechanism by which any such decision must be made.
- 6.35 This is reinforced by the well-established canon of statutory construction that general legislative provisions will not override more specific provisions (*generalia specialibus non derogant*). See *Bennion on Statutory Interpretation* (7th Ed.) at section 21.4, citing *R v Liverpool City Council ex p Baby Products Association* (2000) 2 LGLR 689 where Lord Bingham CJ stated: “A power conferred in very general terms plainly cannot be relied on to defeat the intention of clear and particular statutory provisions”³⁵⁴. Lord Bingham rejected the submission that a local authority’s general statutory powers could be relied upon to issue a public product safety warning in circumstances where Parliament had established a detailed statutory process by which such notices may be issued, subject to important rights and safeguards for affected manufacturers and suppliers.
- 6.36 As to the argument that that process was cumbersome and slow and difficult to apply effectively, Lord Bingham held: “*The remedy for a defective statutory procedure is not, however, to ignore or circumvent it but to amend it*”³⁵⁵. There are many other instances of the courts applying the principle that a general

³⁵³ GEMA, letter to SSEN Transmission dated 19 February 2021, **NOA-1 / Tab 95**.

³⁵⁴ *Bennion on Statutory Interpretation* (7th Ed.), **NOA-1 / Tab 78.1 / Section 21.4**.

³⁵⁵ *R v Liverpool City Council ex p Baby Products Association* (2000) 2 LGLR 689, **NOA-1 / Tab 76.1 / Page 10**.

statutory power cannot be relied on to circumvent the constraints on the exercise of a specific statutory power.³⁵⁶

- 6.37 Equally, in the present context, the existence of the bespoke licence modification process in section 11A, with attendant rights and safeguards for licensees which are additionally enhanced where the modification implements a Price Control Determination, reinforces that GEMA cannot rely on any more general provisions, including in section 7, to do so by way of a “direction” or a ‘self-modification’.
- 6.38 GEMA’s decision is therefore *ultra vires* as it circumvents and runs contrary to the purpose of the statutory regime, by attempting to reserve to itself the power to implement Price Control Determinations other than through the specific process set out in section 11A. GEMA has no power to implement Price Control Determinations by other means, and no power to make a licence modification whose sole purpose would be to purport to arrogate such power to itself.
- 6.39 Accordingly, both the introduction of the Reserved Powers and any purported “direction” issued under them are (or would be) unlawful. The Reserved Powers also stand to be set aside as action taken for an improper purpose, since GEMA cannot lawfully use the licence modification powers granted to it by section 11A of EA 1989 in order to give itself a free hand to make future modifications of the significance of Price Control Determinations and thereby circumvent the rights and safeguards enshrined in statute, where to do so would plainly frustrate the clear legislative purpose. Further, GEMA would be in breach of its statutory duties, which include acting consistently and transparently, and would fail to meet the best practice standards expected of a regulator.
- 6.40 Since GEMA’s decision to alter the SSSEN Transmission Licence to confer upon itself the Reserved Powers was unlawful and *ultra vires* it must be set aside by the CMA.

The Reserved Powers frustrate SSSEN Transmission’s statutory right to appeal

- 6.41 The Reserved Powers also frustrate SSSEN Transmission’s mandatory rights of appeal to the CMA under section 11C of EA 1989. GEMA accepts that a direction issued under its purported Reserved Powers relating to a price control matter cannot be appealed to the CMA and that any challenge would have to be brought by way of judicial review instead. Parliament has provided for a statutory right of appeal to the CMA in respect of Price Control Determinations because the CMA is an expert body best placed to consider the complex issues

³⁵⁶ Recent examples include: *R (Newhaven Port and Properties Ltd) v East Sussex CC* [2015] UKSC 7, [2015] AC 1547 **NOA-1 / Tab 75** at §93 (Lord Neuberger referring to the principle *generalia specialibus non derogant* and stating that “the existence of a *lex specialis* is relevant to the interpretation of a generally worded statute such as the 2006 Act”); *R (JM (Zimbabwe)) v Secretary of State for the Home Department* [2017] EWCA Civ 1669, [2018] 1 WLR 2329 **NOA-1 / Tab 74** at §74 (Flaux LJ noting “[w]hen a particular area in which the power can be used is specified and given express or implied limitations, then the Secretary of State cannot use the general power to undermine the limitations of the specific”); *Brown v Hyndburn Borough Council* [2018] EWCA Civ 242, [2018] 1 WLR 4518 **NOA-1 / Tab 68** at §§46-51 (Hildyard J noting that “[a]t first blush” general powers appeared broad enough to cover what the Council had done but that properly construed they did not, including because a more specific power “would be otiose or unnecessary” if the general powers were broadly construed); *R (British Telecommunications plc) v HM Treasury* [2018] EWHC 3251 (Admin), [2019] Pens LR 9 **NOA-1 / Tab 73** at §156 (the Divisional Court ruling that the “obvious intent of Parliament” was that a bespoke statutory power, and only that power, should be used in preference to a general power); *Minister of Energy and Energy Affairs v Maharaj* [2020] UKPC 13 **NOA-1 / Tab 72** at §56 (Lord Sales noting that “[t]he *lex specialis* nature of the regime” in the Petroleum Act demonstrated an intention that an Interpretation Act provision that a power to grant a licence includes a power to suspend such grant did not apply).

often raised in such appeals. In addition, in a statutory appeal the CMA, unlike judicial review, has the power to substitute its own decision for that of GEMA. Mr Alkirwi has confirmed importance of the ability for licence holders to appeal to the CMA from the perspective of investors, as this ensures that GEMA's decisions are subject to appropriate scrutiny, especially where decisions can affect significant amounts of totex³⁵⁷.

6.42 Moreover, under the EA 1989, licensees are given the right to request suspension of licence modification decisions pending the determination of an appeal by the CMA. This right will be frustrated if GEMA is allowed to introduce the Reserved Powers, because SSEN Transmission would have no right to appeal directions issued thereunder to the CMA.

6.43 This is unlawful and a breach of SSEN Transmission's rights under the statute.

D. Relief Sought

6.44 For all of the reasons set out above, SSEN Transmission respectfully requests that the CMA:

- (a) find that the Reserved Powers of direction are *ultra vires*; and therefore
- (b) uphold SSEN Transmission's appeal in accordance with section 11E(4) of EA 1989 on the basis that the Decision in relation to the Reserved Powers is wrong as a matter of law; and
- (c) require GEMA to consider and introduce a mechanism to ensure that any decisions it takes in connection with the mechanisms to which the Reserved Powers relate are implemented in a way sufficient to ensure that SSEN Transmission's rights under sections 11A and 11C of EA 1989 are preserved.

