Firstgas

3 February 2023

Geoff Brooke, Senior Economist
Commerce Commission
PO Box 2351
WELLINGTON

Sent via email: im.review@comcom.govt.nz

Dear Geoff

CEPA report on aspects of the cost of capital Input Methodologies for the 2023 review

This submission is made on behalf of First Gas Limited (Firstgas) and responds to the letter from the Commerce Commission of 8 December 2022 on aspects of the cost of capital input methodologies and the accompanying expert report from CEPA. The weighted average cost of capital (WACC) has a significant influence on achieving the purpose of Part 4 of the Commerce Act and is a material input in setting allowable revenues for our regulated gas transmission and gas distribution businesses.

Together with other regulated gas distributors Powerco and Vector, Firstgas engaged Oxera to provide expert advice on the issues raised by the Commission's letter and the CEPA report. Oxera's report is attached to a joint letter from all three gas distributors and has been used to inform the views presented in this submission.

Evidence shows that existing cost of capital input methodologies work well for gas pipelines

The Commission should retain existing input methodologies unless there is compelling evidence to change. Such a bias for stability is encouraged by the statutory purpose of the input methodologies themselves, which is "to promote certainty for suppliers and consumers" in regulated industries (section 52R of the Commerce Act).

We see no evidence that the cost of capital input methodologies for gas pipelines should change substantially at this review. The Commission's 2021 review of gas pipeline performance found that gas pipeline businesses "have generally not made excessive profits over the last seven years".[1] Over the same time period, customer bills have fallen in real terms by $75 per customer, while service quality metrics have generally improved. We understand that the Commission intends to publish an updated version of this review using 2022 information disclosure data – and that the underlying trends of lower cost and higher service quality have continued.

Asset beta uplift for gas pipelines should revert to 0.10

The only area where we believe the evidence is sufficient to support a change relates to the asset beta uplift applied to gas pipelines. At the last input methodologies review, the Commission decreased the uplift from 0.10 to 0.05. In our view, the evidence from CEPA and Oxera supports a return to an uplift of 0.10.

[1] See paragraph 37 on page 10: Trends-in-gas-pipeline-business-performance-15-December-2021.pdf (comcom.govt.nz)

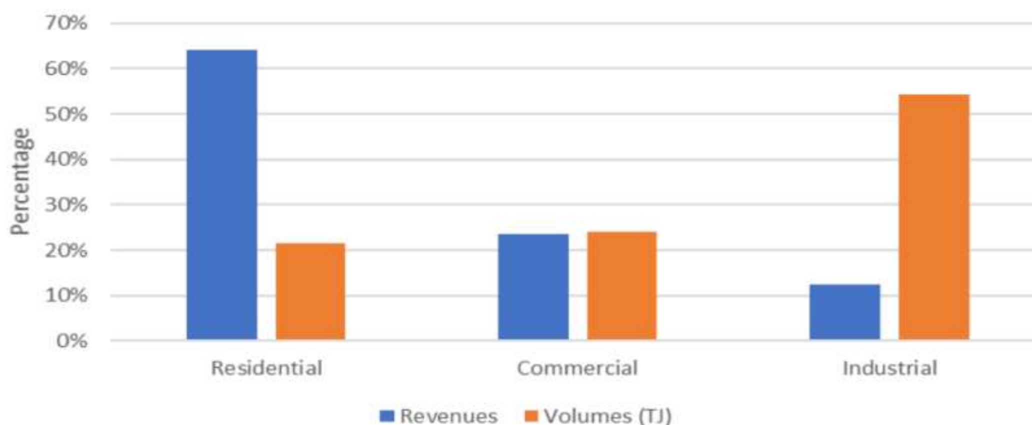
Average betas for gas companies in the comparator samples have remained consistently above average betas for electricity companies. At the last review, the Commission noted that prior to 2009 average electricity beta's were higher than those for gas companies. At the 2016 review, the Commission therefore had 9 years of data where average gas betas were higher than for electricity. That period is now 16 years, with average betas in comparator samples higher in each year following the last input methodologies review. CEPA concludes that "The exact size of this difference is likely to require Commission judgement but may be greater than 0.05." Oxera estimates the size of the difference in asset beta between gas and electricity subsamples as 0.07.

