

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

**BETWEEN:**

**NORTHERN GAS NETWORKS LIMITED**

**Appellant**

**and**

**THE GAS AND ELECTRICITY MARKETS AUTHORITY**

**Respondent**

---

**APPELLANT'S SUBMISSIONS ON THE CMA'S FINAL REPORT ON PR19**

---

Linklaters LLP  
One Silk Street  
London  
EC2Y 8HQ  
Tel +44 20 7456 2000  
Fax +20 7456 2222

## Table of Contents

Contents	Page
1     Executive Summary .....	2
2     Cost of Equity .....	2
3     Outperformance Wedge .....	6
4     Ongoing Efficiency .....	8
5     BPI Stage 4 .....	9
6     Annex 1 – References to PR19 in NGN’s Notice of Appeal requiring updating.....	11

## 1 Executive Summary

- (1) This Submission is made by Northern Gas Networks Limited (“**NGN**”) (the “**Appellant**”), in relation to its appeal to the Competition and Markets Authority (“**CMA**”) against the second determination for gas distribution (“**GD**”) made by the Gas and Electricity Markets Authority (“**GEMA**”) under the RIIO price control regime, known as “**RIIO-GD2**” (the “**Appeal**”).<sup>1</sup>
- (2) Further to the CMA’s process letter of 15 April 2021, this Submission clarifies and updates the case presented in the Appellant’s Notice of Appeal (“**NoA**”) submitted to the CMA on 3 March 2021, to take into account the CMA’s final report in the PR19 price control (“**PR19**”) published on 9 April 2021 (the “**PR19 FD**”).<sup>2</sup>
- (3) In summary, the Appellant considers that the PR19 FD is supportive of the grounds of appeal set out in the NoA. As such, the Appellant does not believe that it needs to make any material updates to its NoA to reflect the PR19 FD. For the CMA’s reference, however, the Appellant has set out where references in the NoA (**Annex 1**) need to be updated to refer to relevant aspects of the PR19 FD.
- (4) In the interests of efficiency, this Submission focuses on the areas in the Appellant’s NoA where the PR19 FD supports the Appellant’s case that GEMA has made material errors in relation to cost of equity, ongoing efficiency and the efficient cost benchmark.
- (5) The Appellant recognises that the PR19 FD is not binding on the CMA Group hearing its Appeal and may not in all respects have a direct read-across to the energy appeals. However, the Appellant also notes that it is well-established that stability, predictability and transparency are key features of any regulatory regime and invites the CMA Group to apply lessons to be learned from PR19 in addressing GEMA’s errors as identified in the Appellant’s NoA and supporting expert reports.

## 2 Cost of Equity

- (6) The Appellant believes that the PR19 FD does not change its (and its expert’s) conclusion that GEMA has made material errors in assessing the cost of equity. If the CMA agrees with the errors identified in the Appellant’s NoA, the Appellant considers that the methodology set out in the KPMG report<sup>3</sup> overall remains an appropriate way of addressing these errors (notwithstanding that some more granular aspects of the approach adopted by the CMA in the PR19 FD may differ).
- (7) The allowed cost of equity set by the CMA in the PR19 FD is 4.73%, compared to 4.55% set by GEMA in RIIO-GD2. It is striking that the CMA’s cost of equity estimate in the PR19 FD is higher than GEMA’s estimate, notwithstanding that it is common ground that there is higher risk in the energy sector (as borne out by the higher beta used by GEMA and also set out in the Appellant’s NoA). Given this greater systematic risk associated with energy networks (and specifically gas distribution), the PR19 FD is strongly supportive of the Appellant’s submission that GEMA erred by setting an allowed return on equity that is too low.

---

<sup>1</sup> The Appellant is appealing the decision of GEMA to proceed with modifications to the licence published on 3 February 2021 (the “**Decision**”) under section 23 GA86.

<sup>2</sup> PR19 Final Report, exhibited at (NGNPR19\_001).

<sup>3</sup> Cost of Equity Report, exhibited at (KPMG\_COE1\_1).

- (8) Investors in UK regulated infrastructure assets face a choice regarding where they invest capital and this choice may be distorted if the regulatory framework creates unjustified disparities between assets.

## 2.1 Risk-free-Rate (RFR)

- (9) As explained in the Appellant's NoA, GEMA's estimate of the RFR is based exclusively on yields on 20-year RPI-linked gilts ("ILGs"). The Appellant's appeal on this ground is based on the proposition that GEMA has erred in failing to give weight to alternative instruments for the purposes of its RFR calculation, such as AAA rated corporate bonds. GEMA also ignored the fact that its own cross-check (nominal gilts (even controlling for their flaws as set out in the Cost of Equity Report))<sup>4</sup> suggests a figure higher than the RFR arrived at solely using ILGs.
- (10) The PR19 FD is aligned with the NoA in the following key respects:
- (i) The CMA recognises that the RFR should be accessible to all relevant market participants;
  - (ii) The CMA finds that the ILG rate alone is not a perfect proxy for the RFR that should be used in the CAPM;<sup>5</sup>
  - (iii) The CMA considers that highly rated corporate bonds are very close to risk-free and represent relevant market evidence in relation to the borrowing rate achievable by private market participants;<sup>6</sup>
  - (iv) The CMA therefore constructed a range for the RFR based on the yield on ILGs and AAA rated corporate bonds;
  - (v) The CMA considered that the RFR needs to capture the risk-free rate for a range of market participants – not just net lenders or the UK government;<sup>7</sup> and
  - (vi) The CMA rejected the SONIA cross check on the basis that it is inherently a short-term rate and that investors borrowing at SONIA would need to post collateral, making it unsuitable as a benchmark for a long-run RFR. The CMA further concluded that the yield on nominal bonds did not provide additional evidential value over and above ILGs, given the uncertainty over the size of inflation and liquidity premia distortions.<sup>8</sup>
- (11) As the RFR is a market-wide parameter, the PR19 FD has clear implications for the energy appeals and strongly supports the Appellant's submissions that GEMA's errors have led it to materially underestimate the RFR.

---

<sup>4</sup> Cost of Equity Report, para. 6.4.7, exhibited at (KPMG\_COE1\_1); NoA, Part V, section 4.1.2.

<sup>5</sup> PR19 Final Report, especially at paras. 9.102 - 9.108 (NGNPR19\_001). The RFR does not satisfy the full set of requirements for a RFR benchmark due primarily to the UK, as a sovereign state, being able to borrow at lower rates than relevant market investors. As the CMA notes at para. 9.104: "...ILGs do not completely meet our requirement of the RFR as applied in the CAPM, that all market participants can borrow at the same rate. UK government can borrow at rates considerably lower than those that can be achieved by even higher-rated non-government issuers."

