

The relationship between transmission investment and price setting for benefit-based charges

Purpose of this Information Sheet

This Information Sheet describes the relationship between price-quality regulation (**PQR**) and investment approval for transmission services and price setting under the transmission pricing methodology (**TPM**).

The Commerce Commission (**Commission**) is responsible for setting Transpower's Maximum Allowable Revenue (**MAR**) and approval of grid upgrades under Part 4 of the Commerce Act, and the Electricity Authority (**Authority**) is responsible for the TPM which determines how Transpower sets transmission charges to recover the MAR.

This Information Sheet provides an overview of:

- the Commission's and Authority's respective responsibilities in relation to price setting;
- the steps Transpower goes through from investment identification and approval to starting Benefit Based Investment (**BBI**) customer allocations for high-value post-2019 BBIs;
- how customer allocations might change over time; and
- where transmission customers and other stakeholders can find information on indicative transmission charges and transmission pricing consultations and decisions.

Unless stated otherwise, all clause references in this Information Sheet are to clauses of the TPM.



Legal disclaimer

This Information Sheet provides a high-level overview of the relevant subject matter only.

Transpower recommends you review the TPM itself and seek independent expert advice before relying on anything in this Information Sheet.

Transpower cannot, and does not, accept any liability for the accuracy or completeness of this Information Sheet or the consequences of your or others' reliance on it.

If you provide this Information Sheet or an extract from it to any other person you must include this disclaimer.

Version history for this guide

Version	Published	Key amendments compared to previous version
1	8 August 2025	n/a

1 The Commerce Commission and Electricity Authority's responsibilities

The Commerce Commission (**Commission**) determines how much revenue Transpower, as the owner and operator of the National Grid, can recover from its customers according to price-quality regulation (**PQR**) of Transpower under Part 4 of the Commerce Act. This includes approval of Transpower's investments and setting Transpower's Individual Price-Quality Path (**IPP**) every five years (the Regulatory Control Period (**RCP**)).

The Commission is required to set a series of Input Methodologies (**IMs**) which provide upfront rules, requirements and processes applying to regulation under Part 4 of the Commerce Act.

One of the IMs that applies to Transpower is the Capital Expenditure IM (**Capex IM**). The Capex IM sets out the rules and requirements that apply when Transpower applies for approval of expenditure related to major capex projects (**MCPs**)¹, listed projects², and base capex and opex proposals which are used as inputs into the Commission's IPP determination. Once the Commission determines Transpower's capital expenditure (and/ or operating expenditure) allowance the Commission will determine Transpower's maximum allowable revenue (**MAR**). For an RCP, the Commission will set a MAR based on its determination of base capex, opex, and the rate of return. The RCP MAR will increase if the Commission approves MCPs or listed projects with assets commissioned during the RCP.

The Electricity Authority (**Authority**) is responsible for the [transmission pricing methodology](#) (**TPM**) which determines how Transpower's MAR is recovered from (allocated to) each of its customers in each pricing year.

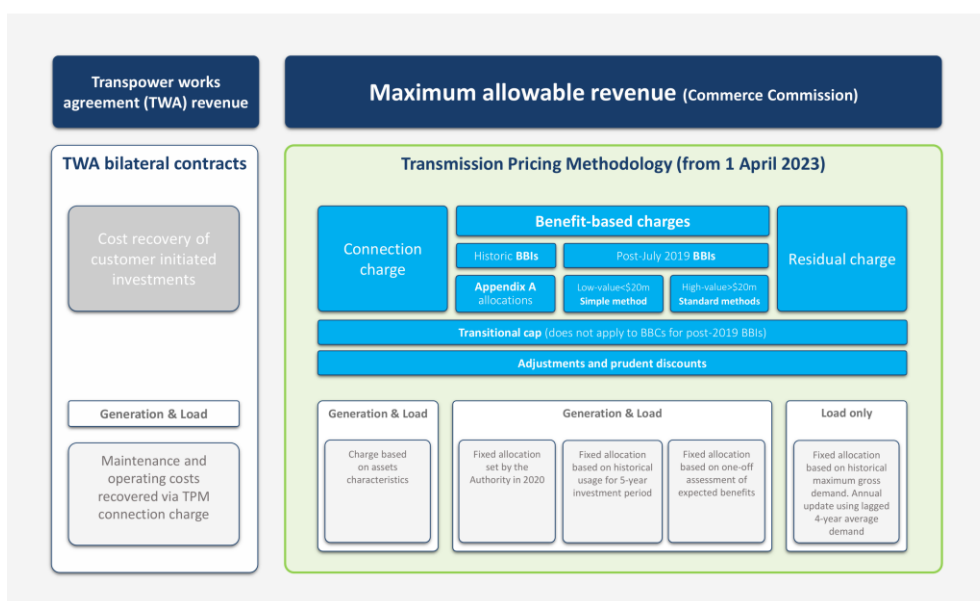
Under the TPM, the covered costs³ of post-2019 investments in interconnection assets and interconnection transmission alternatives (collectively, benefit-based investments (**BBIs**)) are recovered from customers identified as beneficiaries. These allocations are based on each customer's expected positive net private benefit (**EPNPB**) from those investments. The TPM contains the methods for calculating charges for BBIs (benefit-based charges (**BBCs**)).⁴