We consider that little weight should be given to the fact that the difference in average betas of gas and electricity subsamples is not statistically significant. This simply means that the variation of returns within each sample is large – the intuition being that well run companies within each subsample perform well and poorly run companies within each subsample do not. We would expect that this is not uncommon with beta estimates across different sectors. For consistency, we suggest the Commission considers running the same analysis with other industries that it regulates that have different betas (such as telecommunications infrastructure which has an asset beta of 0.50). We consider that the systematic risks across regulated sectors are different and that this should be recognised through the input methodologies, regardless of the variation of betas within each sector (and the resulting implications for statistical significance).

We also think that the reasons for the gas pipelines beta uplift provided in 2016 are stronger in 2023:

- **Income elasticity of demand.** At the last review, the Commission's expert (Dr Lally) identified that "Firms producing products with low income elasticity of demand (necessities) should have lower sensitivity to real GNP shocks than firms producing products with high income elasticity of demand (luxuries), because demand for their product will be less sensitive to real GNP shocks… The primary uses of gas, for heating and cooking, compete with electricity and other fuels for all but a few industrial uses. This suggests that supply of gas to small customers, in particular, may be exposed to the risk of being displaced by electricity and other fuels." Houston Kemp built on this intuition by examining how important the revenue from small customers is to gas pipeline businesses in New Zealand (compared with electricity distribution businesses).[2] If anything, the importance of demand from the residential sector has only strengthened since 2016 as some large industrial facilities have closed (such as the Marsden Point refinery) – a point highlighted by the Commission in the following graph from the 2022 gas DPP reset reasons paper.

Figure 1: Proportion of revenues and demand by consumer group (GDBs)

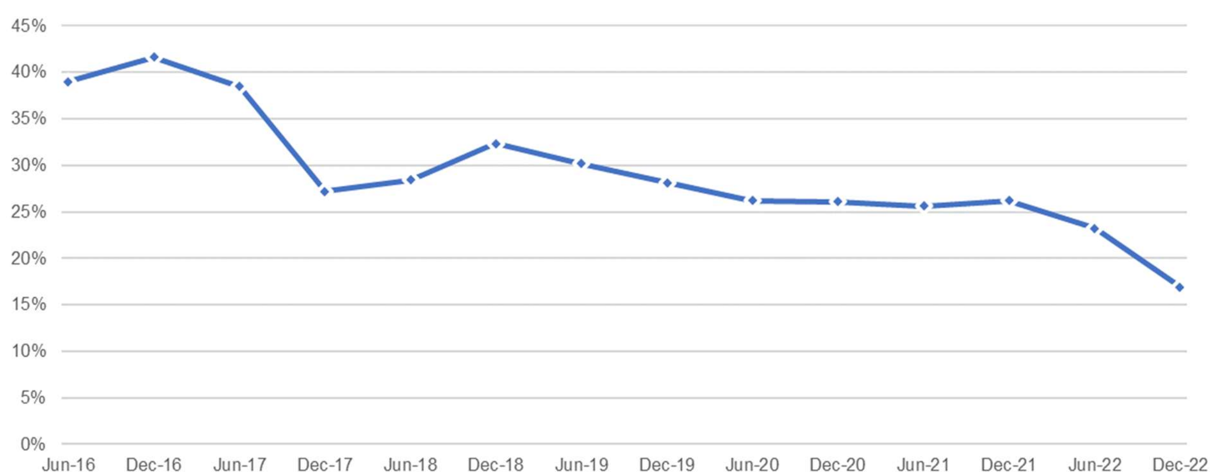


Source: Commerce Commission, 2022 Gas DPP Reset Reasons Paper, Figure 3.1

[2] HoustonKemp-for-Powerco-comments-on-Dr-Lallys-review-of-WACC-issues-May-2016.pdf (comcom.govt.nz)