³⁵⁷ Alkirwi-1 / Para 11.52;

Section 7: Ground 4 – Transmission Network Use of System Charges

A. Overview

- 7.1 GEMA’s Decision contains a fundamental change in the way that SSEN Transmission recovers “Transmission Network Use of System” (*TNUoS*) charges, by transferring the cash-flow risk of under-recovery of such charges from the Electricity System Operator (the *ESO*) to the onshore TOs (SSEN Transmission, SPT and National Grid). GEMA has allocated the risk of cash-flow volatility to the parties that it considers are best placed to withstand it (the TOs) rather than the party that it is best able to manage it (the ESO). The correct solution to the problem faced by the ESO would be to ensure that it is sufficiently incentivised to perform through risk mechanisms and allowances in its price control, not by inappropriately moving the risk elsewhere, and creating a prejudicial disconnect between risk and responsibility.
- 7.2 This Decision will wrongly leave SSEN Transmission 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. This will result in SSEN Transmission being placed in an enduring position of being unable to recover its annual allowed revenue under the RIIO-T2 price control, leaving it underfunded to deliver the wide-ranging programme of investment needed over this period, including that directed towards the delivery of Net Zero, and ultimately leading to significant harm to the public and the environment.
- 7.3 Moreover, GEMA’s Decision to implement this change was taken in absence of any substantiating evidence or analysis to support its principal rationale therefor, and the consultation was deficient in numerous fundamental respects.
- 7.4 The remainder of this Section is structured as follows:
- (a) **Part B** summarises the current regulatory framework governing TNUoS charges.
 - (b) **Part C** sets out GEMA’s Decision on TNUoS charges.
 - (c) **Part D** explains why GEMA’s Decision on TNUoS charges is wrong as a matter of law.
 - (d) **Part E** sets out the relief that SSEN Transmission is seeking.

B. Background

- 7.5 Mr Alkirwi provides a detailed explanation of the existing regulatory framework around TNUoS charges in his witness statement.³⁵⁸ The following paragraphs provide a summary of the key points.
- 7.6 The transmission network is owned by the onshore TOs. Electricity generators and suppliers pay for the use of the network by way of various charges, by far

³⁵⁸ Alkirwi-1 / Paras 12.1-12.41.

the most significant being TNUoS charges, which cover the cost to the onshore TOs of installing and maintaining the network.

- 7.7 Under the current system, each onshore TO charges to the ESO their allowed revenue for a given year under the prevailing price control decision (subject to certain deductions) in twelve equal monthly instalments. These amounts are therefore fixed and known to the TOs and the ESO in advance. The ESO sets TNUoS charges to reflect these monthly amounts, and in turn charges generators and suppliers.
- 7.8 Setting the TNUoS charges requires the ESO to forecast the levels of demand and generation during the period in question, based on information provided by the suppliers and generators who use the transmission network. The ESO's role and oversight of the entire transmission network puts it in the best place to do this. The onshore TOs have no control over or ability to manage this process.
- 7.9 If the ESO's forecasts are inaccurate, then it may recover more or less revenue from generators and suppliers than the amount due to the onshore TOs. Thus, unlike the amounts due to the onshore TOs, the amounts the ESO receives from the users of the transmission network are variable. The ESO currently makes up for any overall shortfall (or excess) at the end of a given year by adjusting TNUoS charges in the year falling two years thereafter.
- 7.10 Thus, under the existing arrangements, the ESO takes the short-term cash-flow risk of there being a mismatch between: (i) the fixed amounts that it pays to the onshore TOs; and (ii) the variable amounts that it receives by way of TNUoS charges. This arrangement creates certainty for the onshore TOs that they will each receive on time the full amount of their (monthly) allowed revenue throughout the price control period.

C. GEMA's Decision on TNUoS

- 7.11 GEMA's Decision unfairly and unjustifiably makes a fundamental change to this arrangement in relation to the TNUoS charges of the onshore TOs. This has the effect of transferring the cash-flow risk from the ESO to the onshore TOs, which, as stated above, the onshore TOs have no ability to manage or control.
- 7.12 This transfer of cash-flow risk is the practical consequence of the fact that GEMA now requires the ESO to pay onshore TOs only such TNUoS revenue as it has invoiced to generators and suppliers during a given month, with any under- or over-recovery to be shared between the onshore TOs in proportion to their respective allowed revenues under the price control.
- 7.13 In October 2019, GEMA decided as part of its RIIO-2 financial methodology and roles framework for the ESO that it would consult on the transfer of revenue collection risk associated with TNUoS charges.³⁵⁹
- 7.14 In December 2019, GEMA published the consultation on TNUoS revenue collection risk setting out its proposals to effect the transfer of this risk, noting in particular that “[it] will engage with the [TNUoS] task force to ensure its

³⁵⁹ ‘RIIO-2 financial methodology and roles framework for the Electricity System Operator – Decision’, 25 October 2019, **NOA-1 / Tab 82**. Mr Alkirwi sets out this consultation process (and surrounding processes) in **Alkirwi-1 / Paras 12.42-12.76**.

conclusions consider the total impact on consumers, considering any interactions with the RIIO-2 price control”, and that any decisions made to change the allocation of the TNUoS cashflow timing risk in time for the start of RIIO-2 would be taken into account in its price control determinations for the ESOs and the onshore TOs (which include SSEN Transmission).³⁶⁰

- 7.15 The reasons for its proposal were: (i) that the costs of financing any under-recovery by the ESO would be more efficient if borne by the onshore TOs rather than the ESO; (ii) to secure consistency with the arrangements applicable for the distribution companies; (iii) that the proposal would avoid incentivising the ESO intentionally to make inaccurate forecasts to secure higher cost allowances; and (iv) that the ESO could continue to be incentivised to make accurate forecasts even if it did not bear the cash-flow risk:

The onshore TOs’ larger RAVs [Regulated Asset Values], and direct interest in their allowed and collected revenues, make them a more natural, and more economical, owner of this cashflow timing risk exposure. As set out at paragraphs 2.6 & 2.7, the difference between allowed and collected revenues can be material in relation to the size of the ESO – 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.

This proposal would bring onshore TOs into line with other network companies, including those in electricity and gas distribution, as well as the water industry, who have the equivalent of a K correction term such that in the short term each company is exposed to some small uncertainty on the exact quantum of collected revenues. Further, the proposed change would avoid a perverse incentive where the ESO could intentionally make inaccurate volume forecasts in order to justify higher allowances for managing cash collection variances.

It is our view that the obligations and incentives on the ESO to produce accurate forecast and tariff calculations can be maintained or improved through other options, at a lower cost to industry. This can be achieved through licence obligations and the ESO’s incentives scheme.³⁶¹

- 7.16 In July 2020, GEMA decided that the TNUoS revenue collection risk should be transferred from the ESO to the TOs by modifying the licences of the ESO and the TOs.³⁶² The principal reasons for this decision corresponded with those set out in its consultation (as quoted in paragraph 7.15 above).
- 7.17 The licence modification that GEMA proposed to give effect to its TNUoS decision was consulted on and given effect in the Decision.³⁶³
- 7.18 In particular, the Decision modifies the TO and ESO standard licence condition B12 to include a requirement that the “System Operator – Transmission Owner Code” (**STC**) which governs the relationship between the ESO and the TOs:

³⁶⁰ GEMA, ‘Consultation on TNUoS Revenue Collection Risk’, 18 December 2019, **NOA-1 / Tab 27**.

