electricity networks association

T +64 4 471 1335

Level 5, Legal House
101 Lambton Quay
Wellington 6011

PO Box 1017
Wellington 6140
New Zealand

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Transpower
PO Box 1021
Wellington 6011

By email: tpm@transpower.co.nz

ENA submission on CUWLP starting BBI customer allocations

The Electricity Networks Association (ENA) welcomes the opportunity to submit on allocation of transmission charges for the Clutha and Upper Waitaki Lines Project (CUWLP).

The first benefits-based investment (BBI) allocated under the new transmission pricing methodology (TPM), the allocation provides an important test case of the TPM, and a proof-of-concept the TPM achieves its objectives of:

1. encouraging parties to reveal accurate information on the need for transmission investments, thereby allowing better transmission investment decision-making; and

2. allocating charges in proportion to benefits of the investment.

This submission is on behalf of ENA's members (listed in the appendix to this submission), the electricity distribution businesses (EDBs) of New Zealand. This submission is not confidential. It is also being provided to the Commerce Commission and Electricity Authority.

ENA and its members are very concerned that load customers are being asked to pay 78 per cent of the costs of CUWLP ($67 million of the $85 million investment cost) yet have little or no prospect of securing benefits from the investment.

There is significant risk that either Tiwai stays (or, equivalently, new load customers connect in the lower South Island) leaving the CUWLP as an white elephant, or Meridian and Contact use the CUWLP to secure new load customers to soak up surplus lower South Island generation in the event that Tiwai leaves. It is essential that the new TPM and/or regulatory arrangements governing the recovery of transmission investments avoid a situation where load customers pick up the costs of an investment from which they derive little or no benefit. We think it would significantly bring the industry into disrepute for the first BBI to be allocated on a basis that results in a significant free ride for the real beneficiaries of the investment.

Consultation on CUWLP BBI charges has revealed that:

- It is highly undesirable for charges to be calculated separately from the investment decision. EDBs made strong submissions that Transpower should wait until Tiwai confirms its exit before proceeding with the CUWLP. Tiwai is now staying until December 2024, and economic conditions suggest a strong chance it will stay beyond December 2024. The proposal to now allocate 78 per cent of the CUWLP to EDBs/load customers adds insult to injury.

- Very few parties have the capacity or capability of engaging with Transpower at a detailed level on calculation of benefits and charges. Ironically EDBs, as the key counter-parties to Transpower that will pay on behalf of end-consumers for a majority of investments, are probably one of the least capable of engaging on the calculations. EDBs do not routinely have access to market models as an inherent requirement for running their businesses (unlike generator-retailers), and therefore have limited capacity to make informed and meaningful comment on highly technical models, assumptions and inputs.

- Accordingly we are reliant on Transpower to make sufficient information available to enable us to make a meaningful contribution to the consultation.

Despite these limitations, based on our understanding of the CUWLP and the consultation materials, ENA notes the following concerns with the proposed outcomes of the approaches used by Transpower to calculate the proposed BBC allocations. Relevant background to these concerns is that:

- We understand that the economic merits of proceeding with the CUWLP are to relieve export and import constraints into the lower South Island (LSI). Transpower had not proceeded with the latter stages of the wider upgrade project because the ongoing presence of Tiwai would mean that the costs of the CUWLP would not exceed the benefits of avoiding those constraints. If Tiwai were to exit, there would be more frequent and material periods of export constraints, resulting in spill at Manapouri.

- When Transpower consulted on the CUWLP investment decision, ENA and many other EDBs requested that Transpower undertake a financial options analysis to determine the optimal timing of investment. At that time NZAS had not committed to closing, so there was significant risk, if Tiwai stays, that the CUWLP could end up a transmission 'white elephant'. Transpower did not undertake that options analysis, or calculate the economic benefits of proceeding with the CUWLP, despite the prospect that Tiwai would stay (and be encouraged to stay to avoid significant disruption to the Southland economy and electricity market).

- Since Transpower made its investment decision to proceed with CUWLP, Tiwai extended its potential shut-down to late 2024, so the project has ended at least two years early in delivery, with still no certainty that Tiwai will exit[1] given globally high aluminium prices[2].