<sup>6</sup> PR19 Final Report, para. 9.149 (NGNPR19\_001).

<sup>7</sup> PR19 Final Report, para. 9.159 (NGNPR19\_001) where the CMA observes "...we are trying to calibrate our estimate of the RFR acknowledging that the ILG rate is available to all lenders but only one borrower, and that even the highest quality borrowers in the country could not access this rate. On the assumption that market participants in the CAPM model are both borrowers and lenders, we consider it unlikely that the highest quality borrowers, who could presumably borrow at the lowest rates, would accept an equity return, even a zero-beta equity return, that was lower than their borrowing cost."

<sup>8</sup> PR19 Final Report, paras. 9.183 to 9.185 (NGNPR19\_001).

## 2.2 Beta

- (12) The Appellant submits that, while the methodology for assessing the asset beta in the Decision is opaque and GEMA has failed to provide further detail despite the Appellant's reasonable requests: (i) GEMA's choice of comparators does not properly capture risk in the energy sector; and (ii) GEMA placed too much weight on the betas of listed water companies, underestimating the higher systematic risk that energy companies (and GDNs in particular) face.<sup>9</sup>
- (13) The CMA's approach to comparator selection in the PR19 FD does not have a direct read across to GEMA's approach for GDNs, given the presence of listed pure-play water companies, which renders comparator selection more straight-forward in water than energy. However, it is nevertheless notable that the CMA chose not to use National Grid in its comparator sample, presumably on the basis that energy networks have a different risk profile from water companies.
- (14) The Appellant notes in addition the CMA's removal of outliers, which are distorted by Covid-19 effects. By contrast, as the Appellant submitted in its NoA, GEMA's approach places undue weight on the Covid-19 period, for example implying that a 5-year beta assumes a similar global pandemic approximately 1 year out of every 7.5 years. The CMA has amended its approach to place less weight on the evidence on beta estimates from December 2020 that include the Covid-19 period, than on observations pre-February 2020 (i.e. before the Covid-19 period). The CMA's final range of asset beta estimates of 0.28 - 0.30 (zero debt beta basis)<sup>10</sup> is fully encompassed within the range of evidence that results from estimates being calculated with a pre-Covid-19 cut-off date of February 2020. Therefore, the CMA's range for beta is relatively unaffected by Covid-19 estimates,<sup>11</sup> in support of the methodological shortcomings in GEMA's beta analysis that the Appellant set out in the NoA.

## 2.3 TMR

- (15) GEMA estimated a TMR of 6.5%, real CPIH, placing most weight on a long-run ex post method. The Appellant submitted that GEMA made an error by underestimating the real TMR by: (i) when deflating nominal returns under the historical ex post approach, placing sole reliance on an inflation series which includes a modelled (unofficial) 'back cast' of CPI data for c.40 years of the period; (ii) relying on a biased method to average annual returns data and failing to have regard to robust alternatives; and (iii) placing too much weight on evidence provided by forward-looking approaches.<sup>12</sup>
- (16) The PR19 FD is aligned with the Appellant's NoA and the Cost of Equity Report in the following key respects:
- (i) When deflating nominal returns under the historical ex post approach, the CMA considers that for the period from 1947 onwards both RPI and CPI series have *"relevant strengths and weaknesses in the context of estimating real historic*

---

<sup>9</sup> NoA, Part V, section 4.2.2.

<sup>10</sup> PR19 Final Report, Table 9-16 (NGNPR19\_001).

<sup>11</sup> PR19 Final Report, para. 9.493 (NGNPR19\_001).

<sup>12</sup> NoA, Part V, section 4.3.2.

*returns.*<sup>13</sup> The CMA therefore places weight on estimates calculated on the basis of both RPI and CPI inflation series;<sup>14</sup>

- (ii) The CMA considered that it is difficult to draw strong conclusions from international comparisons – including the returns on the UK market in US dollar terms. The CMA further notes the supportive literature on the benefits of common-law systems for investors. This supports the Appellant’s position that, if international data is to be taken into account, then a wider set of comparators should be used and that these should be drawn from common-law countries;
  - (iii) When assessing the appropriate methods of averaging deflated returns under the historical ex post approach, the CMA considers that on balance use of the arithmetic mean is preferable due to its simplicity and transparency. Significantly, however, the CMA considers that it is *“more appropriate to take into account all of the above estimates, i.e. both 10- and 20-year overlapping and non-overlapping estimates, in coming to a view on the range of reasonable TMR estimates.”*<sup>15</sup> This supports the Appellant’s contention in the NoA that GEMA’s reliance on an adjusted geometric average is inappropriate;
  - (iv) The CMA concludes that *“reservations about the robustness of the forward-looking evidence and our preference to maintain our assumption of a constant TMR over time, meant that we should place limited weight on the forward-looking estimates”* and that *‘survey evidence should be treated with caution’*.<sup>16</sup> This supports the Appellant’s position in the NoA that GEMA should have disregarded forward-looking and survey evidence when setting its range for TMR; and
  - (v) The CMA estimates a range for TMR under the historical ex post approach of 5.6% to 6.5% (real, RPI),<sup>17</sup> or 6.53% to 7.44% (real, CPIH) using a forward-looking RPI-CPI wedge of 0.9%. GEMA’s TMR estimate of 6.5% (real, CPIH)<sup>18</sup> is therefore lower than the PR19 FD range for TMR under the historical ex post approach. Additionally, the CMA’s TMR point estimate before ‘aiming up’ is 6.81%, which is materially above GEMA’s point estimate of 6.5% (both real, CPIH).
- (17) The Appellant submits that, since TMR is a market-wide parameter, the PR19 FD has clear implications for the energy appeals and further supports the Appellant’s submission that GEMA’s approach is wrong and materially underestimates the TMR.
- (18) We note a material change in the CMA’s position on the weight and estimation approach to long-run ex ante estimates in the PR19 FD compared to the PR19 Provisional Findings. This change is not immediately relevant to the Appellant’s appeal against the errors made by GEMA, given that GEMA, the Appellant, and other RII-GD2 appellants place most weight

<sup>13</sup> PR19 Final Report, para. 9.295 (NGNPR19\_001). Examples of strengths and weaknesses mentioned are that CPI is a more reliable measure of inflation in the economy due to its use of the Jevons rather than Carli formula, but that approximately 40 of the last 70 years of the CPI series are estimated using an approach for which it is impossible to determine the level of accuracy and therefore gives rise to robustness concerns. In contrast, actual RPI data has been collected and published for the entire 70-year period, but RPI is no longer a national statistic due to its heavy reliance on the Carli formula.