³⁶¹ GEMA, ‘Consultation on TNUoS Revenue Collection Risk’, 18 December 2019, **NOA-1 / Tab 27**.

³⁶² GEMA, ‘Decision on re-allocation of TNUoS Revenue Collection Risk’, 9 July 2020, **NOA-1 / Tab 41**.

³⁶³ Mr Alkirwi addresses these modifications (and related decisions of GEMA) in detail in **Alkirwi-1 / Paras 12.77-12.83**.

sets out terms by which the system operator allocates transmission network revenue, consistent with the principles that the system operator will only allocate invoiced transmission network revenue [net of certain deductions] to transmission owners. Any difference between invoiced transmission network revenue and maximum revenue will be fully shared between transmission owners. Each transmission owners share will be proportionate to their share of maximum revenue as notified to the system operator by the transmission owners. The licensee shall use reasonable endeavours to ensure terms are in place that facilitate its compliance with the requirements of this condition no later than 1 July 2021, or such other date as directed by the Authority.³⁶⁴

7.19 In effect, the Decision requires that the procedure STCP 13-1 in the STC on the invoicing and payment of TO charges to the ESO be modified to provide that only invoiced TNUoS revenue is paid to the TOs by the ESO, and to include a process to share any over- or under-recovery between the onshore TOs.³⁶⁵

7.20 This means that, if the TNUoS revenue invoiced by the ESO in a given month is less than the TOs' allowed revenue for that month, then the TOs will, as explained by Mr Alkirwi, experience a delay of up to two years until receipt of the difference.³⁶⁶

D. Legal Grounds on TNUoS

7.21 The Decision is wrong in relation to TNUoS for the following reasons.

7.22 **First**, the Decision 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 (the onshore TOs).³⁶⁷

7.23 This 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. This could perpetuate the existing average TNUoS shortfall [CONFIDENTIAL], if not cause this to increase over time.³⁶⁸

7.24 GEMA has claimed that the ESO can be incentivised to be accurate in its forecasting role even if it does not bear the TNUoS cash-flow risk³⁶⁹ but

³⁶⁴ GEMA, 'Electricity Transmission Standard Licence Conditions', NOA-1 / Tab 14 / Amended Standard Condition B12.1(b).

³⁶⁵ Alkirwi-1 / Paras 12.30-12.33 and 12.78-12.79.

³⁶⁶ Alkirwi-1 / Para 12.88.

³⁶⁷ Alkirwi-1 / Paras 12.57-12.59.

³⁶⁸ Ibid. and Alkirwi-1 / Para 12.54(a).

³⁶⁹ Alkirwi-1 / Para 12.52 and 12.75(b).

GEMA's licence modifications decisions have weakened the accuracy incentives for the ESO:³⁷⁰

- (a) GEMA has removed from the ESO's licence the formerly applicable penalty interest rate for inaccurate forecasts (which was in any case insufficient historically to incentivise the ESO to improve its accuracy); and
- (b) GEMA has not defined the level of penalties or rewards of any alternative mechanism to incentivise the ESO to improve the accuracy of its forecasting.

7.25 The ultimate problem with GEMA's rationale for its decision is that GEMA has allocated the risk of cash-flow volatility to the parties that it considers are best placed *to withstand it* (the TOs) rather than the party that it is best able *to manage it* (the ESO). The correct solution to the problem faced by the ESO would be to ensure that it is sufficiently incentivised to perform through risk mechanisms and allowances in its price control, not by inappropriately moving the risk elsewhere, and creating the prejudicial disconnect set out above.

7.26 GEMA's Decision leaves SSEN Transmission exposed to a perpetual and potentially increasing cash-flow risk that is not in its power to manage or control, as annual under-recovery by the ESO would effectively result in an enduring reduction in SSEN Transmission's allowed revenue.³⁷¹ This exposure is expected to be between £15m and £60m per annum on the assumption that the ESO's forecasting accuracy does not deteriorate and that any under-recovery is recovered in the subsequent year.³⁷² However, since the ESO's incentives to forecast accurately have been weakened, if the ESO's forecasting accuracy does deteriorate further, or (as is likely) the under-recovery is not recovered in the subsequent year, then this exposure could be significantly higher.³⁷³

7.27 GEMA's Decision will therefore leave SSEN Transmission underfunded to deliver the wide-ranging programme of investment needed during RIIO-2, including that towards the delivery of Net Zero, and ultimately lead to significant harm to the public and the environment.³⁷⁴

7.28 **Second**, the Decision will require SSEN Transmission to bear costs that GEMA has not otherwise accounted for in its overall totex allowance.³⁷⁵ Contrary to its claims,³⁷⁶ GEMA has provided the TOs with no compensation for the costs associated with the TNUoS cash-flow timing risk, either through additional totex allowances or through an uplift to the WACC. This is in stark contrast to GEMA's treatment of the ESO, which was allowed an allowance of between

³⁷⁰ Alkirwi-1 / Paras 12.39-12.40, 12.81, 12.83 and 12.85-12.86.

³⁷¹ Alkirwi-1 / Para 12.87.

³⁷² Alkirwi-1 / Para 12.88.

³⁷³ Alkirwi-1 / Para 12.88.

³⁷⁴ Alkirwi-1 / Para 12.91.

³⁷⁵ Alkirwi-1 / Para 12.89.

³⁷⁶ Alkirwi-1 / Para 12.90.

£5m and 6m per annum during RIIO-2 to cover risk and cash-flow management costs, despite the fact that the ESO no longer bears the TNUoS cash-flow risk.³⁷⁷ GEMA has no principled basis on which to compensate one company but not the other for such costs, particularly since the effect of its decision is to transfer the cash-flow risk to the company with no allowance. GEMA's Decision therefore amounts to an unfair and inappropriate cross-subsidy of the ESO by the TOs.

- 7.29 **Third**, 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 licence³⁷⁸. 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.
- 7.30 SSEN Transmission put this concern to GEMA during the 2020 consultation on the TNUoS risk transfer, but GEMA essentially dismissed it by stating that the *"TOs have a role in tariff setting, and under our RIIO-2 proposals have a greater ability to forecast revenues. The risk is therefore not uncontrollable, in our view."*³⁷⁹
- 7.31 In fact, the ESO sets TNUoS tariffs after receiving the TOs indicative and final charges by 31 October and 25 January in a given regulatory year respectively.³⁸⁰ The ESO then publishes final tariffs by 31 January and the TOs have no further engagement in this process. The ESO is not obliged to (and does not) provide the TOs with any access to data or information on its internal tariff-setting processes.³⁸¹ The TOs have no authority over the level at which the ESO sets TNUoS tariffs and is not consulted in any way to approve or endorse them.³⁸²
- 7.32 GEMA's statement regarding the onshore TOs' ability to influence the ESO's TNUoS tariff setting process is therefore wholly incorrect.
- 7.33 **Fourth**, 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 if the onshore TOs rather than the ESO were to bear the TNUoS cash-flow risk:
- (a) GEMA's only supporting "evidence" for this conclusion its assertion that the costs would be (collectively) lower for the onshore TOs because they have larger RAVs than the ESO.³⁸³ Yet GEMA failed to recognise that the determining factor of the borrowing costs of a regulated

³⁷⁷ Alkirwi-1 / Paras 12.82 and 12.89.