- In the meantime, Meridian and Contact have been actively developing options to fill any void left by Tiwai's presence if it does leave. They both have options to not only pursue load customers in the LSI, but elsewhere, now that the CUWLP has relieved the constraints[3,4]. Meridian's chief executive is on the record stating that it has stronger negotiating options with respect to the NZAS[5], and that Meridian would expect to fill the load gap within five years of a Tiwai exit, given the attractiveness of renewable-backed electricity supplies to large potential load customers.[6]

- The Electricity Authority has found that Contact and Meridian were highly incentivised to keep Tiwai in the New Zealand market to avoid consequences of a disorderly exit, including that prices would reduce significantly following exit, and that it would be likely for thermal producers to exit. When responding to the EA's wholesale market study, Meridian stated publicly that even if Tiwai exits, it would expect any reduction in prices to consumers to be delayed, unpredictable and short-lived[7]:

  > "He [Barclay] adds the EA's speculation that prices would have "promptly and permanently been much lower" for at least some residential customers had Tiwai shut this year is also incorrect.
  >
  > "Most residential customers are on fixed-term plans that shield them from the volatility of the wholesale market, and we know retailers compete hard on price to ensure customers are not exposed to this volatility.
  >
  > "In reality, if the smelter closed the market would adjust, so any wholesale price effects would likely be relatively short-lived. And residential price effects are hard to predict."

Transpower proposes that about 78 per cent of the costs of the CUWLP would be paid by load customers (~$67m), based on calculations that load customers would achieve reductions in their energy charges. ENA's concerns are that Transpower's assessment of the benefits of the CUWLP are fundamentally inconsistent with economic reality. In particular, Transpower's models do not take into account that:

1. If Tiwai stays, the benefits of the CUWLP investment will not result in lower energy prices to load consumers (at least, not likely to be exceeded by the costs of the investment);

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1 Rio Tinto crying wolf with smelter review: Forbar | Energy News
2 Aluminum - 2022 Data - 1989-2021 Historical - 2023 Forecast - Price - Quote - Chart (tradingeconomics.com)
3 Tiwai suppliers scoping new demand | Energy News
4 Contact, Meridian eye giant green hydrogen plant | Energy News
5 Meridian bullish on post-Tiwai market | Energy News
6 Replacing Tiwai electricity demand | Energy News
7 Meridian says EA wrong on Tiwai and power prices | Energy News

2. If Tiwai leaves, energy prices – by Meridian's statements - are unlikely to fall for any significant period because:

    a. Meridian and Contact will be highly incentivised to find new load customers (as they have already publicly announced to fill the void); and

    b. Marginal thermal plant would be displaced by the greater availability of hydro-generation, reducing the surplus available from Tiwai's exit, thus holding up prices.

3. The CUWLP has created a valuable negotiating tool for Meridian. Before the CUWLP, Tiwai and Meridian were in a symbiotic relationship. Now Meridian has a valuable economic option to sell to new load customers all around New Zealand, and could be expected to extract a significant economic benefit from NZAS in any new supply contract.

In short, in the event that Tiwai exits, a common-sense analysis of the situation suggests that the CUWLP investment will primarily benefit Meridian, Contact, other generators and new load customers. Meridian and generators more generally will be highly incentivised to avoid price falls in the wholesale electricity market, and have the market share/market power to achieve that, given the levels of concentration in the generation market.

To put it another way, if existing load customers are to shoulder 78 per cent of the burden of the CUWLP, this will amount to a significant freeride for other beneficiaries of the investment, with limited recourse in future for charges to be reallocated. For example, as we understand the TPM, if new load customers were to emerge that 'soak up' the surplus (ex-Tiwai generation), this would not lead to a reopener of the CUWLP allocations. In the event that Tiwai stays, existing load consumers will not receive benefits of lower energy prices, but have to pay for the CUWLP (even though it provides Meridian and Contact with valuable future options). We note in the Reference Scenario that if Tiwai stays, prices are forecast to be immaterially lower - for example, 0.9 per cent on average at Ōtāhuhu. At this level of price reduction, it seems scarcely credible that consumers would see lower bills.

Overall, ENA submits that the proposed allocations of the CUWLP would result in charges to load consumers at odds with the principles behind the beneficiaries-pay ethos in the TPM. Either the Code is wrong in requiring Transpower to use flawed models and assumptions to establish the allocation of charges, or the specific circumstances of the CUWLP mean that the models used by Transpower to calculate the allocation of charges are inadequate for the task, and do not adequately account for the market dynamics associated with Tiwai/Manapouri generation.

In ENA's view it is essential that the outcome from a BBI assessment results in allocations that pass a test of being objectively reasonable in light of the known circumstances and interests of parties that are stakeholders in the assessment. The current proposals do not appear to pass that test.

