



TRANSPOWER

Waikato Regional Interconnection Capacity (WRIC): Major Capex Proposal Shortlist Consultation

Attachment 4: Indicative Pricing Allocations

October 2026

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1 Overview

Under the transmission pricing methodology (TPM),¹ the covered costs² of post-2019 investments in interconnection assets and interconnection transmission alternatives (post-2019 benefit-based investments or BBIs) are recovered from customers identified as beneficiaries. These allocations are based on each customer's expected positive net private benefit (NPB) from those investments. The covered costs of a BBI are recovered through benefit-based charges or BBCs. The TPM contains the methods for calculating BBCs.

This attachment provides stakeholders with information about the indicative range of starting allocations for the preferred option for the Waikato Regional Interconnection Capacity (WRIC) project, which will result in a high-value post-2019 BBI (referred to as the WRIC BBI). The WRIC BBI is a Reliability BBI and as such the indicative range of starting allocations is based on historical offtake data for the offtake customers that benefit from the preferred option.

Our view is that the benefits of this BBI accrue to the offtake customers in the Waikato 110 kV region. Generators within the region will not benefit at times of peak demand, with the investment enabling more capacity into the region and less reliance on the generation connected within the 110 kV region for marginal units of supply.

Following consultation on the shortlisted options and the preliminary application of the investment test, we will select a preferred option and submit a major capex proposal (MCP) to the Commerce Commission. As required by the Capex IM, that proposal will include the indicative increase in transmission charges associated with the investment. Following the Commission's final decision and Transpower's final investment decision, we will consult on the proposed starting allocations for the WRIC beneficiary-based investment (BBI).

The indicative starting allocations presented in this Attachment have been calculated using the methodologies set out in the TPM and Assumptions Book v3.0. While these calculations have not been undertaken at the level of detail that will be applied during the formal BBI allocation consultation, we consider them a reasonable indication of how net private benefits from the preferred option may be allocated under the TPM.

We emphasise that the indicative starting allocations in this Attachment are not the proposed or final starting allocations. Transpower cannot, and does not, accept any liability for the accuracy or completeness of the information provided, nor for any consequences arising from any party's reliance on it.

1.1 Preferred option investments

The Waikato Regional Interconnection Capacity (WRIC) shortlist consultation identifies a preferred investment option comprising a new substation at Hamilton East with a 220/110 kV interconnecting

¹ The TPM is in Schedule 12.4 of Part 12 of the Electricity Industry participation Code ([Part 12 - Transport](#)).

² The cost recovered through the benefit-based charges for a benefit-based investment is referred to in the TPM as the "covered cost".

transformer. This option has an estimated capital cost in 2026 of \$47.9m. Additional detail about the preferred investment option is provided in Attachments 1 and 3.

Our view is that this investment should be treated as a single BBI, because the required investments are driven by one primary need: insufficient interconnection capacity in the Waikato 110 kV region to meet forecast load growth and the N-1 requirement of the core grid.

The WRIC MCP's preferred option will be a high-value BBI required to maintain N-1 reliability standards on the core grid. The benefits resulting from the BBI include reliability benefits, reflecting the avoidance of future supply interruptions and load curtailment under credible contingency conditions. We will therefore apply the TPM Standard Price-Quantity method for a Reliability BBI.