¹ A major capex project is a project expected to cost over \$30m that is undertaken to address or enable a specific investment need to be met, which may be either or both, a transmission investment or non-transmission solution.

² A listed project is a base capex project or programme that is specified as a 'listed project' in an IPP determination.

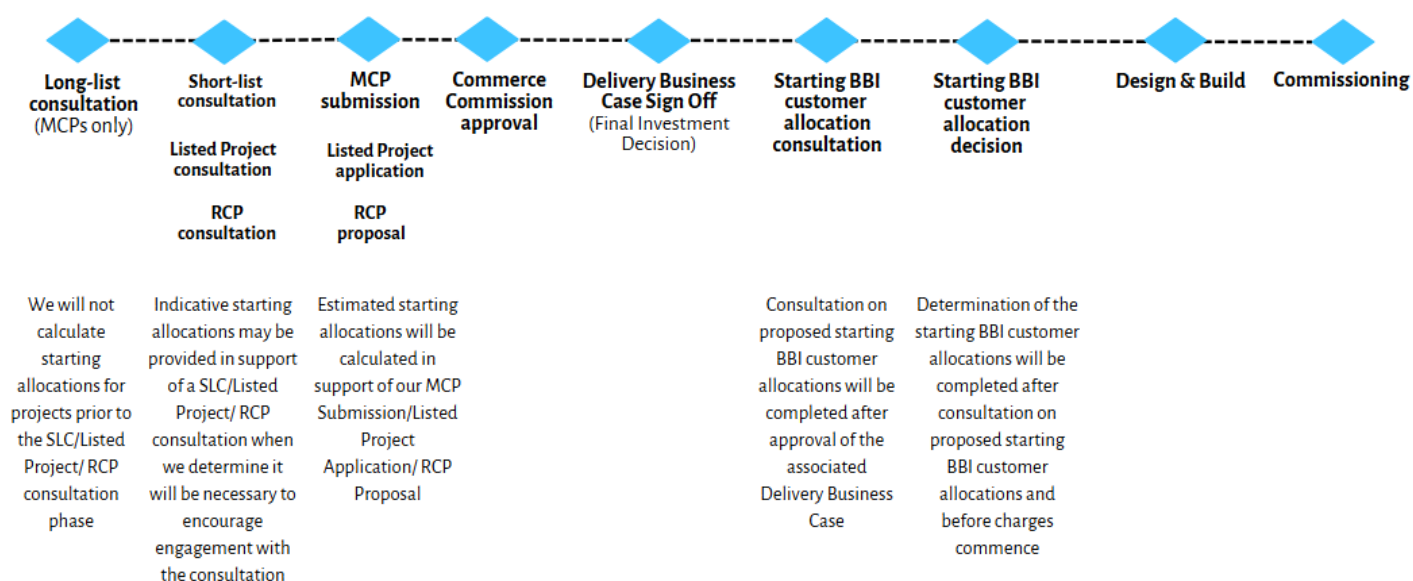
³ The cost recovered through the BBCs for a BBI is referred to in the TPM as the BBI's covered cost. The covered cost of a BBI includes capital components (return on and of investment) and an allocation of Transpower's operating costs (including overheads).