³⁷⁸ GEMA, 'Electricity Transmission Standard Licence Conditions', NOA-1 / Tab 14.

³⁷⁹ RIIO-2 - Decision on re-allocation of TNUoS Revenue Collection Risk, NOA-1 / Tab 41 / Response to Q1.

³⁸⁰ Alkirwi-1 / Para 12.27.

³⁸¹ Alkirwi-1 / Paras 12.75(d).

³⁸² Ibid.

³⁸³ Alkirwi-1 / Paras 12.53 and 12.66.

company is its credit rating, not its RAV.³⁸⁴ Therefore, given that the ESO's and the onshore TOs' respective credit ratings are not materially dissimilar, in the absence of any analysis to demonstrate otherwise, the presumption must be that the costs to the industry would broadly be the same for the onshore TOs than they were for the ESO.³⁸⁵

- (b) In fact, the costs to the industry may be higher as a result of GEMA's Decision, owing to the inefficiency of spreading the necessary working capital facilities to manage the cash-flow risk, and administrative costs, across four companies rather than one company. GEMA presented no evidence to show that it would not, and wrongly placed the burden of proof on SSN Transmission.³⁸⁶
- (c) GEMA also assumed without any supporting evidence or analysis that the ESO's forecasting inaccuracy would not deteriorate as a result of the Decision.³⁸⁷
- (d) GEMA failed to consider the cost of any reward-based financial incentive necessary to ensure that the ESO remained accurate in its forecasts.³⁸⁸

7.34 **Fifth**, contrary to its obligations under the section 5A of the Utilities Act 2000³⁸⁹, and to its own internal guidance documents,³⁹⁰ GEMA failed to carry out an impact assessment, or any other form of cost-benefit analysis in relation to its proposal, which was plainly required in view of the significant impact that this could have on the TOs.³⁹¹ GEMA suggested that this was not necessary in the circumstances because the impacts are valued at less than £5m, which is incorrect for the reason set out in paragraph 7.26 above.³⁹²

7.35 **Sixth**, GEMA's consultation on, and assessment of, the TNUoS risk transfer was in any case flawed and incomplete, and GEMA has accordingly failed to gather and take into account all relevant facts and information relevant to this Decision. In particular:

- (a) GEMA's consultation of 18 December 2019³⁹³ did not concern whether the cash-flow timing risk *should* be transferred to the TOs, as GEMA claimed, but *how* this should be achieved.³⁹⁴ In other words, GEMA had

³⁸⁴ Alkirwi-1 / Para 12.93.

³⁸⁵ Ibid.

³⁸⁶ Alkirwi-1 / Paras 12.67 and 12.75(g).

³⁸⁷ Alkirwi-1 / Paras 12.54(c), 12.66 and 12.72(b).

³⁸⁸ Alkirwi-1 / Para 12.67(b).

³⁸⁹ Utilities Act 2000, NOA-1 / Tab 54.1 / Section 5A.

³⁹⁰ GEMA, Impact Assessment Guidance (4 May 2020), MA-1 / Tab 39.

³⁹¹ Alkirwi-1 / Paras 12.68-12.71.

³⁹² Alkirwi-1 / Paras 12.75(h) and 12.76.

³⁹³ RIIO-2 - Consultation on TNUoS Revenue Collection Risk, NOA-1 / Tab 27.

³⁹⁴ Alkirwi-1 / Paras 12.50-12.51.

already made its decision to transfer of the cash-flow risk prior to issuing the consultation.

- (b) GEMA concluded that the Decision on TNUoS did not involve any significant impact on industry participants, the general public or on the environment,³⁹⁵ without providing any detailed reasoning or the evidence upon which it has reached this conclusion. As noted above, this is wrong as the Decision does, in fact, have a significant impact on SSEN Transmission, as set out in paragraphs 7.22 to 7.27 above.
- (c) GEMA based its decision on errors of fact by both (i) miscalculating the annual under-recovery of TNUoS tariffs, and (ii) significantly underestimating the year-to-year variability. During the period between 2004/05 to 2018/19, it stated that the average under-recovery was £33m per year with a peak of £99m in 2014/15.³⁹⁶ [CONFIDENTIAL]
- (d) 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.³⁹⁷
- (e) GEMA failed to consider alternative protections for the TOs, such as caps and collars on the risk exposure.³⁹⁸
- (f) GEMA failed to consider alternatives to the reallocation of the TNUoS cash-flow timing risk to the TOs, for example the option of placing this instead on suppliers of electricity.³⁹⁹
- (g) GEMA also failed to assess the ESO's historical performance in setting accurate TNUoS tariffs, its forecasting processes and its internal data governance and controls.⁴⁰⁰
- (h) GEMA took the view that its decision "[w]ould bring onshore TOs into line with other network companies, including those in electricity and gas distribution, electricity transmission prior to NGET separation, as well as the water industry, who have the equivalent of a K correction term such that in the short term, each company is exposed to some small uncertainty on the exact quantum of collected revenues"⁴⁰¹. However, the Distribution Network Operators (**DNOs**), who run the energy distribution network, both have the responsibility for setting network usage charges *and* bear the risk of their usage forecasts being inaccurate. Thus, in this case risk and responsibility are rightly aligned.⁴⁰²

³⁹⁵ GEMA, 'Decision on re-allocation of TNUoS Revenue Collection Risk', 9 July 2020, **NOA-1 / Tab 41**.

³⁹⁶ **Alkirwi-1 / Para 12.53(a)**.

³⁹⁷ **Alkirwi-1 / Paras 12.53(b) and 12.54(b)**.

³⁹⁸ **Alkirwi-1 / Para 12.72(a)**.

³⁹⁹ **Alkirwi-1 / Para 12.72(c)**.

⁴⁰⁰ **Alkirwi-1 / Para 12.72(d)**.

⁴⁰¹ GEMA, Decision on re-allocation of TUNoS Revenue Collection Risk, 9 July 2020, **NOA-1 / Tab 41 / Annex 1**.

⁴⁰² **Alkirwi-1 / Para 12.58**.

E. Statutory grounds of appeal and relief sought on TNUoS

7.36 GEMA's decision to proceed with the licence modification under section 11A of EA 1989 in a way which transfers TNUoS revenue collection cash-flow risk from the ESO to the TOs is therefore wrong on the following statutory grounds:

- (a) By creating a serious risk that SSEN Transmission will be routinely and enduringly underfunded, GEMA has failed properly to have regard to and/or to give the appropriate weight to: (i) the interests of existing and future consumers in the delivery of a secure electricity supply and in reducing electricity-supply emissions of targeted greenhouse gases (sections 3A(1)-(1A)); (ii) the need to secure that all licence holders are able to finance their activities (section 3A(2)(b)); and/or (iii) the Social and Environmental Guidance issued by the Secretary of State and the related Net Zero Duty (section 3B(2)). **[section 11E(4)(a) and (b) EA 1989]**
- (b) GEMA's decision was based on errors of fact and/or law (in particular the public law duty to reach reasonable decisions). **[section 11E(4)(c) and (e) EA 1989]**

7.37 For all of the reasons set out above, SSEN Transmission respectfully requests that the CMA remove GEMA's modification of the TO and ESO standard licence condition B12 insofar as this gives effect to GEMA's Decision on TNUoS charges.

