MAJOR GAS
USERS GROUP

Keston Ruxton
Manager, IM Review
Regulation Branch
Commerce Commission
PO Box 2351
Wellington
(via email to regulation.branch@comcom.govt.nz)

5 February 2016

Dear Keston

RE: Submission on Cost of Capital Update Paper: 30 November 2015

1. This submission is on behalf of the Major Gas Users Group (MGUG)
2. MGUG was established in 2010 as a consumer voice for the interests of a number of industrials who are major consumers of natural gas.
3. Membership of MGUG includes:
   - Ballance Agri-Nutrients Ltd
   - Oji Fibre Solutions (NZ) Ltd
   - Fonterra Co-operative Group
   - Goodman Fielder New Zealand Limited
   - New Zealand Steel Ltd
   - New Zealand Sugar Company Ltd
   - Refining NZ
4. These industries are a significant part of New Zealand's economy, including; the primary industry export sector, in provision of energy security, and through import substitution assisting New Zealand's balance of payments. Their manufacturing base in New Zealand relies on a secure energy supply, which for natural gas includes secure and reliable gas transport (transmission and distribution). Collectively the group has invested significant long term capital in manufacturing facilities that consume about 30 PJ per annum of natural gas, or about 15% of the gas supplied to the market in New Zealand.
5. MGUG appreciates that the IM review on cost of capital covers more than regulated gas pipeline businesses (GPBs) but our representation is focused on gas experience and hence our comments are primarily focused on GPBs.
6. To date most of MGUG's focus relating to gas pipelines has been on gas transmission (GTB) issues rather than distribution (GDB) as this reflects the dominance and importance of this form of gas transport infrastructure supplying MGUG sites. However we believe that the broader points also apply to regulation of gas distribution businesses.

Summary of Submission

7. This submission points to statements made by the new owners of gas transmission and Vector's North Island gas distribution assets that they expect a commercial return well in excess of the Commission's regulated WACC. This suggests that the Commission's current IM will not achieve the outcomes of S52A(1)(c) and S52A(1)(d).

8. MGUG supports evidence based reasoning for changing the current approach and settings. MGUG believes that it is also the Commission's responsibility to review suppliers' actual performance in the first period, as well as projected performance into the next period in order to form a reasoned basis for change.

9. MGUG submits that reliance on a single theoretical model for determining cost of equity is inferior to use of a number of models to arrive at a better judgment.

10. This submission is not confidential. Some members may make separate submissions.

Basis of Submission

11. MGUG's starting point for this submission on cost of capital is the same as the Commission's, i.e. the Commerce Act Part 4 Purpose statement S52A(1):

> *The purpose of this Part is to promote the long-term benefit of consumers in markets referred to in section 52 by promoting outcomes that are consistent with outcomes produced in competitive markets such that suppliers of regulated goods or services—*
>
> *(a) have incentives to innovate and to invest, including in replacement, upgraded, and new assets; and*
>
> *(b) have incentives to improve efficiency and provide services at a quality that reflects consumer demands; and*
>
> *(c) share with consumers the benefits of efficiency gains in the supply of the regulated goods or services, including through lower prices; and*
>
> *(d) are limited in their ability to extract excessive profits.*

12. The purpose of the review on cost of capital therefore needs to be seen in the context of whether the current determination on cost of capital is, and would continue, to meet the outcomes of S52A(1).

Parameters required to estimate the cost of capital

13. Rather than focus on the detail of model parameters MGUG believes that it is important to first reflect on whether the current IM for the cost of capital continues to be fit for purpose going forward.

14. For GPBs the ownership context where we now have new overseas based owners (noting the approval process) of the Vector and MDL owned transmission systems and Vector's North Island distribution system is an important and material change in the industry. MGUG

is still trying to assess what the total impact of this is likely to be on consumers. An early concern is that the new ownership structure appears to be able to circumvent the ability of the Commission to ensure that the outcomes of S52A(1) will be met.

15. Colonial First State Global Asset Management (CFSGAM), the new owners of the GTBs and Vector North Island distribution assets, purchased these at a premium to the RAB. Given that the Commission does not intend to alter the RAB valuation it seems unusual that CFSGAM would pay more than the RAB unless it expected to achieve a commercial return higher than the regulated return. This appears to be the case.

16. Colonial First State Global Asset Management (CFSGAM), notes on its website that its Unlisted Infrastructure[1] investments, where the New Zealand pipeline assets will sit, have delivered an annualised gross return of 13.2% across its portfolio since inception (over 20 years). The addition of the New Zealand transmission assets to the portfolio is unlikely to have been done with the expectation of lowering the overall portfolio returns.