<sup>14</sup> PR19 Final Report, para. 9.296 (NGNPR19\_001).

<sup>15</sup> PR19 Final Report, para. 9.333 (NGNPR19\_001).

<sup>16</sup> See PR19 Final Report, para. 9.379 (NGNPR19\_001). The CMA also notes that, because surveys and forecasts are subjective; ‘the results may depend on the identity and outlook of the respondents and how they interpret the questions being asked’, PR19 Final Report, para 9.377 (NGNPR19\_001).

<sup>17</sup> PR19 Final Report, para. 9.393 (NGNPR19\_001).

<sup>18</sup> FD Finance Annex (revised), Table 12 (NGNNOA1\_167).

on ex post rather than ex ante analysis. Nevertheless, following discussions with KPMG and our expert witnesses, including Prof Alan Gregory, we note that:

- (i) the DMS decomposition approach places 100% weight on CED/CPI, which is inconsistent with the CMA's position on the ex post analysis;
- (ii) the 40bp serial correlation adjustment is *ad hoc* and not appropriate for the DMS decomposition number; and
- (iii) the Barclays data set used for the Fama-French estimate has data integrity issues and is not fit for being given such significant weight.

## 2.4 Aiming-up/selecting a point estimate

- (19) In selecting the point estimates for each parameter in the cost of equity, GEMA has generally adopted the mid-point of its estimated range. In its NoA, the Appellant submits that, in failing to aim up, GEMA failed to take into account: (a) the uncertainty in the correct level of the cost of capital and the risk of underinvestment/exit of investment if the cost of capital is set too low, (b) the asymmetric risk faced by GDNs, and (c) the value of real options.<sup>19</sup>
- (20) The PR19 FD is aligned with the Appellant's NoA and Cost of Equity Report in the following key respects:
  - (i) The CMA considered that the need to promote investment should be a consideration in setting the point estimate.<sup>20</sup> This corroborates the position in the NoA that aiming-up is required to mitigate the risk of underinvestment and exit of capital.
  - (ii) The CMA confirmed that aiming-up should be applied where there is asymmetric risk.<sup>21</sup>
  - (iii) On the basis of its assessment, the CMA's final decision is to use a cost of equity point estimate of 0.25% above the middle of its range. This is consistent with the uplift modelled in the Cost of Equity Report and supports the Appellant's case that an uplift for uncertainty from the mid-point is necessary.<sup>22</sup>
- (21) While the degree of aiming-up will have sector-specific components, the CMA's recognition of the need to aim-up for uncertainty and asymmetric risk as a matter of principle has a significant read across for this Appeal. The Appellant also notes that (i) the downside risk is higher for GDNs compared to water companies, and (ii) GDNs face additional asymmetric risk due to the UK transition towards Net Zero, and negative asymmetry under GEMA's proposals in the RIIO-GD2 Final Determinations.

## 3 Outperformance Wedge

- (22) The NoA submits that GEMA made a number of material errors in including an outperformance wedge ("**OW**") mechanism. The Appellant submitted that incentives to outperform are a central part of incentives-based regulation, and that GEMA's introduction

---

<sup>19</sup> NoA, Part V, section 4.4.2.

<sup>20</sup> In particular, the CMA recognises the "*risks of an exit of capital from the long-term investors in the sector, should the cost of capital be set too low*", and the "*risks of underinvestment in new assets, if the expected return on capital on new investment in AMP8 and beyond does not provide incentives to reinvest capital and maintain or grow the asset base over time*", PR19 Final Report, para. 9.1394 (NGNPR19\_001).

<sup>21</sup> PR19 Final Report, para. 9.1395 (NGNPR19\_001).

<sup>22</sup> PR19 Final Report, para. 9.1306 (NGNPR19\_001).

of the OW will distort investment incentives, erode investor confidence, increase investor risk and weaken clarity over calibration of the price control.<sup>23</sup>

(23) The PR19 FD is aligned with the NoA in the following key respects:

- (i) The CMA reaffirmed that outperformance is a desirable outcome of the regulatory regime, noting that *“[i]f 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”*.<sup>24</sup>
- (ii) The CMA further stressed that they *“[were] not persuaded it is consistent for Ofwat to both set new and increasingly stretching targets [...] and also to assume that companies will outperform against those targets”*.<sup>25</sup>
- (iii) The CMA’s consideration of Ofwat’s novel gearing outperformance mechanism (“**GOSM**”) in the PR19 FD emphasised the high evidential standard required when introducing novel regulatory mechanisms. The CMA stressed the need to provide “enough evidence” to justify a *“significant break from a well-established regulatory approach”*.<sup>26</sup> The CMA noted that *“Ofwat was not able to present any analysis to identify and quantify any excess benefits from high gearing structures”*,<sup>27</sup> nor had they provided *“any analysis of what the associated risks with miscalibrating this mechanism may be”*.<sup>28</sup> Significantly, the CMA concluded in the PR19 FD that there was not sufficient evidence that *“an intervention on gearing is required within this price control in respect of the four Disputing Companies”*<sup>29</sup> and that the CMA had not *“been convinced that the risks of high gearing for the Disputing Companies in current circumstances merit any additional mechanisms over and above those that are already available to Ofwat”*.<sup>30</sup> While the Appellant recognises that the appeals framework for water and energy are different, the CMA’s comments on the introduction of a new regulatory tool are relevant to the present Appeal, and consistent with the CMA’s precedent in energy appeals about the evidential threshold for a regulator to introduce novel deductions in a price control framework.<sup>31</sup> The Appellant therefore submits that the CMA’s position regarding outperformance and the inappropriateness of introducing a new regulatory mechanism without supporting evidence is aligned with the Appellant’s case that GEMA was wrong in introducing the OW given the lack of sufficient evidence justifying the need for, and effectiveness of, introducing such a new regulatory mechanism in RIIO-GD2 as well as the lack of an impact assessment on the incentive effects of the wedge.<sup>32</sup>

---

<sup>23</sup> NoA, Part VI, section 3.2.

<sup>24</sup> PR19 Final Report, para 9.1334(a) (NGNPR19\_001).

<sup>25</sup> PR19 Final Report, para 9.1334(b) (NGNPR19\_001).

<sup>26</sup> PR19 Final Report, para 9.1223 (NGNPR19\_001).

<sup>27</sup> PR19 Final Report, para. 9.1212 (NGNPR19\_001).

<sup>28</sup> PR19 Final Report, para 9.1215 (NGNPR19\_001).

<sup>29</sup> PR19 Final Report, para 9.1224 (NGNPR19\_001).

<sup>30</sup> PR19 Final Report, para 9.1225 (NGNPR19\_001).