- **Lower penetration of connections.** The Commission also found in 2016 that since gas is a discretionary fuel for many uses (e.g. for residential and commercial cooking and heating) it have lower penetration rates, and therefore faces opportunities to grow when economic fortunes are good and greater asset stranding risks during the hard times. Figure 1 illustrates that the penetration of gas connections has fallen since the Commission last reviewed the input methodologies. This chart shows new gas connections on Vector's Auckland network as a proportion of new electricity connections, as reported in Vector's half-year and full-year operating reports. We have used Vector data since the company's electricity and gas networks cover broadly the same areas. Since the last input methodologies review, penetration fell from around 40% of new electricity connections to around 25%, where it remained for several years. This penetration rate then appears to have fallen further during 2022 – possibly in response to changes made to Vector's capital contributions policy. Given the uncertainty facing the gas sector in New Zealand, we expect it to become more difficult to achieve the penetration rates seen at the last input methodologies review in 2016.

Figure 2: New Gas Connections as a % of New Electricity Connections – Vector Network



Source: Vector Operating Reports (2016-2022)

The WACC Percentile uplift should continue to apply to regulated gas businesses

Given that the analysis underpinning the selection of the WACC percentile uplift was carried out in the electricity sector, the Commission has asked whether the percentile uplift should continue to apply to gas pipelines. As explained above, our general position is that unless there are compelling reasons to change then the existing input methodologies should remain as they are. On this issue, neither the CEPA report nor the Commission's paper have provided any evidence to suggest that the reasons and magnitude of the percentile uplift are any different in the gas industry than for electricity. To the contrary, the Commission's performance reviews indicate that investment is taking place to gradually improve service quality over a period when revenues and prices have been falling.

We see three compelling reasons that the WACC percentile uplift should continue to apply to regulated gas businesses:

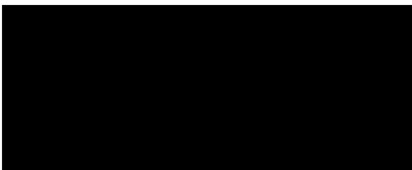
- **The intuition is the same as for electricity**. The Oxera report carefully traces the intuition and empirics for choosing the 67th percentile of the WACC range for regulated energy networks – that when consumers are deprived of a reliable energy supply the costs incurred are greater than the costs incurred for the same level of over-investment. In our view this asymmetry applies as much to consumers of gas pipeline services as to consumers of electricity lines services.

- **New Zealand's experience with gas outages underscores their significant economic impact.** Significant gas pipeline outages in New Zealand are very rare. However, the last major outage in 2011 highlights the magnitude of economic loss that occurs when gas is not able to be supplied. In that case, economic costs were estimated at around $500 million following an outage of the Maui pipeline – an event that much of our investment over the past decade has avoided repeating. In our view, the comparable annual impact of under-investment in gas pipelines calculated by Oxera of $77 million is clearly plausible (see footnote 102 of the Oxera report).
- **Gas users continue to demand high levels of reliability through the energy transition.** The Commission's letter highlights the uncertainties facing gas pipelines in New Zealand as we move towards net zero emissions by 2050. At the same time, natural gas will remain an important source of primary energy for decades to come and consumers (particularly major gas users) have emphasised the importance of reliable gas supply as they move to decarbonise their operations. In consultation on our 2022 Asset Management Plan, we asked stakeholders what outcome is most important to them: price, risk, safety or reliability. Half of respondents listed reliability as the number one priority – twice the number of respondents that believed price should be our highest priority.

Conclusion

If you have any questions regarding this submission or would like to meet with Firstgas to discuss please contact me on [redacted] or via email at ben.gerritsen@firstgas.co.nz.

Yours sincerely



Ben Gerritsen
General Manager Customer and Regulatory