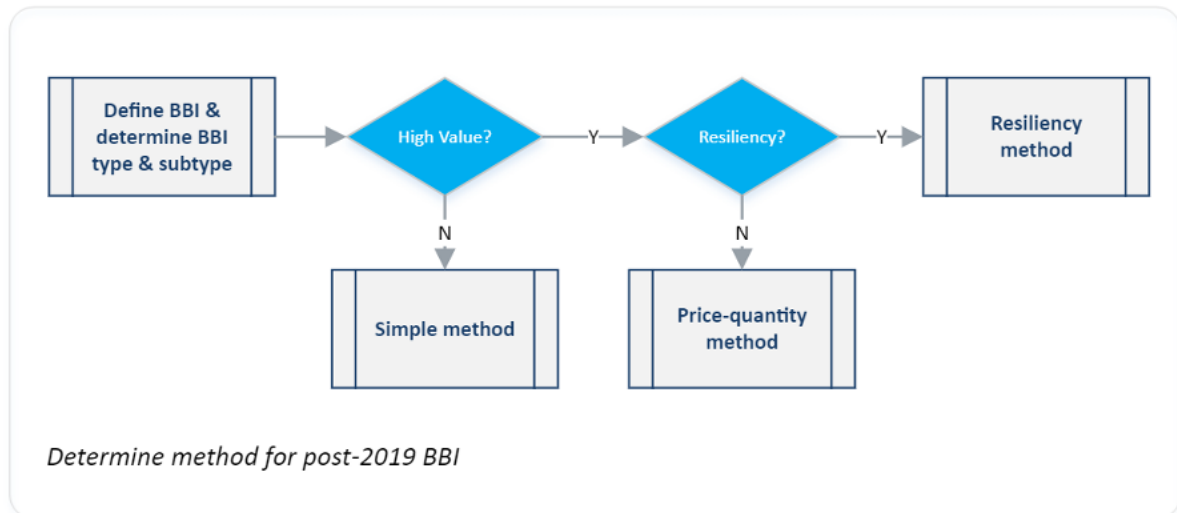


Figure 1: Decision diagram for post-2019 BBIs

1.2 Reliability BBI and the price-quantity method

The WRIC BBI does not meet the criteria of a Resiliency BBI and therefore we apply the **price-quantity method**.

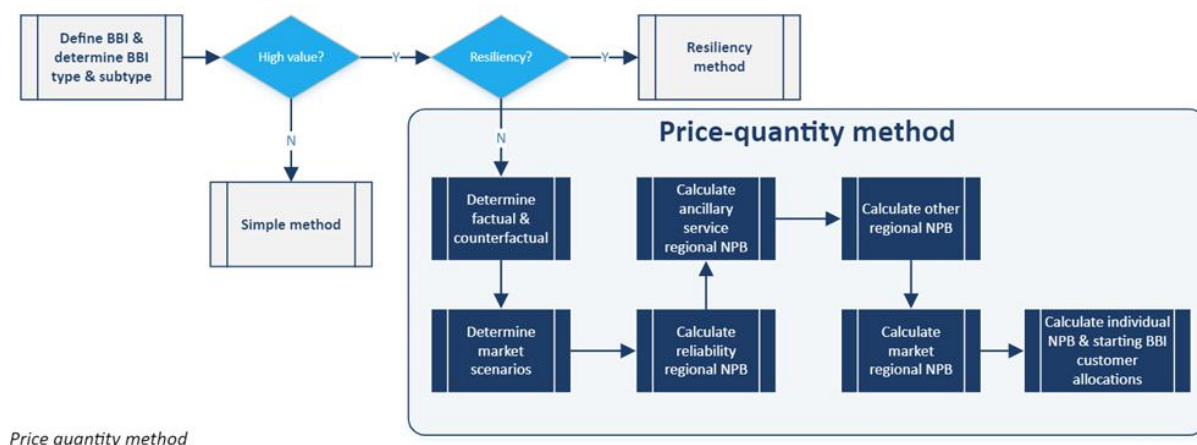


Figure 2: The price-quantity method

Under the price-quantity method, Transpower must:

- always calculate at least one of market regional NPB, ancillary service regional NPB or reliability regional NPB for a post-2019 BBI; and
- calculate reliability regional NPB for a reliability BBI if Transpower determines it is necessary to do so to produce BBI customer allocations for the reliability BBI that are broadly proportionate to positive NPB from the reliability BBI.

Transpower must identify the BBI's beneficiary customers and calculate their starting allocations. To do this Transpower must determine the reliability BBI's modelled regions and regional customer groups.

Table 1: Grouping beneficiary customers

Type of Regional Customer Group	Modelled Region	Regional Customer Group
Regional Demand Group	A region defined by a set of GXPs at which there is expected to be a change in unserved energy in the same direction if an outage scenario for the reliability BBI occurs	All offtake customers in the modelled region except in respect of grid-connected battery storage
Regional Supply Group	A region defined by a set of GIPs at which there is expected to be a change in unsupplied energy in the same direction if an outage scenario for the reliability BBI occurs.	All injection customers in the modelled region

For this Reliability BBI there is one modelled region and one regional customer group. The modelled region is the Waikato 110 kV region that would be affected by unserved energy in the event of an outage of one of the 220/110 kV interconnecting transformers. The Price-quantity method calculates expected positive net private benefit (EPNPB) based on changes in reliability, including changes in unserved or unsupplied energy. The preferred investment is expected to reduce the extent of unserved energy compared with the counterfactual grid.

The regional customer group (a regional demand group) is comprised of all customers that take electricity off the grid in the modelled region (offtake customers), except grid-connected batteries.

We have not identified injection customers as beneficiaries of the WRIC BBI under the modelled outage scenarios, because the preferred investment does not increase their ability to inject electricity into the grid.