<sup>31</sup> NoA, para 251.

<sup>32</sup> NoA, Part VI, section 3.4.2.



#### 4 Ongoing Efficiency

- (24) The Appellant's case is that GEMA has erred in setting an overly challenging Ongoing Efficiency ("OE") target. In the PR19 FD the CMA set a productivity figure of 1% p.a. This figure is much lower than GEMA's overall OE challenge of 1.2% p.a, (notwithstanding the fact that the scope for incremental efficiency improvements in the water sector is much higher) and does not suffer from the double-counting implied by GEMA's imposition of an innovation uplift on top of the overly stretching base efficiency challenge.<sup>33</sup>
- (25) The PR19 FD is aligned with the NoA in the following key respects:
- (i) Choice of comparator sets. the CMA accepted the use of a targeted comparator set. This aligns with the Appellant's submission that GEMA placed too much weight on the economy-wide comparator set, which is less representative for GDNs.<sup>34</sup>
  - (ii) Gross Output (GO) v Valued Added (VA) productivity measures. The CMA focused on the GO measure but gave some qualitative weight to the VA metric being higher.<sup>35</sup> This approach supports the Appellant's submission that GEMA placed too much weight on VA measures, which resulted in an estimate of productivity that is biased upwards.<sup>36</sup>
  - (iii) Historical sector productivity. The Appellant submits that GEMA was wrong to use the NGN historical productivity 'cross-check' of its productivity figure. It is notable that the CMA decided not to place weight on historical water sector productivity estimates, because they "*are unlikely to be reliable for the purposes of projecting future productivity gains*", and so concluded that benchmarking to a competitive benchmark is more appropriate.<sup>37</sup>
  - (iv) Absence of an innovation uplift. The CMA did not include an "innovation uplift" and GEMA's approach in this respect remains unprecedented. GEMA contends that its decision to set the OE challenge within the top of CEPA's recommended range and include an innovation uplift is reasonable on the basis that network companies drive higher efficiency gains as they are not subject to competitive pressure. However, as noted in the NoA, GEMA's reasoning cuts across well-established economic theory<sup>38</sup> and is contradicted by the CMA's approach at PR19 FD: "*[we] decide that a central measure of what can be achieved in competitive sectors is likely to provide a stretching target*".<sup>39</sup>
- (26) While the Appellant submits that the PR19 FD supports the fact that GEMA has made errors in its assessment of OE, it notes that there are important differences between the water and energy sectors. As explained in the NoA, given that the water sector has a much wider and

---

<sup>33</sup> NoA, Part VII, section 2.2.

<sup>34</sup> NoA, para. 55(iv). The Appellant notes that there is not much overlap between the PR19 comparator group and the RIIO-GD2 targeted comparator group which, based on CEPA's analysis, experienced an economy-wide productivity slowdown (2 of the 4 RIIO-GD2 sectors are also in PR19).

<sup>35</sup> PR19 Final Report, para 4.545 (NGNPR19\_001).

<sup>36</sup> NoA, para. 55(iii).

<sup>37</sup> PR19 Final Report, para 4.570 (NGNPR19\_001).

<sup>38</sup> NoA, paras. 332-338 and 378.

<sup>39</sup> PR19 Final Report, para 4.522 (NGNPR19\_001).

more complex supply chain compared to GDNs, the potential for incremental efficiency improvements in the GDN sector is comparatively more limited.<sup>40</sup>

- (27) Additionally, the Appellant submits that the OE target set by GEMA is comparatively more difficult for a frontier company to achieve. Investments made by the frontier company may have higher risk or costs than laggard companies, as the frontier company has already made the investments with the highest net benefit. This is supported by the CMA's view of the higher costs the frontier company in the water sector faces in investment and innovation compared to other companies in the sector: *"As a frontier company, it may need to make investments and explore innovation that others do not need to meet their higher leakage PCs. We recognise that an appropriate unit rate for Anglian may be higher than others because it may already have exhausted low-cost options."*<sup>41</sup>

## 5 BPI Stage 4

- (28) The Appellant submits that GEMA made material errors in its assessment of the Appellant's BPI Stage 4 reward, including by setting an overly challenging efficient cost benchmark at a glidepath to the 85th percentile in its model. The Appellant submits that this approach was not supported by the confidence levels appropriate for a single econometric (top-down totex) model.<sup>42</sup>
- (29) In the PR19 FD, the CMA confirmed its provisional decision to set totex allowances at the upper quartile, which *"balances [the CMA's] objective of setting a challenging benchmark while acknowledging the limitations of the econometric modelling (and the consequent risk that the company will have insufficient allowed revenue)"*.<sup>43</sup> This is clearly consistent with the Appellant's submission that the efficient cost benchmark should be set at the upper quartile.
- (30) The CMA based its decision on the degree of confidence that it had in the totex model and the quality of econometric analysis.<sup>44</sup> The CMA concluded that the changes it made *"whilst appropriate, did not result in substantial improvements in the statistical performance of the econometric modelling"* and further noted that *"we are wary of placing too much reliance on comparisons of standard errors and confidence intervals"*. Consistent with the approach adopted in the PR19 FD, the Appellant submits that GEMA's choice of the efficient cost benchmark is not justified by the confidence levels in GEMA's totex modelling.

---

<sup>40</sup> NoA, para.319.

<sup>41</sup> PR19 Final Report, para. 8.136 (NGNPR19\_001).

<sup>42</sup> NoA, paras. 61-66 and Part VIII.

<sup>43</sup> PR19 Final Report, para 4.494 (NGNPR19\_001).

<sup>44</sup> PR19 Final Report, para 4.492 (NGNPR19\_001).

**STATEMENT OF TRUTH**

The Appellant believes that the facts stated in this Submission are true.

.....

Signature of Authorised Representative

Mark Horsley, Chief Executive Officer

.....

