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By email to im.review@comcom.govt.nz

Dear Geoff

2023 WACC review

1. This is a submission from the Major Electricity Users' Group (MEUG) on the report for the Commerce Commission by Cambridge Economic Policy Associates (CEPA), "Review of Cost of Capital 2022/23," dated 29 November 2022 and published for consultation with a Commission cover letter on 8 December 2022.¹
2. MEUG members have been consulted in the preparation of this submission. This submission is not confidential. Members may lodge separate submissions.
3. The focus of this submission is on the question of whether the WACC for regulated electricity businesses should be retained at the 67th or changed to the 50th percentile. The 67th percentile is hereon referred to as "the WACC uplift." The sections below consider the two specific points on the WACC uplift in the Commission cover letter.
4. MEUG members are materially affected by the choice of a WACC uplift or not. Currently MEUG members pay between \$10 to \$15 million per annum more because of the WACC uplift. Over the current 5-year Regulatory Control Period (RCP) this is a premium of between \$50 to \$75 million. For all consumers the CEPA estimate of the WACC uplift cost of \$80 million per annum equals \$400 million for the current RCP.
5. Expectations are that the risk-free for the next RCP starting April 2024 will be higher, and potentially more than double the current risk-free rate used for the regulatory WACC. In that case and assuming the WACC uplift continues, the incremental cost of the WACC uplift to MEUG members will be several tens of millions of dollars more than \$50 to \$75 million for the next 5-year RCP and hundreds of millions more than \$400 million for all consumers.

¹ Document URL https://comcom.govt.nz/_data/assets/pdf_file/0014/301082/CEPA-report-on-Commerce-Commission-IM-Review-Cost-of-Capital-29-November-2022.pdf at <https://comcom.govt.nz/regulated-industries/input-methodologies/input-methodologies-for-electricity-gas-and-airports/input-methodologies-projects/2023-input-methodologies-review?target=documents&root=282671>.

WACC percentile

6. The first specific point in the Commission cover letter follows,

“First, when we first set the WACC at the 67th percentile for price-quality regulated energy businesses, the justification for the uplift was developed solely with reference to electricity distribution and transmission and the cost of electricity blackouts. We welcome views on whether we should continue to apply an uplift to price-quality regulated gas businesses.”
7. For this submission MEUG assumes the reference to “gas” in the last sentence of the quote above should also apply to regulated electricity lines businesses. This submission relates only to regulated electricity businesses.
8. MEUG believes there is sufficient doubt that the benefits of continuing the WACC uplift outweigh the costs to consumers and hence the uplift should be removed. MEUG comments on the CEPA report follow:

- a) The update and review by CEPA of relevant overseas jurisdictions regulatory practice and precedent found,

“... support for choosing a WACC above the 50th percentile has fallen.”²

The brief given by the Commission to CEPA follows,

“We were requested by the Commission to replicate the methodology applied in 2016 but updated for new data. We have not been asked to critique or update the methodology itself.”³

CEPA went beyond the brief in considering international precedents by recommending the use of a WACC uplift in New Zealand be reviewed,

“Going into this review, it is prudent to recognise that current regulatory decisions are based, in large part, on previous regulatory decisions, and that the Commission should take this opportunity for a fresh look at the issue of setting WACC percentile.”⁴

MEUG agrees with CEPA.

- b) CEPA confirmed the conclusion by OXERA that the own-price elasticity of demand of electricity is materially less than the price effect on consumers and hence the deadweight loss of choosing a WACC uplift when the true WACC is at the 50th percentile, was not material.⁵ MEUG is unsure if the CEPA analysis is complete because it appears to be a standard analysis of static efficiency effects and therefore does not capture longer-term investment (and divestment) and innovation dynamic efficiency effects.

Regulatory policies and precedents have real-world effects on businesses. Most large electricity intensive businesses in New Zealand are part of multi-national

² CEPA, Table 4.1.

³ Ibid, Executive Summary, p4.

⁴ Ibid p30-31.

⁵ Ibid pp33-37.

companies and compete for capital with overseas business units in those companies. For example, at the margin given everything else is equal, if the general practice overseas is not to have a WACC uplift, then over time investment by multinational businesses for projects that require regulated lines services will favour other countries to the detriment of New Zealand.

The Oxera methodology and CEPA update do not consider these long-term investment effects on electricity intensive businesses.

- c) CEPA summarised the findings of the Australian Energy Regulator (AER) review in 2018 as follows:

“An important observation made by the AER is that, given their methodology for estimating WACC parameters is unbiased, in the long run the expectation of the difference between the allowed WACC and the true WACC is zero. That is, in the long run, the allowed WACC should not lie below the true WACC and cause sustained underinvestment, reducing the cost to consumers of underinvestment.”⁶

In New Zealand the review required of IM’s no later than every 7-years, and opportunity at any stage before the comprehensive IM review for be-spoke reviews, will ensure over time any over or under-estimation of the true WACC will tend towards zero.