For a single customer group, the individual NPB for each customer in the regional demand group will be equal to the value of the customer's intra-regional allocator (**IRA**). The IRA values are calculated as each customer's **mean historical coincident peak offtake** (for peak BBIs). The mean is calculated over the 100 peak offtake trading periods per capacity year – over the five complete capacity years (1 September to 31 August) immediately preceding the final investment decision date for the BBI.

To calculate a customer's starting allocation, we divide the customer's individual NPB by the total of all customers' individual NPBs. As mentioned earlier, a customer's BBC for the BBI is calculated by multiplying the BBI's covered cost by the customer's allocation.

2 TPM Requirements

2.1 Outage scenarios

For the WRIC BBI, the relevant outage scenarios are those that could result in unserved energy in the Waikato 110 kV region under credible contingency conditions. The shortlist analysis models outages of an interconnecting transformer and assesses the expected exceedances of available interconnection capacity at those times. These exceedances are expected to occur principally during periods of high regional demand, which is why WRIC is being assessed as a Reliability Peak BBI.

The modelling also considers the effect of planned maintenance conditions where the system may be operating with one asset already out of service and a further credible contingency occurs (i.e., N-1-1). These maintenance-related scenarios are generally expected to arise during off-peak periods, but they remain relevant to the assessment of reliability benefits because the preferred option reduces the likelihood and extent of load curtailment across the modelled region.

2.2 Modelled region and regional customer group

Under the counterfactual grid, an outage of one of the two 220/110 kV interconnecting transformers at Hamilton GXP could result in the Waikato 110 kV region no longer being supplied to an N-1 reliability standard, with potential unserved energy from 2030.

The regional customer group comprises all the offtake customers in the Waikato 110 kV region, being:

- Powerco, with offtake at Piako, Waihou, Waikino, Kopu, Hinuera and Arapuni North;
- Waipā Networks, with offtake at Cambridge and Te Awamutu;
- WEL Networks, with offtake at Hamilton 11 kV;
- The Lines Company, with offtake at Hangatiki 11 kV and Hangatiki 33 kV;
- Mercury Energy, with occasional offtake at Arapuni and Karapiro; and
- Harmony Energy, with occasional offtake at Waihou.

We propose a regional demand group as the single regional customer group for this BBI. The WRIC BBI addresses a common reliability constraint across the Waikato 110 kV network. The modelled outage scenarios are not confined to a single GXP or customer but relate to the regional ability to maintain supply following credible contingencies on the 220/110 kV interconnection and associated network. The customers supplied from the WRIC GXPs therefore benefit from the same reliability improvement, so their intra-regional allocations should be calculated within one regional demand group using mean historical coincident peak offtake.

A regional supply group has not been included for this BBI. WRIC is being assessed as a Reliability BBI whose modelled benefits are avoided unserved energy and reduced load curtailment for regional offtake customers. The outage scenarios do not identify increased generation access, dispatch, or market benefits for injection customers. The relevant customer group is therefore the Waikato regional demand group, with allocations based on mean historical coincident peak offtake.

2.3 Calculation of Intra-regional allocators (IRAs)

The Assumptions Book provides that, for market and reliability BBIs, the IRA for regional demand groups can be calculated using either mean historical annual offtake for non-peak BBIs or mean historical coincident peak offtake for peak BBIs. WRIC is being assessed as a Peak BBI because the relevant unserved energy is modelled principally at times of high regional demand. Accordingly, the IRA values for the WRIC BBI are calculated using each customer's mean historical coincident peak offtake over the five complete capacity years immediately preceding the final investment decision date for the BBI, consistent with the TPM and the Assumptions Book.

2.4 Indicative starting allocations

We have calculated the customers' IRA values as their mean historical coincident peak offtake from 1 September 2020 to 31 August 2025. This calculation will be updated for more recent years' offtake after there is a final investment decision date for the Proposed Investment and prior to consulting on the proposed starting allocations for the WRIC BBI under the TPM.

Table 2: Indicative starting allocations for the Waikato Regional Interconnection Capacity Reliability BBI

Customer Name	Location Codes	Indicative Allocation
Powerco	ARI-110, PAO, WHU, WKO, KPU, HIN	50-60%
The Lines Company	HTI-11, HTI-33	5-10%
Waipā Networks	CBG, TMU	20-30%
Waikato Electricity Limited	HAM-11	5-10%
Mercury Energy	ARI, KPO	0% ³
Harmony Energy	WHU	0% ³

2.5 Covered cost calculation methodology

Under the TPM, a BBI's covered cost is calculated annually based on the values of certain capex and opex inputs for the relevant pricing year. A BBI's covered cost is made up of:

³ Generators will receive non-zero allocations should they have had net offtake during any of the 100 peak offtake trading periods per capacity year – over the five previous complete capacity years.