Section 8: GEMA's "statement of policy" on post-appeal reviews and pre-action correspondence

A. Introduction

- 8.1 Two issues are addressed in GEMA's Draft Determination and Final Determination which, whilst not taking effect as licence modifications and hence not forming part of SSEN Transmission's appeal⁴⁰³, nevertheless have the potential to become relevant at the remedies and/or costs stages of these proceedings. It is therefore appropriate for SSEN Transmission to comment briefly on the troubling position set out by GEMA on these issues and why SSEN Transmission does not accept that position.

B. Post-appeal review

- 8.2 GEMA's Draft Determination and Final Determination both set out what was described as a "statement of policy"⁴⁰⁴ regarding how GEMA envisages it may act following a successful appeal to the CMA against its licence modification decision. In particular, GEMA has expressed the view that there may be circumstances in which it carries out a "post appeal review" in order to consider whether it is necessary to adjust an element of the price control that GEMA considers is linked to any aspects of the price control decision that have been modified by the CMA. GEMA made clear that this "statement of policy" would not be given effect by way of provision in the licence itself⁴⁰⁵.
- 8.3 In an annex to its consultation response at the Draft Determination stage⁴⁰⁶, SSEN Transmission set out why the position on post-appeal reviews expressed in the Draft Determination is unlawful. In summary:
- (a) Any attempted post-appeal review would undermine the statutory appeals framework by reserving to GEMA a purported further determination of issues that properly fall to be finally determined by the CMA. This is contrary to the statutory rights of parties affected by a licence modification decision to bring an ex-post appeal before an independent decision-maker which results in finality and certainty.
 - (b) GEMA's purported justification for reserving to itself the final determination of issues is not well-founded. The premise of GEMA's proposal is that following a successful appeal to the CMA in relation to certain elements of a price control decision, it may be necessary for GEMA to adjust other elements that are linked. However, the current appeal process permits the CMA to consider any such interlinkages in its appeal determinations. If GEMA considers that the elements subject to appeal are linked to other elements that may require adjustment if the

⁴⁰³ GEMA's statements on these issues do not constitute "*a decision ... to proceed with the modification of a condition of a licence under section 11A*" within the meaning of section 11C of EA 1989, and hence are not the subject of an appeal to the CMA.

⁴⁰⁴ RIIO-2 - Draft Determination, Core Document (9 July 2020), **NOA-1 / Tab 1 / Para 11.33**; RIIO-2 - Final Determination, Core Document, **NOA-1 / Tab 9 / Para 11.41**.

⁴⁰⁵ RIIO-2 - Draft Determination, Core Document (9 July 2020), **NOA-1 / Tab 1 / Para 11.41**: "*We do not consider that it would be appropriate or necessary to include provision for [post-appeal reviews] in the licence.*"

⁴⁰⁶ SSEN Transmission, Response to RIIO-T2 Draft Determination - Annex 1 - QA on pre-action correspondence, **NOA-1 / Tab 6**.

appeal succeeds, it is incumbent on GEMA to raise such interlinkages in its submissions to the CMA during the appeal proceedings. The CMA has ample powers to address interlinkages, including, if necessary, by way of remitting the matter to GEMA with directions. What GEMA cannot lawfully do is simply allow the CMA to make its decision on the appealed elements, remaining silent on the issue of interlinkages, and then itself separately purport to revisit the price control decision in a manner which may undermine or vitiate the effect of the CMA's decision.

- (c) Post-appeal adjustments of the type envisaged by GEMA would further undermine the legislative intent that underpins the statutory appeals framework by opening up the possibility of a further chain of appeals. Any post-appeal licence modification decision initiated by GEMA would itself be subject to the statutory consultation period and, if implemented, would give rise to a fresh right of appeal for affected parties and restart the statutory time limits. This would be contrary to the clear intention that appeals should be speedily determined in order to achieve finality and certainty, as reflected for example in the statutory time limits for appellants to bring an appeal (20 working days) and for the CMA to determine the appeal (six months from the grant of permission).

- 8.4 In its Final Determination, GEMA appears to have at least partially recognised the force of these objections to the approach it outlined in its Draft Determination. Thus, GEMA states that “[a]ny review (if it is necessary) will only be carried out consistently with the CMA’s ruling and directions, such as a direction that we re-consider part of the price control”⁴⁰⁷. GEMA further states that a post-appeal review would only be carried out in circumstances where “the CMA has directed it or asked us to reconsider an aspect of our decision following a successful appeal”⁴⁰⁸. However, whilst this passage goes on to give two examples of scenarios in which the CMA has expressly directed GEMA to consider interlinkages, GEMA’s general wording could also extend to post-appeal reviews where no such express direction has been given by the CMA. This would be wrong in principle for all the reasons summarised above.
- 8.5 In light of the foregoing, to the extent that the CMA upholds SSEN Transmission’s appeal, there is the real risk that any remittal of decision-making back to GEMA could undermine the substance of the CMA’s decision. In particular, GEMA could seek to undermine the intended outcome of the CMA’s decision by way of an unlawful post-appeal review and attempt to take purported interlinkages into account during such a process, to adjust aspects of the price control that were not raised before the CMA. SSEN Transmission therefore invites the CMA to use its powers to replace GEMA’s decision with its own on all of the matters in relation to which the CMA upholds SSEN Transmission’s appeal.

⁴⁰⁷ RIIO-2 - Final Determination, Core Document, NOA-1 / Tab 9 / Para 11.40.

⁴⁰⁸ RIIO-2 - Final Determination, Core Document, NOA-1 / Tab 9 / Para 11.44.

- 8.6 SSEN Transmission also fully reserves its position in relation to any attempt GEMA may make to embark on a post-appeal review in this case.

C. Pre-action correspondence

- 8.7 GEMA has also set out its position on what it considers appropriate by way of pre-action correspondence. The Draft Determination set out a series of steps which GEMA stated it “expects” any prospective appellant to take in correspondence between the publication of the Final Determination and prior to the appeals window opening. In particular, GEMA “expects” prospective appellants to “*clearly explain their intention to appeal, the element(s) of the RIIO-2 price control that they intend to appeal, the scope of that appeal including, in sufficient detail, the alleged errors, and why that particular component(s) of the price control is wrong having regard to interlinked aspects of the decision*”⁴⁰⁹.