⁴ For more information on BBCs refer to the various [BBC Information Sheets](#).



2 The steps from investment identification and approval to starting BBI customer allocations

The steps Transpower is required to go through for capital expenditure approval vary depending on the nature of the investment, but the pricing information to be provided at each stage is broadly the same (see diagram below).



2.1 Short-list, Listed Project or RCP consultation

If we consider it will be necessary to encourage engagement with the consultation, we may provide indicative starting allocations when we undertake the short-list consultation (**SLC**) for MCPs, the Listed Project consultation for Listed Projects and the five-yearly RCP consultation for Base Capex Projects (>\$30m). As this stage of the process, while we may publish indicative allocations, we do not consult on these.

We have used methods from the TPM and the [Assumptions Book](#) to provide indicative starting allocations. These calculations are less detailed, including using simplifying assumptions,⁵ than those we apply when we calculate proposed starting BBI customer allocations for consultation under the TPM.⁶

The covered costs used at this early stage are also indicative. Transpower does not estimate the amount of revenue to recover for an investment (and therefore the transmission charges that will ultimately be set) until after it receives the Commission's approval of the expenditure it can recover.

2.2 MCP submission, Listed Project application or RCP proposal

Following the SLC, Listed Project or RCP consultation, we will select our preferred option and submit a proposal (or application) to the Commission. As required by the Capex IM, we will include an estimate of the expected increase in transmission charges due to the proposed expenditure.^{7, 8}

Again, at this stage, the estimated starting allocations and transmission charges are indicative only and are not consulted on.

2.3 Starting BBI customer allocations

Following the Commission's final determination on our proposal or application, assuming the Commission approves the investment, we will undertake a formal consultation on the proposed starting BBI customer allocations, as required by clause 15 of the TPM.

The determination of starting BBI customer allocations will be completed after this consultation and before the charges commence.

⁵ For example, as part of our NZGP1 short-list consultation, we formed an initial view that the HVDC and CNI investments should be treated as a single BBI but acknowledged this as a matter we would need to consider again as part of consultation on proposed starting BBI customer allocations.

⁶ e.g. Transpower, [NZGP1 short list consultation: Indicative covered costs and starting BBI customer allocations](#), 14 July 2022.

⁷ Clause 7.5.1(1)(c) of the Capex IM.

⁸ e.g. refer to our [consultation on RCP4](#), for 2025-2030, and our subsequent [RCP4 proposal](#) to the Commission. We calculated aggregate indicative charges for our customers based on our forecast revenue. These were provided in the [RCP4 Indicative Transmission Charges](#) workbooks. Actual charges will be based on the value and location of the investments made during RCP4 (and during the remainder of RCP3). Therefore, charges will change between when the indicative transmission charges were published and when the transmission charges are notified to customers for each pricing year.

3 Determining starting allocations

For standard method BBIs, we determine regional customer groups by identifying the customers who receive similar benefits to one another. Within each regional customer group identified as a beneficiary of the investment, individual customers' starting BBI allocations are determined in proportion to the values of their intra-regional allocators (**IRAs**), which are measured at the points of connection to the grid and are net by trading period.

IRAs for customers in regional demand groups are based on:

- mean coincident peak offtake if a peak BBI i.e. if the investment need for the BBI is primarily attributable to meeting peak demand; or
- mean annual offtake if a non-peak BBI.

IRAs for customers in regional supply groups are based on mean annual injection.

4 Changes to allocations over time

Once determined, the starting BBI allocations are adjusted if certain events occur, referred to as "Benefit-based charge (BBC) adjustment events".⁹

The BBC adjustment events are listed in clause 81(1) of the TPM. Most of them result in immediate step changes to allocations, although not necessarily immediate changes to BBCs for all affected beneficiaries.

While allocations may change following an adjustment event, regional customer groups are unlikely to change (unless the "Substantial sustained change in grid use" adjustment event applies, which results in a full recalculation for any affected BBIs). In the same manner, if a customer is not categorised within a regional customer group before an adjustment event, the customer will remain outside of this group afterwards (unless the customer connects a large facility, >10MW, that qualifies as part of such regional customer group¹⁰).

Several adjustment events also apply to large embedded plant e.g. large embedded plant connection or disconnection, including large upgrades and large de-ratings (clause 85), and substantial sustained increase in large embedded plant consumption or generation (clause 86). Changes to allocations because of these adjustment events are attributed to the relevant host customer.