Other points

ENA requests that Transpower reviews its models to ensure that they effectively calibrate to market observations. Prices in the reference scenario at Ōtāhuhu are forecast to be $23, $24 and $30/MWh in 2023, $24, $25 respectively on average, well below observed forward-market indicators (by more than $100-$150 MWh) suggesting that Transpower's price-forecasting models are poorly calibrated.

Transpower assumes that when it made the investment decision it was a 50:50 likelihood of Tiwai staying or leaving. ENA submits that this value should be calibrated with respect to the economic assessment at the time of the investment. The 50 percent likelihood of Tiwai staying seems incompatible with the investment being optimally timed – it would have been better to wait until there was a firm commitment from Tiwai to leave, given the very modest benefits of the CUWLP in the event of Tiwai staying.

An alternative way to determine the probability of Tiwai leaving at the time of the investment is to assume that the decision to proceed was optimal, and then calculate the probability of Tiwai exiting as a function of the point at which the economic assessment model establishes that the expected net economic benefits of proceeding exceed the expected economic benefits of waiting. It is not appropriate to adopt such an arbitrary assumption of 50:50 likelihood of Tiwai exiting or staying, when it is possible to determine this probability as a function of the economic assessment that Transpower ought to have made at the time.

In ENA's view, to justify the CUWLP proceeding at the point of investment, there must (rationally) have been very high probability of Tiwai exiting. If Transpower doesn't proceed with checking the maximum probability of Tiwai exiting via an assessment of the optimum timing of investment, ENA recommends that Transpower adopts an assumption of "almost certainty" that Tiwai exits (90 percent).

Modelling of new large loads

Given Meridian and Contact's expressly stated interest in securing new large loads, and clear and strong incentives to find such loads to absorb surplus capacity if or when Tiwai leaves, ENA recommends that Transpower model new large loads as being connected to the transmission system progressively from December 2024 over a five-year period (per Meridian chief executive's statements), as a core assumption in the Tiwai exits scenario. The load customers could effectively be modelled as Meridian and Contact customers directly connected to the grid in proportion to their generation freed up by Tiwai exit. In that way, Meridian and Contact could then pass on the costs of the CUWLP to the beneficiaries of the transmission investment that has been made to enable those customers to gain the benefits of the low-cost Manapouri generation. This should be the core modelling assumption in the Tiwai exits scenario and would be consistent with achieving the beneficiaries-pays objectives of the TPM. It was notable that Meridian and Contact were the most vocal proponents of the CUWLP when Transpower made its final investment decision.

We note that Transpower did not include new large loads as a sensitivity. But just because such customers do not yet exist, does not absolve Transpower from making the most reasonable assumption in light of the evidence available about the most likely and credible scenario to emerge following a Tiwai exit, which is that Meridian and Contact find new customers to soak up what would otherwise be a generation surplus. Conversely, the current models assume that existing load customers would benefit from a reduction in generation prices upon Tiwai exit – for the reasons (and public statements of Meridian and Contact) stated earlier, this appears to be a low probability outcome.

Finally, a request for information

On behalf of Transpower's EDB customers, ENA requests that Transpower provides ENA (retrospectively) an economic options' analysis of the CUWLP investment decision. This is a customer request. While this is not part of the requirements of calculating the BBCs, it provides us with a relevant context for assessing the economic reasonableness of the proposed BBCs.

We would particularly like to understand the economic benefits of the CUWLP in the event that Tiwai stays. Under the proposals, EDBs directly, and load customers indirectly, will pay around $67 million of the costs of CUWLP. It is only reasonable that, as the proposed majority payers of the CUWLP, ENA members understand the economic benefits of the investment (or lack thereof) in the event that Tiwai stays.

ENA notes that this information is necessary to make meaningful and informed comment on the proposed BBC allocations, and reserves all legal rights on behalf of members in the event the information is not forthcoming. We note Transpower had not provided this information in an earlier request from one of our members.

Thank you again for the opportunity to submit.

Regards,

Graeme Peters

Chief Executive

cc:	James Stevenson-Wallace	Andy Burgess
	Chief Executive	General Manager Infrastructure Regulation
	Electricity Authority	Commerce Commission

Appendix A

The Electricity Networks Association makes this submission along with the explicit support of its members, listed below.

Alpine Energy

Aurora Energy

Buller Electricity

Centralines

Counties Energy

Eastland Network

Electra

EA Networks

Horizon Energy Distribution

MainPower NZ

Marlborough Lines

Nelson Electricity

Network Tasman

Network Waitaki

Northpower

Orion New Zealand

Powerco

PowerNet

Scanpower

The Lines Company

Top Energy

Unison Networks

Vector

Waipa Networks

WEL Networks

Wellington Electricity Lines

Westpower