- 8.8 As in relation to post-appeal review, the annex to SSEN Transmission’s consultation response ⁴¹⁰ set out why GEMA’s position on pre-action correspondence is unlawful. In summary:

- (a) It is not within GEMA’s powers or otherwise appropriate for it to purport to impose any additional rules on appellants to those contained in the statutory framework and the CMA’s appeal rules, not least as GEMA is itself a party to the prospective appeal proceedings for which it is purporting to set the rules of procedure. The power to prescribe rules of procedure regulating the conduct of appeals lies with the CMA itself under paragraph 11 of Schedule 5A to the EA 1989.
- (b) GEMA’s proposed pre-action rules would serve no useful purpose in the context of an energy price control, in circumstances where: (i) the statutory process has already been designed to provide GEMA with detailed information regarding companies’ positions on the issues in the price control; (ii) GEMA envisages a one-way provision of information by prospective appellants to GEMA, with no requirement on GEMA to respond with a view to narrowing the issues in dispute of the type included in civil litigation pre-action protocols; and (iii) in any event, given the short time period for lodging an appeal after publication of the licence modification decision prospective appellants are unlikely to be in a position to provide the detailed information envisaged by GEMA so that there would be limited time for any material discussions between the appellants and GEMA.
- (c) GEMA’s proposed pre-action rules would place a disproportionate burden on appellants and give GEMA an unfair advantage in any appeal proceedings.

⁴⁰⁹ RIIO-2 - Draft Determination, Core Document (9 July 2020), NOA-1 / Tab 1 / Para 11.36.

⁴¹⁰ SSEN Transmission, Response to RIIO-T2 Draft Determination - Annex 1 - QA on pre-action correspondence, NOA-1 / Tab 6.

- 8.9 In its Final Determination, GEMA again appears to have at least partially recognised the force of these objections to the approach it outlined in its Draft Determination. Thus, GEMA now “invites” prospective appellants to send pre-action correspondence outlining their intention to appeal, the elements of the price control which they intend to appeal and an outline of the grounds on which they intend to appeal⁴¹¹, but expressly acknowledges that it was not imposing an obligation on the licensee to take these steps and will not impose penalties if they fail to do so. GEMA nevertheless “reserves the right” to make submissions to the CMA about costs in the event that an appellant does not take these steps⁴¹².
- 8.10 SSEN Transmission submits that no possible criticism can be made of its approach to this appeal and fully reserves its position in relation to any reliance GEMA may place in costs submissions on the steps taken or not taken by SSEN Transmission prior to this appeal being filed.

⁴¹¹ RIIO-2 - Final Determination, Core Document, **NOA-1 / Tab 9 / Para 11.58**.

⁴¹² RIIO-2 - Final Determination, Core Document, **NOA-1 / Tab 9 / Para 11.61**.

Section 9: Relief Sought

9.1 This section summarises the relief that SSEN Transmission seeks from the CMA under each ground of appeal.

Summary of relief sought under Grounds 1 and 2 for GEMA's errors in setting the overall CoE

9.2 As shown in Table 6 below, SSEN Transmission estimates the financial impact of the errors identified in Grounds 1 and 2 where relevant over the RIIO-T2 price control period. In other words, if those errors remain uncorrected, that is the estimated sum by which SSEN Transmission will be underfunded as a result of GEMA's price control decision.

Table 6: Summary of GEMA's CoE errors, Oxera's corrections, and estimated financial impact of errors for the RIIO-T2 period

Ground of appeal	Component of CoE calculation	GEMA's estimate	Oxera's estimate	Estimated financial impact on SSEN Transmission for the RIIO-2 period of difference between flawed range and corrected range (m)
1A	Risk-free rate	-1.58%	-0.96% – -0.99%	[CONFIDENTIAL]
1B	Total market return	6.5%	7.0% – 7.5%	[CONFIDENTIAL]
1C	Equity beta (at 60% gearing)	0.759	0.83-0.91	[CONFIDENTIAL]
	CoE (at 60% gearing)	4.55%	5.61% – 6.78%	[CONFIDENTIAL]
	CoE (at 55% gearing)	4.25%	4.98% – 6.02%	[CONFIDENTIAL]
1D	Aiming up	4.25% (at 55% gearing)	Aim up by at least 125bps if using GEMA's range without correction	[CONFIDENTIAL]
2	Outperformance	0.22%	Remove 22bps adjustment	[CONFIDENTIAL]

Note: Oxera estimates the total financial impact of these errors across RIIO-2 using Ofgem's base case totex allowance and the formula (CoE difference) x annual NPV-neutral average RAV x (1 – notional gearing). This provides the approximate difference in nominal cash flows resulting from the CoE difference (the value is approximate as Ofgem's modelling of the notional company's financing requirements accounts for allowed returns and may therefore result in marginally different cash flows). Oxera's estimates are conservative as Oxera has used Ofgem's base case totex scenario, which provide a lower level of expenditure than using the higher spend Net Zero scenarios that account for the uncertain expenditure required to meet Net Zero ambitions.

¹ This is the minimum financial impact as Oxera recommend aiming up from the Final Determination cost of equity to at least the middle of the Oxera range. Oxera estimates the 125bps by taking the difference in Ofgem's point estimate of 4.25% at 55% gearing and the middle of the Oxera range (5.50%) at 55% gearing.

² This is the maximum financial impact as Ofgem's ex-post mechanism would provide cash flows up to 22bps in the event that the notional company does not outperform. As Ofgem has erroneously deducted this amount from the cost of equity when setting the allowed return, this therefore represents a financial loss.

Source: Oxera analysis, Cost of Equity report (PH-1 / Table 3.2) and NOA-1 / Tab 93.

Relief sought under Ground 1A for GEMA's errors in setting the RFR

- 9.3 The appropriate RFR for SSEN Transmission that GEMA should have adopted⁴¹³ is in line with the CMA's recent approach in PR19. The RFR should have been derived by adopting both a bottom-up approach (applying an upward adjustment to spot yields on ILGs to account for their convenience premium, resulting in an RFR estimate of **-0.99%**) and a top-down approach (deflating the yields of AAA-rated corporate bonds to account for their liquidity premia and default risks, resulting in an RFR estimate of **-0.96%**).
- 9.4 Accordingly, SSEN Transmission respectfully requests that the CMA correct GEMA's decision by setting the RFR between **-0.99%** and **-0.96%**.
- 9.5 By correcting this error, the CMA would prevent a financial impact on SSEN Transmission of [CONFIDENTIAL]. In other words, if this error remains uncorrected, that is the sum by which SSEN Transmission will be underfunded as a result of GEMA's Decision.

Relief sought under Ground 1B for GEMA's errors in setting the TMR

- 9.6 Correcting for GEMA's errors in TMR, Oxera's expert report concludes that GEMA should have set the TMR in the range of **7.0-7.5%** (CPIH-real).⁴¹⁴ The estimation is based on the arithmetic average of RPI-real returns, converted into CPIH using the implied OBR inflation wedge. The forward-looking evidence is used as a primary cross-check, supporting the adoption of 7.0-7.5% as a range.
- 9.7 Accordingly, SSEN Transmission respectfully requests that the CMA correct GEMA's flawed estimate of TMR by setting TMR between **7.0%** and **7.5%**.
- 9.8 By correcting this error, the CMA would prevent a financial impact on SSEN Transmission of [CONFIDENTIAL]. In other words, if this error remains uncorrected, that is the sum by which SSEN Transmission will be underfunded as a result of GEMA's Decision.