Name of Authorised Representative

Date: 23 April 2021

for and on behalf of Northern Gas Networks Limited

## Annex 1 – References to PR19 in NGN’s Notice of Appeal requiring updating

NGN’s NoA Reference	PR19 PF Reference	Extract	PR19 Final Report Reference	Changes required in NGN’s NoA
<b>Appeal Ground 1: Cost of Equity</b>				
31(iii) [Summary]	N/A	<i>“GEMA’s approach is in stark contrast with the CMA’s PR19 Provisional Findings, which incorporates AAA-rated corporate bonds as part of its range for its estimate of RFR.”</i>	85(b)	The reference to “CMA’s PR19 Provisional Findings” in para.31(iii) of the NoA should be replaced with “CMA’s PR19 Final Report (see CMA’s PR19 Final Report, para.85(b))”.
37(iii) [Summary]	80(d)	<p><i>“GEMA’s approach is in contrast to the approach adopted by the CMA in the PR19 Provisional Findings where the CMA recognised the presence of data and methodological issues in inflation measurement and chose to construct its range for the TMR with weight given to both CPI and RPI”.<sup>3</sup></i></p> <p><u>FN 3:</u> <i>“In particular, to calculate the TMR, the CMA placed the most weight on historical ex post returns (from 1900 to the present day) and placed some weight on both historic ex ante approaches and forward-looking evidence as a cross-check when selecting its range (see CMA’s PR19 Provisional Findings, para. 80(d) (NGNNOA1_186)).”</i></p>	85(a), 12.46(a), 13.41(a), 14.42(a), 15.42(a), 9.216	<p>The reference to “PR19 Provisional Findings” in para.37(iii) of the NoA should be replaced with “PR19 Final Report”.</p> <p>The wording of FN3 should be replaced with “<i>In particular, to calculate the TMR, the CMA placed the most weight on both historical ex post returns (from 1900 to the present day), and historic ex-ante approach and placed less weight on the forward-looking evidence [...] [the CMA] believe that both historic ex-ante approaches and forward-looking evidence can provide a useful cross-check in some cases (see CMA’s PR19 Final Report, paras. 85(a), 12.46(a), 13.41(a), 14.42(a), 15.42(a)).</i>”</p>
39 (iv) [Summary]	N/A	<i>“GEMA’s approach is also in contrast to the approach adopted by the CMA in the PR19 Provisional Findings where the CMA considered a wide range of estimation methods for horizons of 10 to 20 years.”</i>	9.330	The reference to “PR19 Provisional Findings” in para.39(iv) of the NoA should be replaced with “PR19 Final Report (see CMA’s PR19 Final Report, para.9.330)”.

NGN's NoA Reference	PR19 PF Reference	Extract	PR19 Final Report Reference	Changes required in NGN's NoA
43(i) [Summary]	N/A (CMA 2020 Water Redeterminations Working Paper, para. 4)	<i>"There is a consistent regulatory track record, both in the UK and internationally, that supports the principle of aiming up. An approach of picking a point estimate higher than the midpoint was used in previous determinations by each of Ofwat, GEMA and the Competition Commission ("CC")/CMA, in recognition of the societal detriments from setting the cost of equity allowance too low."</i>	9.1402	The underlying source should be replaced with "CMA's PR19 Final Report, para.9.1402 (NGNPR19_001)".
43(ii) [Summary]	N/A (CMA 2020 Water Redeterminations Working Paper, para. 115)	<i>"The CMA's Working Paper on cost of equity for PR19 clearly supports the fact that there are "a number of benefits from choosing a point estimate for the cost of equity above the middle of the range" (i.e. the principle of "aiming up")."</i>	9.1402	The reference to the "CMA's Working paper on cost of equity for PR19" in para.43(ii) of the NoA should be replaced with "CMA's PR19 Final Report" and the underlying source with "CMA's PR19 Final Report, para.9.1402 (NGNPR19_001)".
167	N/A	<i>"GEMA, contrary to what would be reasonably expected from a regulator, has not given any weight to alternative instruments for the purposes of its RFR calculation, despite evidence submitted by GDNs in the form of expert reports and the CMA's provisional findings in PR19 ("PR19 Provisional Findings"). In particular, GEMA has not placed any weight on AAA-rated corporate debt."</i>	85(b)	The reference to "PR19 Provisional Findings" should be replaced with "CMA's PR19 Final Report (see CMA's PR19 Final Report, para.85(b))".
168(iii)	N/A (Wright & Mason	<i>"GEMA's decision to continue to rely on ILGs is based on an argument from a submission made to the CMA in the context of the PR19 Provisional Findings by two academics, Stephen Wright and Robin Mason. However, this argument is flawed, since it too is</i>	9.102, 9.103 and 9.108	Additional wording should be added at the end of para.168(iii) of the NoA as follows: "This is supported by the CMA in the PR19 Final Report, where it found that the ILG rate alone is not a perfect proxy for the

NGN's NoA Reference	PR19 PF Reference	Extract	PR19 Final Report Reference	Changes required in NGN's NoA
	PR19 Report)	<i>based on a fundamental misapplication of the principles of the CAPM framework."</i>		<i>RFR in the CAPM framework. This is because ILGs do not satisfy the full set of requirements for an RFR benchmark due primarily to the sovereign being able to borrow at lower rates than relevant market investors (see CMA's PR19 Final Report, paras. 9.102, 9.103 and 9.108)".</i>
168(v)	N/A	<i>"[...] As regards regulatory practice, the decision by GEMA in RIIO-GD2 (and also Ofwat in PR19), towards setting the RFR based on spot yields, rather than a more robust approach, citing only the high level recommendation in the UKRN Study, means that the CMA's detailed consideration of this approach in PR19 Provisional Findings is the relevant regulatory precedent for setting the RFR using spot market data. GEMA's statement is therefore inapt."</i>	9.161	The reference to "PR19 Provisional Findings" should be replaced with "CMA's PR19 Final Report (see CMA's PR19 Final Report, para.9.161)".
168(vi)	12.44	<i>"GEMA's approach is at odds with the approach taken by the CMA in the PR19 Provisional Findings, where the CMA calculated the RFR "by placing weight on both long-tenor index-linked gilts and AAA-rated non-government bonds (the highest quality commercial debt)"."</i>	85(b), 15.42(b)	<p>The following changes are required in para.168(vi) of the NoA:</p> <ul style="list-style-type: none"> <li>• The PR19 Provisional Findings quote to be replaced with "by placing weight on both long-tenor index-linked gilts and AAA-rated non-government bonds (the highest quality commercial debt) and taking into account up-to-date market data".</li> <li>• The underlying source to be replaced with "CMA's PR19 Final Report, paras.85(b) and 15.42(b) (NGNPR19_001)".</li> <li>• The reference to "PR19 Provisional Findings" to be replaced with "PR19 Final Report".</li> </ul>