- costs that are directly attributable to the BBI or have a verifiable causal relationship with it. This captures capex costs (depreciation and a return on investment using our regulated WACC) and some types of opex; and
- a portion of our “overhead” opex, which does not have a direct or causal relationship with the BBI but is reasonably attributable to it. This type of opex is attributed to all BBIs in proportion to their depreciation (depreciation multiplied by an attributed opex ratio).

2.6 Indicative covered costs

We have used the same cost estimates as in Attachment 3 to calculate the indicative covered costs for the WRIC BBI.

The annual covered cost of a BBI is confirmed as part of calculating transmission charges for each pricing year after the BBI is commissioned. Our calculation of the WRIC BBI’s indicative covered cost relies on a number of estimates including final asset composition and asset values, which we will not know until after the BBI is fully commissioned.

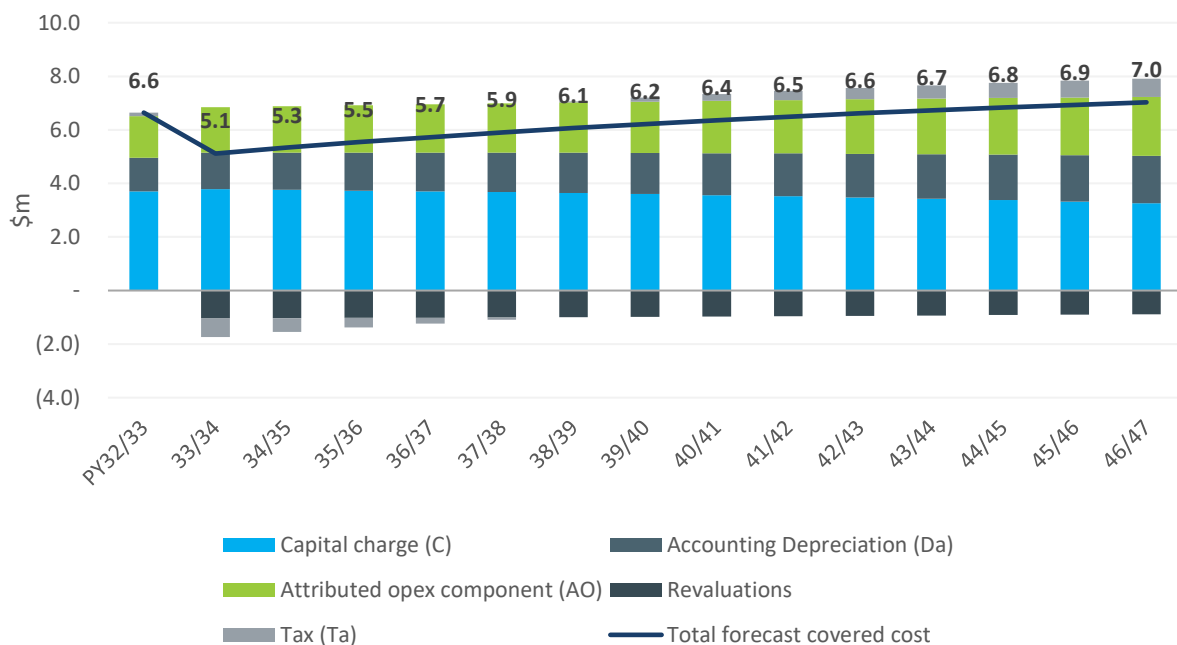


Figure 3: Waikato Regional Interconnection Capacity BBI indicative covered costs

2.7 What happens next?

Following this shortlist consultation, we will consider feedback, select our preferred option, and submit an MCP to the Commerce Commission. The MCP will include the estimated increase in transmission charges associated with the proposal, as required by the Capex IM.

The indicative starting allocations in this Attachment are not proposed or final starting allocations. If the Commission approves the MCP and Transpower makes a final investment decision, we will consult separately on the proposed starting allocations for the WRIC BBI under the TPM.

- Q15. Do you agree that WRIC MCP should be treated as a Reliability BBI?
- Q16. Do you agree with the proposed Waikato 110 kV modelled region and regional demand group?
- Q17. Do you agree that WRIC should be treated as a Peak BBI, and with the use of mean historical coincident peak offtake to calculate indicative IRAs?
- Q18. Are there any customers, GXPs, or data-related issues that may materially influence the proposed starting allocations and should be taken into account?