Relief sought under Ground 1C for GEMA's errors in setting the beta

- 9.9 Correcting GEMA's errors results in significant changes to the asset beta for UK energy networks. The corrected estimates are presented in Table 7.5 in Oxera's Cost of Equity Report reproduced below.

⁴¹³ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Section 5G**.

⁴¹⁴ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Section 6D**.

Table 7 Asset Betas

	Five-year
National Grid	0.37
Average water UK	0.35
Enagas	0.37
Red Eléctrica	0.37
Snam	0.45
Terna	0.43
Average energy EU	0.40

Note: UK water companies include Severn Trent and United Utilities. National Grid and UK water company equity betas were estimated relative to the FTSE All-share index, using daily data. European energy company equity betas were estimated relative to the Eurostoxx TMI index, using daily data. A debt beta of 0.05 is assumed. We present the spot averaging period for all estimation windows. The cut-off date is 31 December 2019.

Source: Oxera analysis based on Bloomberg data.

- 9.10 As shown in Table 7 above, there is a significant difference in asset risks between the water sector (with a beta of 0.35 for UK water companies) and the energy sector (with a beta of 0.40 for EU energy networks). An asset beta range that uses National Grid's five-year asset beta as the low-end and the comparator average five-year asset beta as the high-end will translate to a beta range of 0.37 to 0.40. After the MM cross-check adjustment, the asset beta range proposed by Oxera translates to an equity beta range of 0.83 to 0.91 (and, as explained above, Oxera recommends using a debt beta of 0.05).⁴¹⁵
- 9.11 Further, the asset betas for energy companies have increased post-COVID. Oxera's methodology avoids capturing this period but this is a further reason why the asset beta is too low on a forward-looking basis for RIIO-T2.
- 9.12 Accordingly, SSEN Transmission respectfully requests that the CMA correct GEMA's beta range by setting the equity beta between **0.83** and **0.91**.
- 9.13 By correcting this error, the CMA would prevent a financial impact on SSEN Transmission [CONFIDENTIAL]. In other words, if this error remains uncorrected, that is the sum by which SSEN Transmission will be underfunded as a result of GEMA's Decision.

Relief sought under Ground 1D for GEMA's failure to aim up

- 9.14 GEMA's failure to aim up was an error in principle and further resulted in a material underestimation of the CoE.
- 9.15 Oxera has collected a large amount of primary evidence to form a corrected CoE range based only on data that they consider to be robust. As Oxera explains in its expert report, the correct approach would be to aim up within the corrected

⁴¹⁵ Oxera, Cost of Equity Report, **PH-1 / Tab 1 / Section 7E**.

range of 5.61%-6.78% (for 60% gearing).⁴¹⁶ For SSEN Transmission, with 55% gearing, the range would be 4.98%-6.02%.⁴¹⁷ GEMA has adopted a point estimate of 4.25% within a range of 3.62%-4.86% at 55% gearing. The difference between the middle of the Oxera range and the GEMA point estimate is 125 bps and therefore, on a standalone basis (i.e. assuming that the other errors in GEMA's CoE parameters have not been corrected), GEMA should have aimed up by at least 125 bps in order to have aimed up within the Oxera range.

- 9.16 By correcting this error, the CMA would prevent a financial impact on SSEN Transmission of at least [CONFIDENTIAL]. In other words, if this error remains uncorrected, that is the sum by which SSEN Transmission will be underfunded as a result of GEMA's Decision.

Relief sought under Ground 1E for GEMA's errors in cross-checks carried out regarding the cost of equity figure

- 9.17 The financial impact of the errors identified in this ground of appeal is not additional to the impact of the errors identified in the rest of Ground 1 above. Rather, the errors in cross-checking reinforce that GEMA was wrong to approach CoE in the way it did, in each of the respects identified in Grounds 1A to 1D.

Relief sought under Ground 2 for GEMA's use of an outperformance adjustment

- 9.18 SSEN Transmission respectfully requests that the CMA remove GEMA's outperformance adjustment from the CoE.
- 9.19 By correcting this error, the CMA would prevent a financial impact on SSEN Transmission of [CONFIDENTIAL], which is the amount that GEMA's ex-post mechanism would have erroneously deducted from the CoE, being the cash flow of up to 22 bps that GEMA's outperformance adjustment would have provided for in the event that the notional company does not outperform.⁴¹⁸

Relief sought under Ground 3 for GEMA's Reserved Powers

- 9.20 SSEN Transmission respectfully requests that the CMA:
- (a) find that the Reserved Powers of direction are *ultra vires*; and therefore
 - (b) uphold SSEN Transmission's appeal in accordance with section 11E(4) of EA 1989 on the basis that the Decision in relation to the Reserved Powers is wrong as a matter of law; and
 - (c) require GEMA to consider and introduce a mechanism to ensure that any decisions it takes in connection with the mechanisms to which the

⁴¹⁶ Oxera, Cost of Equity Report, PH-1 / Tab 1 / Table 9.1.

⁴¹⁷ Oxera, Cost of Equity Report, PH-1 / Tab 1 / Table 9.1.

⁴¹⁸ As set out in Final Determination and the associated licence documents (including the PCFM), GEMA has reflected an annual dividend yield of 3% based on the regulatory equity. In order to reflect any changes in the CoE as a result of the CMA's determination, this also would need to be uplifted by at least any uplift the CMA applies to GEMA's CoE set at Final Determination. This would ensure the change is reflected consistently throughout the PCFM and corresponding financial impact as set out in Table 6: Summary of GEMA's CoE errors, Oxera's corrections, and estimated financial impact of errors for the RIIO-T2 period above.

Reserved Powers relate are implemented in a way sufficient to ensure that SSEN Transmission's rights under sections 11A and 11C of EA 1989 are preserved.

Relief sought under Ground 4 for GEMA's changes to the Transmission Network Use of System Charges

- 9.21 SSEN Transmission respectfully requests that the CMA remove GEMA's modification of the TO and ESO standard licence condition B12 insofar as this gives effect to GEMA's Decision on TNUoS charges.