NGN's NoA Reference	PR19 PF Reference	Extract	PR19 Final Report Reference	Changes required in NGN's NoA
168(vi)	9.137	<i>"[...] In particular, in the PR19 Provisional Findings, the CMA (i) adopted the use of a range for the RFR where the upper bound was based on the AAA corporate debt rate and [...]"</i>	9.161-9.162	The reference to "PR19 Provisional Findings" in para.168(vi) of the NoA should be replaced with "PR19 Final Report" and the underlying source with "CMA's PR19 Final Report, paras. 9.161-9.162 (NGNPR19_001)".
168(vi)	9.126	<i>"[...] (ii) applied a 6-month average extending from the 1-month average used by GEMA, acknowledging that averaging periods that are too short risk the introduction of inappropriate levels of volatility into the estimation process."</i>	9.208	The underlying source should be replaced with "CMA's PR19 Final Report, para. 9.208 (NGNPR19_001)".
168(vii)	9.135	<i>"Further, GEMA's interpretation of the CMA position is highly selective and self-serving. GEMA refers to the CMA's statement that "ILGs closely but imperfectly match the key requirements of the RFR", concluding that this implies that "using ILGs is not necessarily wrong in the CMA's view. However, the CMA also stated that "yield on ILGs is likely to sit below the 'true' estimate of the theoretical RFR" [...]"</i>	9.264, 9.108	Additional wording to be added as follows: "and in the PR19 Final Report, the CMA stated that "it is likely that the RFR appropriate for a range of relevant investors sits above the return available from ILGs" (see CMA's PR19 Final Report, para. 9.264) and ""we conclude that appropriate maturity ILGs remain a useful input to the RFR estimation process, but that they are unlikely to provide a perfect (or wholly sufficient) proxy for the RFR in isolation" (see CMA's PR19 Final Report, para.9.108).
168(vii)	9.88	<i>"[...] and that ILGs "are unlikely to provide a perfect (or <b>wholly sufficient</b>) proxy for the RFR in isolation" (emphasis added)."</i>	9.108	Additional wording to be added as follows: "The same conclusion was reached in the PR19 Final Report (see CMA's PR19 Final Report, para. 9.108)."
168(vii)	9.137	<i>"[...] Furthermore, mirroring the CMA quote that GEMA cites to support its reliance on ILGs, the CMA used the exact same</i>	9.239	Additional wording to be added as follows: "The same conclusion was reached in the PR19 Final Report (see CMA's PR19 Final Report, para. 9.239)."

NGN's NoA Reference	PR19 PF Reference	Extract	PR19 Final Report Reference	Changes required in NGN's NoA
		<i>language to describe AAA-rated corporate bonds, stating that they "closely but imperfectly match the key requirements of the RFR".</i>		
168(viii)	N/A	<i>"GEMA has been partial and selective in dismissing alternative approaches, in particular its dismissal of placing weight on AAA-rated corporate debt as the CMA has done in the PR19 Provisional Findings."</i>	85(b), 15.42(b)	The reference to "PR19 Provisional Findings" should be replaced with "PR19 Final Report (see CMA's PR19 Final Report, paras. 85(b), 12.46(b), 13.41(b) and 14.42(b) and 15.42(b))".
169(v)-(vii)	N/A (Ofwat Price Determinations Submission by Energy Networks Association (ENA) paras. 2.7 to 2.10)	<i>"In particular, GEMA has not included AAA-rated corporate bonds which are a better benchmark for the risk-free borrowing rate, as recognised by the CMA, which relied on this instrument in the PR19 Provisional Findings. [...] This is particularly the case in relation to AAA-rated corporate bonds, which give materially higher estimates of the RFR."</i>	85(b), 15.42(b)	The reference to "PR19 Provisional Findings" should be replaced with "PR19 Final Report (see CMA's PR19 Final Report, paras. 85(b), 15.42(b))".
197(iv)	9.160, 9.161	<i>"GEMA cross checks the real TMR using this approach with the real TMR earned by a USD investor in UK equities. In doing so, GEMA has [...] followed an approach which is inconsistent with CMA and other regulatory precedent, which supports putting weight on both inflation series".</i>	9.295-9.296	The underlying sources should be replaced with "CMA's PR19 Final Report, paras.9.295-9.296 (NGNPR19_001)".



NGN's NoA Reference	PR19 PF Reference	Extract	PR19 Final Report Reference	Changes required in NGN's NoA
198(iv)	9.176 to 9.184	<i>"GEMA has [...] followed an approach which is inconsistent with CMA (and CC) precedent, which in a number of previous decisions, as well as the recent PR19 Provisional Findings, puts weight on a range of approaches to averaging in arriving at a final TMR estimate."</i>	9.333	The reference to <i>"PR19 Provisional Findings"</i> in para.198(iv) of the NoA should be replaced with <i>"PR19 Final Report"</i> and the underlying source with <i>"CMA's PR19 Final Report, para.9.333 (NGNPR19_001)"</i> .
200(iv)	9.204 to 9.215	<i>"In the PR19 Provisional Findings, the CMA has placed no weight on forward-looking approaches, noting their significant shortcomings."</i>	9.394	The statement <i>"In the PR19 Provisional Findings, the CMA has placed no weight"</i> in para. 200(iv) of the NoA should be replaced with <i>"In the PR19 Final Report, the CMA has placed limited weight"</i> and the underlying source should be replaced with: <i>"CMA's PR19 Final Report, para.9.394 (NGNPR19_001)"</i> .
206	N/A (CMA 2020 Water Redeterminations Working Paper, para. 22)	<i>"There is a well-established principle (known as 'aiming-up') whereby an estimate above the mid-point of the range is chosen due to the uncertainty around the parameter estimates, and the relatively worse consequences for consumer welfare of selecting a cost of equity that is too low. There are good reasons for choosing a point estimate from the upper end of that range, including to (i) promote long-term investment and address the risk of an exit of capital if the cost of equity is set too low; (ii) reflect structural asymmetries; and (iii) take into account a cross-check on financeability."</i>	9.1402	The following should be added at the end of this statement: <i>"This conclusion is confirmed in the CMA's PR19 Final Report"</i> , with the following source: <i>"CMA's PR19 Final Report, para.9.1402 (NGNPR19_001)"</i> .
211(iv)	9.667	<i>"GEMA's position is also at odds with the latest CMA precedent from the PR19 Provisional Findings and subsequent cost of capital working paper, which clearly supports the principle of aiming-up in order to avoid the greater risk to consumer welfare from setting the cost of equity too low. In the cost of capital working paper, the CMA</i>	9.1394(a), 9.1402	The reference to <i>"PR19 Provisional Findings and subsequent cost of capital working paper"</i> in para. 211(iv) of the NoA should be replaced with <i>"PR19 Final Report"</i> and the reference to <i>"In the cost of</i>