⁹ For more information refer to our [BBC Adjustments Information Sheet](#).

¹⁰ An example of this occurring would be an industrial user installing a large embedded generator. Clause 85(2) requires a large plant connection to be treated as a separate new customer (the notional new customer).

5 The boundaries between investment approval and the determination of customer allocations under the TPM

While Transpower is required to provide estimated changes in transmission charges as part of the Commission's capital expenditure approval process, it should be noted that Transpower's estimate of market benefits is separate from determining how the cost of the investment, if approved, will be allocated amongst Transpower's customers through transmission charges:

- The Commission's investment approval does not impact how that cost is allocated through transmission charges. The Commission has noted: "The new TPM guidelines and the new TPM [approved by the Electricity Authority in April 2022] under them will not affect the regulatory approval process for assessing the [Major Capex Proposal] under the Capex IM or the amount Transpower can recover in transmission charges for the investment."¹¹
- The TPM does not regulate our investment decision making processes – that is the role of the Capex IM. The Investment Test in the Capex IM requires Transpower to estimate the *total* "market benefits" of an investment while allocation of the cost of the investment under the TPM is based on the *relative* "private benefits" for each individual transmission customer. For transmission pricing purposes it is the relative benefits that matter and not the size of the total benefits.
- The concept of "net private benefits" is broadly consistent with, but not the same as, the electricity "market benefits" we use to assess investments under the Investment Test in the Capex IM.

When we undertake cost-benefit analysis under the Investment Test, we assess reductions in electricity market costs against the cost of investment. In other words, we assess net changes in economic surplus in the electricity market and ignore wealth transfers between parties in the market e.g. between loads and generators. These are often referred to as efficiency benefits. We do not typically identify who receives these benefits.

For the purposes of determining private electricity market costs and benefits, under the TPM, "net private benefits" is defined as positive changes in economic surplus to individual parties in the electricity market as a result of the transmission investment (including where this change is a wealth transfer from one party to another, but not including the cost of the investment itself).

¹¹ Commerce Commission [Decision and reasons on Transpower's Bombay Otahuhu Regional MCP](#), 19 March 2021, paragraph 27.

- Both changes in private benefits and changes in electricity market costs can be derived from our transmission investment modelling, with simplifying assumptions. Under the TPM, the two “standard methods” used for high-value BBIs¹² require Transpower to adopt an approach to determining investment-specific beneficiaries and their relative expected benefits that must be as consistent as reasonably practicable with our application of the Investment Test.¹³ We may depart from the Investment Test approach if we determine that approach would not produce allocations that are broadly proportionate to EPNPB from the BBI.

It would be entirely consistent for a transmission customer to support a proposed investment (and the estimate of the benefits of that investment) even if they do not agree with the relative private benefits used to establish indicative (or subsequent proposed) transmission charges.

6 Where can I go for information on future changes to transmission charges?

Transpower provides information on its consultations at: <https://www.transpower.co.nz/our-work/consultations-webinars>. This includes long-list MCP consultations, short-list MCP consultations, Listed Project application consultations, and RCP consultations as well as other consultations Transpower undertakes.

The Commerce Commission includes consultations on [Major Capex Proposals](#), [Listed Projects](#) and [RCP/IPP determinations](#).

Transpower’s starting BBI customer allocation consultations and decisions are available at: <https://www.transpower.co.nz/our-work/industry/grid-pricing/transmission-pricing-methodology/starting-bbi-customer-allocations>.

Information more generally on indicative pricing can be found at: <https://www.transpower.co.nz/our-work/industry/grid-pricing/indicative-pricing>.

¹² The TPM contains two “standard methods” and a simple method for calculating BBCs. For BBIs expected to cost more than \$30m (high-value investments), a BBC “standard method” must be applied: the price-quantity method or the resiliency method. The resiliency method applies where the investment need is primarily attributable to mitigating a risk of cascade failure or a high-impact low-probability event. If the resiliency method does not apply the price-quantity method applies.

¹³ The TPM also requires Transpower to publish a BBC [Assumptions Book](#) containing the assumptions and methodologies Transpower intends to apply for allocating the costs of BBIs.