Section 10: Chronology

Date	Event
7 March 2018	GEMA publishes RIIO-2 framework consultation
2 May 2018	SSEN Transmission responds to the RIIO-2 framework consultation
30 July 2018	GEMA publishes RIIO-2 framework decision
18 December 2018	GEMA publishes RIIO-2 sector specific methodology consultation
14 March 2019	SSEN Transmission responds to RIIO-2 sector specific methodology consultation
26 March 2019	GEMA publishes further information document on financeability assessment for RIIO-2
24 May 2019	GEMA publishes RIIO-2 sector specific methodology decision
3 June 2019	GEMA publishes updated RIIO-2 business plans guidance document
31 October 2019	GEMA publishes latest RIIO-2 business plans guidance document
9 December 2019	SSEN Transmission publishes RIIO-T2 business plan along with supporting documents and evidence
9 July 2020	GEMA publishes RIIO-2 Draft Determinations
4 September 2020	SSEN Transmission responds to RIIO-2 Draft Determinations
30 September 2020	GEMA publishes RIIO-2 informal licence drafting consultation
28 October 2020	SSEN Transmission responds to informal licence drafting consultation
8 December 2020	GEMA publishes RIIO-2 Final Determinations
17 December 2020	GEMA publishes statutory consultation for RIIO-2 transmission, gas distribution and electricity system operator licences
17 December 2020	GEMA publishes draft Price Control Deliverable Reporting requirements and Methodology document for consultation
19 January 2021	SSEN Transmission responds to statutory consultation on licence modifications
26 January 2021	GEMA publishes draft Large Onshore Transmission Investments (LOTI) Reopener guidance for consultation
3 February 2021	GEMA publishes decision on proposed modifications to RIIO-2 licences
1 April 2021	Proposed start date for RIIO-T2 Price Control

Section 11: Statement of Truth

The Appellant believes that the facts stated in this Notice of Appeal are true.

Signature of Authorised Representative

Name of Authorised Representative

Date

for and on behalf of Scottish Hydro Electric Transmission plc

Glossary

Abbreviation	Meaning
ARP	Asset Risk Premium
Authority	GEMA
BSUoS	Balancing Services Use of System Charges
capex	Capital expenditure
CAPM	Capital asset pricing model
CCA 2008	Climate Change Act 2008
CMA	Competition and Markets Authority
CMA Appeal Rules	CMA, <i>CMA70: Energy Licence Modification Appeals: Competition and Markets Authority Rules</i> (October 2017)
CoD	Cost of Debt
CoE	Cost of Equity
CPI	Consumer Prices Index
CPIH	A variant of the CPI that includes owner occupiers' housing costs and Council Tax
CPM	Competition Proxy Model
CUSC	Connection and use of system code
DDM	Dividend Discount Model
DECC	Department of Energy and Climate Change
Decision	The decision made by GEMA on 3 February 2021 under section 11A of EA 1989 to modify the standard and special licence conditions for SSEN Transmission to give effect to the RIIO-T2 price control final determination which will operate from 1 April 2021 from 31 March 2026
DNO	Distribution network operator
Draft Determination	GEMA's Draft Determination for SSEN Transmission's allowances under the RIIO-2 price controls, published for consultation on 9 July 2020
DRP	Debt Risk Premium
E.ON	<i>E.ON v Gas and Electricity Markets Authority</i> (10 July 2007)

EA 1989	Electricity Act 1989
ED1 BGT Appeal	<i>British Gas Trading Limited v Gas and Electricity Markets Authority Final Determination</i> (29 September 2015)
ED1 Appeal	ED1 BGT Appeal and ED1 NPg Appeal
ED1 NPg Appeal	<i>Northern Powergrid (Northeast) Limited and Northern Powergrid (Yorkshire) plc v Gas and Electricity Markets Authority Final Determination</i> (29 September 2015)
Equity beta	Exposure of shareholders to systematic risk
ESO	Electricity System Operator
Final Determination	GEMA's Final Determination for SSEN Transmission's allowances under the RII0-2 price control, published on 8 December 2020
Financeability	SSEN Transmission's ability to finance the activities which are the subject of obligations imposed by or under the relevant licence or legislation. Financeability is assessed using a range of different qualitative and quantitative measures, including financial ratios.
Financeability Duty	The duty of GEMA to ensure that licence holders are able to finance the activities that are the subject of obligations imposed by or under relevant legislation, i.e. the activities covered by their TLs, as set out in section 3A(2) of EA 1989
Firmus Energy Appeal	<i>Firmus Energy (Distribution) Limited v Northern Ireland Authority for Utility Regulation Final Determination</i> (26 June 2017)
GA 1986	Gas Act 1986
GDN	Gas Distribution Network
Gearing	The ratio of a company's debt to equity
GEMA	The Gas and Electricity Markets Authority, or 'the Authority'
Gilt	A bond issued by the UK government
GSC	TO General System Charges
ILG	Index-linked gilts
IQI	Information Quality Incentives
IS	Information systems
IRR	Internal rate of return

Licence conditions	The conditions under which SSEN Transmission holds its licence to operate as an electricity transporter
LOTI	Large Onshore Transmission Investment
LOTI G&SR	LOTI Guidance and Submissions Requirements Document (as yet unpublished)
MAR	Market-asset ratio
MM	Modigliani-Miller Theorem
NARM	Network Asset Risk Metric
NAV	Net asset value
NIE	Northern Ireland Electricity
OBR	Office for Budget Responsibility
Ofgem	Office of Gas and Electricity Markets, which supports GEMA
OFTO	Offshore transmission owner
Ongoing efficiency	The reduction in the volume of inputs required to produce a given volume of output, i.e. the productivity improvements that GEMA considers even the most efficient company is capable of achieving
opex	Operating expenditure
PCD	Price control deliverable
PCD RR&M	PCD Reporting Requirements and Methodology Document
Project Assessment Direction	A direction by GEMA, following a submission by SSEN Transmission justifying its costs for delivering a LOTI, specifying a LOTI Output, delivery date, and associated allowances, to be included in the LOTI G&SR
PR19 Provisional Findings	CMA's Provisional Findings for Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Limited for the PR19 price control period, published on 29 September 2020
RAV	Regulatory Asset Value
Re-opener	Mechanisms introduced by GEMA, by which companies can request further totex allowances for certain categories of works during the course of the price control
Reserved Powers	The powers reserved by GEMA in the Decision to modify the price control via directions, outside of the statutory mechanism for licence modification set out in section 11A EA 1989

RFR	Risk-free rate
RIIO	Revenue = Incentives + Innovation + Outputs
RPI	Retail prices index
SC	Special Condition
SHE-T	Scottish Hydro Electric Transmission plc
SSEN Transmission Licence	The electricity transmission licence held by SHE-T under section 6 of EA 1989
SONI Appeal	<i>SONI Limited v Northern Ireland Authority for Utility Regulation Final Determination</i> (13 November 2017)
SONIA	Sterling Overnight Index Average
SSC	TO Site-Specific Charges
STC	The System Operator – Transmission Owner Code
Supplier	Any person authorised to supply gas and/or electricity by virtue of a Gas Supply Licence and/or Electricity Supply Licence
TL	A licence authorising a person to participate in the transmission of electricity for that purpose
TMR	Total market return
TNUoS	Transmission Network Use of System Charges
TNUoS charging methodology	Use of system charging methodology
TNUoS Decision	GEMA, Decision on re-allocation of TNUoS Revenue Collection Risk, 9 July 2020
TO	Electricity transmission operator
totex	Total expenditure
Transmission system	The system of high voltage electric lines and high pressure pipelines providing for the bulk transfer of electricity and gas across the UK
UA 2000	Utilities Act 2000
UR	Northern Ireland Authority for Utility Regulation
Users	Residential and commercial end users of the UK electricity network

WA 1989	Water Act 1989
WACC	Weighted Average Cost of Capital
WIA 1991	Water Industry Act 1991