NGN's NoA Reference	PR19 PF Reference	Extract	PR19 Final Report Reference	Changes required in NGN's NoA
		<i>clearly supports the principle of applying an uplift to, or 'aiming up' on, market-based cost of equity, stating that there are "a number of benefits from choosing a point estimate for the cost of equity above the middle of the range". GEMA's attempt to downplay this clear, recent, CMA view, by contrasting it with the approach the CMA took in the NATS Final Report, ignores the obvious differences between NATS Final Report and the water appeals which the CMA stated led to its differing approach. In particular, the CMA placed significant weight on government ownership in the NATS Final Report, which was not relevant in water and does not apply to energy networks."</i>		<i>capital working paper" with "In the PR19 Final Report".</i>  The underlying source should also be replaced with "CMA's PR19 Final Report, paras. 9.1394(a), 9.1402 (NGNPR19_001)".
211(v)	N/A (CMA 2020 Water Redeterminations Working Paper, para. 46)	<i>"This is clearly incorrect, as explained in the Cost of Equity Report, since companies need to raise finance to invest and will only do so if the allowed rate of return at least equals the true (but unobservable) weighted average cost of capital ("WACC"). Furthermore, the impact of a cost of equity that is set too low will be felt over the longer term. Consequently, focussing on investment during RIIO-GD2, as GEMA's arguments do, is clearly wrong and has a negative impact on the interests of existing and future customers.<sup>213</sup>"</i>  <i><u>FN213:</u> CMA 2020 Water Redeterminations Working Paper, para. 46 (NGNNOA1_185) where the CMA noted "the cost of capital today may have a knock-on impact on investment planning during AMP7 that will be actioned (or not) in subsequent price controls.</i>	9.1273	The underlying source in FN213 should be replaced with "CMA's PR19 Final Report, para. 9.1273 (NGNPR19_001)".

NGN's NoA Reference	PR19 PF Reference	Extract	PR19 Final Report Reference	Changes required in NGN's NoA
212(v)	N/A	<i>"The CMA recognised the need for an adjustment to cost of capital to reflect asymmetry in its recent PR19 Provisional Findings."</i>	9.1395	The reference to "PR19 Provisional Findings" should be replaced with "PR19 Final Report (see CMA's PR19 Final Report, para.9.1395)".
<b>Appeal Ground 2: Outperformance Wedge</b>				
279	N/A (CMA 2020 Water Redeterminations Working Paper, para. 81)	<i>"The fact that outperformance is a desirable outcome was also recently recognised by the CMA in its PR19 working paper on the cost of capital: "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."</i>	9.1334(a)	The reference to the "PR19 working paper on the cost of capital" in para. 279 of the NoA should be replaced with "PR19 Final Report" and the underlying source with "CMA's PR19 Final Report, para.9.1334(a) (NGNPR19_001)".
282	9.180	<i>"Aiming up is the principle whereby a regulator sets an allowed cost of equity above the mid-point of its estimated range for the cost of equity, in order to ensure that the allowed cost of equity is likely to be above the true cost of equity for investors, given that cost of equity is estimated with uncertainty. The rationale for this principle is to ensure that the allowed cost of equity creates sufficient incentives to invest. The approach was firmly endorsed by the CMA in its PR19 Provisional Findings."</i>	9.1317, 9.1387-9.1394, 9.1402	The reference to "PR19 Provisional Findings" should be replaced with "PR19 Final Report, and the underlying source with "CMA's PR19 Final Report, paras. 9.1317, 9.1387-9.1394 and 9.1402 (NGNPR19_001)".
306	9.629, 9.628	<i>"The CMA's discussion of Ofwat's gearing outperformance mechanism in the PR19 Provisional Findings is important to note here. The CMA rejected the novel gearing outperformance sharing mechanism (GOSM) that Ofwat had adopted. The CMA was "concerned that a GOSM as proposed by Ofwat would represent a significant break from a well-established regulatory approach and</i>	9.1222-9.1223	The PR19 Provisional Findings quote in para.306 of the NoA should be replaced with "doubtful over the effectiveness of the proposed mechanism to improve financial resilience - it does not reduce or eliminate financial risks [...] and may even exacerbate them – and was also concerned that a GOSM as proposed

NGN's NoA Reference	PR19 PF Reference	Extract	PR19 Final Report Reference	Changes required in NGN's NoA
		<i>may be seen by investors as punishing companies for previously sanctioned capital structures without offering sufficient evidence, clarity of justification or time to make cost-effective adjustments."</i>		<i>by Ofwat would represent a significant break from a well-established regulatory approach without offering enough evidence to justify doing so."</i>  Also, the reference to "PR19 Provisional Findings" should be replaced with "PR19 Final Report" and the underlying source with "CMA's PR19 Final Report, paras. 9.1222-9.1223 (NGNPR19_001)".
307	9.630	<i>"It is notable that the CMA's view was not predicated on whether higher levels of gearing were desirable per se. In other words, it was concerned by the principle of Ofwat's approach. It urged Ofwat to develop tools to address the perceived issues more directly, and to do a "full assessment of the costs and benefits of the different options for intervention"."</i>	9.1224-9.1225	The last sentence in para. 307 of the NoA should be replaced with "It urged Ofwat to consider the "different options open to Ofwat to address any concerns it may have about the consequences of high gearing and other factors affecting financial resilience. These include licence modifications which could be defined to directly limit gearing", explaining that it "[has] not been convinced that the risks of high gearing [...] merit any additional mechanisms over and above those that are already available to Ofwat".  Also, the underlying source should be replaced with "CMA's PR19 Final Report, paras. 9.1224-9.1225 (NGNPR19_001)".
<b>Appeal Ground 3: Ongoing Efficiency</b>				
57 [Summary]	N/A	<i>"These errors, both individually and in aggregate, lead to a level of overall OE challenge which is unreasonably high and inconsistent with regulatory practice (including the CMA's provisional finding of a 1% OE challenge at PR19)."</i>	4.616	The reference to the "CMA's provisional finding" in para.57 of the NoA should be replaced with "CMA's finding in its PR19 Final Report (see para. 4.616)".

