

19 July 2023

IM Review
Commerce Commission
Wellington
By E-Mail: IM.Review@comcom.govt.nz

Re: IM Review - Cost of Capital and Financing and Incentivising Efficient Expenditure

This submission covers both the IM Review of the 2023 draft decision on the cost of capital and the IM Review on financing and incentivising efficient expenditure.

Counties Energy Limited (CEL) is a consumer-owned EDB that is price-exempt. However, CEL uses the IM Review to provide pricing guidance through utilizing the Commerce Commission (Commission) Excel default price-quality paths (DPP) model to prepare CEL's default price path. This is then validated separately with external consultants preparing an independent CEL DPP.

CEL's submission covers the following:

1. Transpower and EDB WACC percentile determinations should not be grouped together and Transpower's WACC should be the 50th percentile;
2. Network utilisation is the key to enabling decarbonisation at the lowest possible cost; and
3. A lack of empirical evidence that IRIS is effective.

Transpower WACC 50th percentile

CEL disagrees with Transpower being grouped with EDBs when considering the WACC percentile, with a 50th percentile WACC being appropriate for Transpower. This reflects Transpower's investment decisions being different to EDBs because Transpower faces a much lower risk profile with pricing under the TPM, limited risk from decarbonisation and the cost impact on customers is greater than EDBs. In particular, CEL notes the following:

- Transpower's backbone transmission network has very long-term planning horizons that are centrally planned rather than having an end customer focus. Where there are customer connections, the risk around new connections is fully mitigated by the transmission pricing methodology that requires the customer to cover the connection costs. This fits with Transpower being a state-owned enterprise where its principal existence is to provide a critical infrastructure service. Consequently, the risk of under-investment because of a lower WACC doesn't exist.
- Transpower's risk profile from decarbonisation is very different to EDBs because transport electrification and distributed generation (DG) will have the greatest impact on low voltage networks, CEL is already experiencing DG voltage rise issues with small solar arrays in rural areas and larger (5MW)



Physical
14 Glasgow Road
Pukekohe 2120
New Zealand

Postal
Private Bag 4
Pukekohe 2340
New Zealand

**Energy
Reimagined**

0800 100 202
countiesenergy.co.nz

DG in both urban and rural areas. CEL's analysis of EVs is that these will also create voltages firstly on residential transformers. These risks will not be seen on Transpower's transmission network; and

- In making its decision, CEL would request that the Commission consider the fact that Transpower's higher WACC will have a far more widespread cost impact than any single EDB WACC. This is because the entire electricity industry is impacted by Transpower's higher WACC being the generators, direct supply customers and price exempt EDBs. Of these, the biggest impact will be from nearly all New Zealand's generation coming from Transpower transmission connected generation that results in higher wholesale electricity pricing being passed on to all New Zealanders.

In conclusion, Transpower's WACC percentile must be considered separately from the EDB WACC percentile and should be lowered to the 50th WACC percentile.

Network utilisation key to decarbonisation

The most effective mechanism to improve EDB productivity, while minimising the cost of decarbonisation to EDBs and consumers, is improved network utilisation. To this end, the IM Review would benefit from focusing more on achieving this outcome, which will require research and development, new industry players and financial structures. In particular, the IM Review should incentivise the formation of Distribution System Operators (DSO). To this end, CEL notes the following on EDB investment drivers, decarbonisation and DSO expenditure.

Investment Driver

The IM Review should consider refining the investments category "Demand growth: investments to meet current and future consumer demand" to "Peak demand growth: investments to meet consumer demand that occurs during peak demand periods". This is important because nearly all EDB peak demand occurs for very short periods of time during winter afternoons. This is when Households return home and heat their houses at the same time that there is industrial and commercial demand. Outside of these times there is significant spare network capacity, which can be utilised at no marginal cost. Consequently, with increased power demand from decarbonisation, improved network utilisation is the most cost-effective mechanism for EDBs to this growth, which will also improve EDB per kWh efficiency.

New Zealand's decarbonisation

Improved network utilisation will be more obtainable in New Zealand because decarbonisation in New Zealand will be dominated by electrification of transport¹ and industrial process heating². The electricity peak demand times for these sectors are very different to the peak demand times required for household winter heating peak. Therefore, the demand growth for decarbonisation does not require distribution investments to meet future consumer demand as there exists significant underutilised network capacity.

At the same time, improved network utilisation will be required for the increasing distributed generation uptake that creates very different congestion issues to increased decarbonisation demand. As noted above, CEL is already experiencing DG network congestion that is being experienced by other

¹ Transport is 50% of New Zealand's total consumer energy demand and industrial fuel consumption is 17% of total consumer energy demand.

² Unlikely most OECD countries, residential gas is not heavily relied on in New Zealand. According to MBIE Energy Balance publication residential gas use is 1% of New Zealand's total consumer energy demand. Similar, decarbonization of electricity generation is less of an issue in New Zealand compared to most other OECD countries.

customers as voltage rise. EDBs will need to work with individual customer DG installations and a DSO to reduce generation output at the low voltage level to improve network export utilisation.

Ring-fencing DSO expenditure

Improved network utilisation will require new technology, load aggregators and Distribution System Operators (DSO) to make flexible load and flexible generation available, orchestrate demand and generation and do so with real-time low voltage network capacity visibility. Given the significant opportunity for capital infrastructure cost savings to CEL, we are focused on researching and investing into a DSO.

This DSO research covers technology, commercial frameworks and potentially company structures. While there are significant long-term savings to be made, undertaking this work involves financial risk with the future DSO structures unknown and unlike EDB fixed network structures being open to competition. For these reasons, the IM Review should consider ring-fencing DSO expenditure into a separate cost category so that EDBs can undertake the necessary work, which is critical for managing the costs of future decarbonisation.

Empirical Evident IRIS is working

Given that IRIS has now been working for a number of years, CEL would expect that the IM Review would present the Commission findings to date on the performance of IRIS. From previous IM Review consultation it appears that there is conflicting feedback from EDBs as to whether IRIS is working. Without empirical evidence the IM Review justification for IRIS is just a theoretical argument from the Commission and, consequently, may not be working in practice.

I would be happy to discuss any aspect of this submission.

Yours sincerely



Andrew Toop
General Manager Commercial