17. In a further news announcement of the sale on 11 November[2] CFSGAM explained that "*VGL offers an attractive anticipated cash yield and return profile in line with GDIF's target return profile*."[3]

18. GDIF's target return profile is *net* IRR of 9-11% pa including cash yield of 4-6% pa[4]. Gross returns, i.e. including management fees raises this to 10-12%. These commercial returns are based on the actual purchase price, which, as pointed out, is already higher than the RAB, and well in excess of the Commission's regulated returns determined by its cost of capital model.

19. The question in MGUG's mind is how to reconcile an expectation of a long term commercial 10-12% return with the lower regulated return as determined by the Commission to be necessary to achieve S52A(1). CFSGAM would have been aware through its due diligence process of the assets of the Commission's cost of capital determination as well as the Commission's ability to clawback excessive returns under S52D. Yet CFSGAM statements nevertheless indicates with some confidence that they believe they can beat the regulatory settings without risking clawback[5]. This suggests to MGUG that there are important practical flaws with the Commission's input methodologies.

---

[1] http://www.cfsgam.com.au/au/insto/Funds/Unlisted_Infrastructure/

[2] http://www.cfsgam.com.au/au/insto/About_Us/151111_CFSGAM_managed_funds_to_acquire_100__of_Vector_Gas_Limited/

[3] The Global Diversified Infrastructure Fund is one of the two funds within CFSGAM that have financed the acquisition

[4] http://www.firststateinvestments.com/uploadedFiles/Content/Funds_-_Investment_strategies/Literature/201502%20-%20GDIF_Global%20Diversified%20Infrastructure%20Fund_FundFlyer_Asia.pdf

[5] If they did believe that the Commission would lower prices through clawback than this would be reflected in a lower IRR for CFSGAM.

20. A cursory rather than close examination of the financial Information Disclosure templates[6] suggests that the problem may rest with the Commission's assumption that a common set of parameters which are likely to be largely irrelevant for CFSGAM's fiscal arrangements, can be applied across all regulated industries. These include parameters like risk free rate, debt premium, debt issue costs, investor tax rates which rely on local (New Zealand based) rather than global settings.
21. MGUG has not investigated this further as it should be the Commission's role to determine the evidence on whether its ex-ante settings for regulatory periods will produce outcomes for the regulated suppliers consistent with the objectives of S52A(1). On the face of CFSGAM statements MGUG does not believe the outcomes of S52A(1) will be achieved under the current rules and it requests that the Commission investigates this more fully.

Commission's role to analyse compliance

22. MGUG believes that CFSGAM's comments, if tested and found to undermine the intent of S52A(1), may be revealing of a deeper underlying problem across all of the regulated industries covered by the IMs. We therefore suggest that the Commission should evaluate whether its ex-ante settings determined for the first regulatory period has produced outcomes for all regulated suppliers consistent with the objectives of S52A(1).
23. The Commission does not seem to have produced any analysis or evidence on this matter. MGUG believes that it would be helpful if the Commission produced a statement on its view of supplier's performance in the first regulatory period as presumably any findings on this should influence clawback and inform adjustments to model selection and parameters.

Alternative approach for determining cost of equity

24. MGUG has no particular reason to disagree with the general framework for the calculation of WACC in setting the required economic return on investment. The WACC equation is an empirical, rather than theoretical statement of what actually occurs in asset financing. However the selection of appropriate cost of debt and cost of equity as a comparator for ROI needs to be re-examined in light of MGUG's experience with CFSGAM's comments.
25. MGUG agree with determining cost of debt through a building block approach using risk free rate, debt premium, and debt issuance cost but questions whether these should be based on local settings rather than the settings typical in comparator firms. For GPBs the common ownership is outside of New Zealand and comparator firms are also selected from outside of New Zealand. Use of local settings appears to inconsistently blend local and global settings and unnecessarily introduce another source of error into the model.

[6] http://www.comcom.govt.nz/regulated-industries/gas-pipelines/gas-information-disclosure/