NGN's NoA Reference	PR19 PF Reference	Extract	PR19 Final Report Reference	Changes required in NGN's NoA
319(vi)	N/A	<i>"GEMA has failed to consider regulatory precedent. An OE challenge in excess of 1% has not been set by any regulator considered by CEPA. GEMA's 1.2% OE challenge also materially exceeds the CMA's provisional decision of 1% in PR19 (which does not suffer from the double counting implied by GEMA's innovation uplift). Moreover, water companies have significantly more complex supply chains and therefore greater scope for incremental efficiency improvements than the GD sector."</i>	4.616	The reference to the "CMA's provisional decision" in para.319(vi) should be replaced with "CMA's decision in its PR19 Final Report (see para. 4.616)".
334(ii)	N/A	<i>"<u>Second</u>, GEMA has failed to have proper regard to GO measures of productivity, seemingly placing considerable weight on value added VA measures. Placing weight on only VA measures results in an estimate of productivity that is biased upwards, for the reasons set out in the Ongoing Efficiency Report. GEMA has disregarded CEPA's recommendation and regulatory precedent,<sup>357</sup> which both support a more balanced approach."</i>  <i>"<u>FN 357</u>: For instance, this approach was used by GEMA at RIIO-GD1/T1 and by the CMA in its Provisional Findings for PR19 (NGNNOA1_186). See Ongoing Efficiency Report, para. 6.2.20, 6.2.26, exhibited at (MR1_1). CEPA also advised that "it is typically seen as good regulatory practice to consider the information provided by both methods." See CEPA's FD Report, p. 24 (NGNNOA1_230)."</i>	4.544-4.545	The reference to PR19 Provisional Findings in footnote 357 should be replaced with "the CMA in its Final Report for PR19, paras. 4.544-4.545 (NGNPR19_001)".
340	N/A (FD Core (revised), para 5.25)	<i>"In the FD, GEMA noted that it had decided not to make an allowance for the impact of COVID-19 on OE on the basis that: (i) it is very hard to make a confident judgement about the impact of COVID-19 on productivity; (ii) GEMA will address any potential</i>	4.589-4.595	The reference to "PR19 PFs" in para. 340 of the NoA should be replaced with "PR19 Final Report, (see paras. 4.589-4.595)".

NGN's NoA Reference	PR19 PF Reference	Extract	PR19 Final Report Reference	Changes required in NGN's NoA
		<i>impacts of COVID-19 as part of the RIIO-GD2 closeout process; and (iii) its approach is supported by that of the CMA in its PR19 PFs."</i>		
<b>Appeal Ground 4: BPI Stage 4</b>				
66(i) [Summary]	N/A	<i>"At FD, GEMA set an overly challenging efficient cost benchmark at a glidepath to the 85th percentile in its model. The Appellant submits that this target [...] is inconsistent with regulatory good practice, which has typically been set no higher than the upper quartile (i.e. 75th percentile) (including provisionally by the CMA at PR19)."</i>	4.494	The reference to "provisionally by the CMA at PR19" in para. 66(1) of the NoA should be replaced with "by the CMA in its PR19 Final Report (see CMA's PR19 Final Report, para. 4.494)".
469	4.292	<i>"As the CMA's analysis in the PR19 Provisional Findings shows, there is limited (if any) precedent for UK regulators setting targets above the upper quartile."</i>	4.488	The reference to "PR19 Provisional Findings" in para. 469 of the NoA should be replaced with "PR19 Final Report" and the underlying source with "CMA's PR19 Final Report, para. 4.488 (NGNPR19_001)".
470	4.296	<i>"The approach adopted by the CMA in PR19 supports the Appellant's view that setting the efficient cost benchmark at the upper quartile is most appropriate. While Ofwat had adopted a 'tougher' efficient cost benchmark, the CMA provisionally reduced this to the upper quartile: "as this balances our objective of setting a challenging benchmark while acknowledging the limitations of the econometric modelling (and the consequent risk that the company will have insufficient allowed revenue to ensure a base level of service)".</i>	4.494, 12.8	The reference to "provisionally" in para.470 of the NoA should be replaced with "in its PR19 Final Report" and the underlying source with "CMA's PR19 Final Report, paras. 4.494, 12.8 (NGNPR19_001)". Also, the PR19 Provisional Findings quote in para.470 of the NoA should be replaced with "this balances our objective of setting a challenging benchmark while acknowledging the limitations of the econometric modelling (and the consequent risk that the company will have insufficient allowed revenue [...] to ensure a base level of service)."

NGN's NoA Reference	PR19 PF Reference	Extract	PR19 Final Report Reference	Changes required in NGN's NoA
472	N/A (FD GD Annex (revised), para. 3.33)	<i>"GEMA seeks to argue that the CMA's approach at PR19 supports its decision-making: "the 75th percentile proposed by the CMA for PR19 still represents a very large increase from the 50th percentile adopted in PR14, reinforcing the regulatory principle of continuing to raise the catch-up efficiency challenge regulated companies should seek to achieve over time to operate ever closer to the frontier efficient company." The Appellant submits that GEMA is wrong to proceed on the basis that there is precedent supporting an approach of 'continuing to raise the catch-up efficiency challenge.' Rather, regulatory precedent supports setting an efficient cost benchmark consistent with the confidence levels in the underlying economic modelling (which has invariably been no higher than the upper quartile). The Appellant also respectfully submits that no weight can be placed on the fact that the CMA did not comment on GEMA's choice of efficiency challenge as part of the PR19 PFs, given this was not part of the CMA's remit at PR19."</i>	4.494, 4.492	The reference to "PR19 PFs" in para. 472 of the NoA should be replaced with "PR19 Final Report". Further, additional wording should be added at the end of para. 472 of the NoA as follows: "But instead weight should be placed on the CMA's decision in its PR19 Final Report to reduce Ofwat's 'tougher' efficient cost benchmark to the upper quartile (see CMA's PR19 Final Report, para. 4.494) as well as to the CMA's consideration of the "overall model effectiveness" when setting the efficiency benchmark (see CMA's PR19 Final Report, para. 4.492)".
474	4.294	<i>"The Appellant submits that the choice of the efficient cost benchmark should be informed by the degree of confidence in the totex model i.e. the degree to which the cost modelling allows GEMA to separate inefficiency from error in the model. This is consistent with the approach adopted by the CMA in Bristol Water and was also a factor that appeared to be given most weight in the CMA's Provisional Findings for PR19."</i>	4.492	The reference to "Provisional Findings for PR19" in para.474 of the NoA should be replaced with "PR19 Final Report" and the underlying source with "CMA's PR19 Final Report, para. 4.492 (NGNPR19_001)".
479	4.295	<i>"For completeness, GEMA stated that the 85th percentile is appropriate given that GDNs have experienced significant efficiency gains over the previous price controls and continued outperformance in RIIO-GD1. However, as the CMA recognised in</i>	4.493	The last sentence of para.479 of the NoA should be replaced with "However, as the CMA recognised in the PR19 Final Report, past outperformance by itself cannot justify a 'tougher' efficiency challenge "since

NGN's NoA Reference	PR19 PF Reference	Extract	PR19 Final Report Reference	Changes required in NGN's NoA
		<i>the PFs for PR19, past outperformance by itself cannot “justify a ‘tougher’ efficiency challenge, since multiple factors could have led to this result.”</i>		<p><i>multiple factors could have led to this outcome”. For this reason, the CMA placed little or no weight on this factor when deciding the appropriate level of the efficiency benchmark.”</i></p> <p>Further, the underlying source should be replaced with “CMA’s PR19 Final Report, para. 4.493 (NGNPR19_001)”.</p>