- a) CEPA noted two reasons why the Oxera methodology over-estimates the benefits of the WACC uplift,

“However, we do note concerns that Oxera’s approach overestimates the true cost of underinvestment by using the cost of one-off events to estimate the annualised cost of these events. In addition, we believe there would be some probability of a loss of network reliability even in a world of efficient investment, while Oxera assume this probability to be zero.”⁷

A closer look at the examples used by Oxera bring into question the validity of the Oxera estimate of NZ\$1 billion cost per year of a loss in network reliability.⁸ CEPA used the NZ\$ 1 billion to estimate an updated value of NZ\$1.9 billion per year. Based on anecdotal reports on network failures overseas and in New Zealand, the cause of such events is usually the result of multiple coincidental failures across a range of issues over time covering poor asset management planning through to real-time operational mistakes. To assign the full cost of the failures listed by Oxera to network under-investment failure is an over-exaggeration. For example, CEPA note,

“The evidence includes one study of the costs of a loss of network reliability event in the US and Canada that was caused by underinvestment in generation

⁶ Ibid p32.

⁷ Ibid p39.

⁸ Ibid p40.

and transmission assets after the Canadian electricity market was liberalised in 2002.”⁹

The Oxera estimate is therefore, based on the above example alone, questionable.

The above example also highlights a key assumption in the Oxera methodology relying on cumulative effects over time. CEPA summarised the Oxera analysis as follows, with underlining of text added by MEUG,

“These case studies argue that prolonged underinvestment leads to network deterioration and eventually a loss of network reliability event.”¹⁰

The NZ incentive based regulatory regime would not lead to prolonged regulated network investment because the regime is subject to required minimum review periods (seven years for IM’s and five years for price-quality paths) and therefore over time is self-correcting and will revert to optimal expected settings. An important aspect of the New Zealand regime is a requirement for high quality regularly updated Asset Management Plans (AMP) with pro-active monitoring by the Commission and feedback to regulated companies. This allows risks of developing trends for possible prolonged under or over-investment to be identified early and remedial action taken. Remedial action can also include a distribution company subject to Default Price-Quality Path (DPP) regulation deciding to apply for a Customised Price-Quality Path (CPP). In the case of Transpower, subject to an Individual Price-Quality Path (IPP), there is intense scrutiny by the Commission of ahead of each RCP of the IPP proposal by Transpower and within each RCP oversight of AMP and Major Capex Proposals (any capex investment over \$20 million) requiring individual authorisation.

The effect of robust oversight of AMP, the option to apply for CPP, and intensive scrutiny of Transpower have the effect to mitigate risks of under-investment in the New Zealand regime. These were not considered by Oxera or CEPA. CEPA noted that similar regulatory tools are used overseas and have been part of the rationale for relying on a WACC uplift to mitigate risks of under-investment,

“Regulators in Australia and the UK have shifted towards using the midpoint estimate for WACC except in special cases. The UKRN in their ongoing consultation on common approaches to setting WACC parameters recommend that:

Recommendation 7: Regulators should only deviate from the mid-point of the CAPM cost of equity range if there are strong reasons to do so.

They also list a range of regulatory tools (i.e., statutory requirements, service delivery incentives, separate treatment of large one-off projects, and pricing freedom for innovative new investments) as alternatives to using the WACC to insure against underinvestment.”¹¹

⁹ Ibid p40.

¹⁰ Ibid p40.

¹¹ Ibid p47.

Are climate change policies relevant to deciding if a WACC uplift is justified?

2. The specific point in the Commission cover letter follows,

“Second, the most important change to the wider energy economy since 2016 is the expectation of increased electrification of the economy as part of the response to climate change. We welcome views on how the increased electrification of the economy impacts our reasoning around the costs of blackouts and our methodology for considering whether a WACC uplift is warranted.”

3. The risks of climate change are all encompassing for the global economy. This global issue is complex with many key unknowns such as the future changing risk profile, the effectiveness of policy mechanisms such as pricing emissions, and unknown rate of change for adaptive technology. For New Zealand an important opportunity is electrification of the transport fleet and existing large heat loads. It is not though the only possible option. In some cases, other fuels may be better such as hydrogen or biomass. There are also transition options. Many other countries consider gas as an acceptable transition fuel from coal before transitioning to longer-term lower emissions fuels and this might in some cases be appropriate in New Zealand. Similarly, commercially viable carbon storage and sequestration technologies may be developed overseas that might be adopted in New Zealand. In summary climate change risks and opportunities are complex and keeping a range of options open than relying only on electrification is a better strategy.
4. The question posed by the Commission is too narrowly drafted on the risks of under-investment affecting electrification. With all sectors of the New Zealand and global economy subject to climate change risks and opportunities, the Commission should rely on market observed changes in sector beta including the effect on regulated electricity networks. To justify a WACC uplift because of the importance in New Zealand’s case of electrification, would lead to a bias in the economy and unintended consequences such as households and businesses deferring electrification or inefficiently changing to another fuel because the long-term delivered price of electricity was expected to be higher due to a WACC uplift. Accordingly, MEUG does not believe the expected increase in electrification justifies a WACC uplift.

Yours sincerely



Major Electricity Users’ Group