26. MGUG appreciates that calculating cost of equity is not straightforward in that it can't be directly observed.
27. We are aware of the initial determination and supporting reasons paper that support the use of the CAPM for determining the cost of equity.
28. The Commission in our view has placed an undue emphasis on economic theory, acceptance of the methodology amongst regulators, consistency, and appeal to authority, to support the use of the methodology[7].
29. An absence of empirical data to test regulatory settings might justify a theoretical argument for setting the initial parameters. However, once there is experience with a regime, the test for the methodology is not whether the theory is simple, consistent in use, or is recommended by authority, but whether the methodology actually works in practice to support the objectives of S52A.
30. The Commission has relied on the CAPM for estimating return on equity but has acknowledged that the theory has limitations[8].
31. To add to the approximate nature of theoretical models, in particular the CAPM, CFSGAM lists a key benefit of its unlisted infrastructure fund as having "low correlation with other asset classes". Although what is deemed to be "low" is not explained, it suggests that using the CAPM (which references stock market returns), is not a useful predictor of CFSGAM's cost of equity.
32. The Commission nevertheless has adopted the model on the basis that it is "the most widely understood and most widely used..and has a strong *theoretical* (our emphasis) foundation"[9].
33. The Fama French model was discounted, oddly, on the basis of a weak theory, rather than on its empirical performance.[10]
34. As also acknowledged by the Commission, the largest regulator in the world's most sophisticated market, FERC in the US, uses DCF as the primary model for estimating a firm's allowed return on equity[11] and applies the CAPM only as a sanity check in determining cost of equity. FERC uses a two stage discount model weighting short term dividend growth rate and long term dividend growth. This adaption is not discussed by the Commission, but it seems to address the Commission's concern about the simpler Gordon model overstating the dividend growth rate in the long term.
35. Although MGUG doesn't disagree with the reasoning that all theoretical models have flaws we disagree with the implicit premise that only one model can be used by the Commission and that it should be applied mechanistically.

---

[7] EDB-GPB Input Methodologies Reasoning Paper – 2 December 2010 – H2.39
[8], Ibid e.g. H2.19, 2.23, 2.36, 2.77
[9] Ibid – H2.43
[10] Ibid – H2.26
[11] Ibid – H2.29

36. We refer the Commission to a 2013 paper prepared by the Brattle Group for the Australian Pipeline Industry Association on estimating the cost of equity for regulated companies[12] whose key conclusions can be summarised as:
    - All models have relative strengths and weaknesses
    - "wealth of statistical evidence contradicting the Sharpe-Lintner CAPM over the past 40 years" [13]
    - "Use more than one model when you can. Because estimating the opportunity cost of capital is difficult, only a fool throws away useful information"[14]

37. The advice here is that different models should be applied to the set of comparator firms to generate a range of estimates for the cost of equity and that weightings can be applied to adjust for prevailing economic conditions, industry specifics, and characteristics of the firm. There is no single or formulaic approach to estimating the cost of equity and best practice for ensuring robustness is to look at the totality of information.

38. The paper lists examples in the US, Canada, and the UK where the regulators use multiple models to arrive at estimates for the cost of equity[15].

39. We stress that the real test of any model or settings is the ex-post empirical performance of the regulated supplier. If the Commission is to use proxy models then the ex-ante parameters for the next period need to be adjusted against the empirical evidence of actual performance, and anticipated future performance, taking into account known differences (such as supplier capital structure) for the next period.

Other Matters

40. This submission deals with the more fundamental matter of whether IM settings are achieving the purpose of Part 4. Absence of MGUG comment on specific matters raised by the Commission in the update paper does not imply support or indifference.

41. MGUG has already raised the issue of pricing methodology in its submission on gas stakeholder workshop as one that should form part of a wider IM review[16].

42. MGUG reserves further comment on appropriate asset beta for gas pipelines when the Commission addresses risk allocation and form of control.

---

12 http://www.brattle.com/system/publications/pdfs/000/004/809/original/Estimating_the_Cost_of_Equity_for_Regulated_Companies_Villadsen_et_al_Feb_17_2013.pdf?1378772131

13 Ibid – p16

14 Ibid –p 1

15 Ibid, pp 54-59

16 http://comcom.govt.nz/regulated-industries/input-methodologies-2/input-methodologies-review/gas-pipelines-issues-im-review/

Overall Conclusions

43. MGUG is concerned that S52A(1) will not be met under the new overseas based ownership of GPB assets. This is based on the published statements by the new owners that it expects to achieve commercial returns exceeding the regulated WACC. This suggests that the Commission's IM for GPBs is not producing outcomes consistent with Part 4 purpose. MGUG requests that the Commission investigates this.

44. MGUG's expectation is that the Commission will review CFSGAM commercial rate of return and to the extent that more than normal rates of return are being forecast, use S52D to lower prices in the next period to achieve the intended outcomes of S52A(1).

45. CFSGAM's statements may be revealing of a deeper underlying problem in the IMs as they apply across all of the regulated industries. Before proceeding with a parameter review it would seem more effective to first form an understanding of the extent of the problem in order to arrive at a reasoned outcome of the next period's regulatory determination. MGUG therefore proposes that the Commission should review all of the regulated industries' commercial performance in the first regulatory period in terms of whether settings achieved Part 4 outcomes.

46. Determining the cost of equity is problematic but MGUG supports the findings of the Brattle report that multiple models should be used to arrive at a considered judgement on rate of return on equity as a means to overcome the practical weaknesses of CAPM approach.

Yours sincerely

Richard Hale
Hale & Twomey Ltd
Secretariat for the Major Gas Users Group