Benefit-based charges: Adjustment events

Purpose of this Information Sheet

This Information Sheet describes adjustments that can be made to benefit-based charge (BBC) allocations under the transmission pricing methodology (TPM).

BBC allocations are calculated before the relevant benefit-based investment (BBI) is commissioned. The allocations do not change over the life of the BBI unless certain significant events occur. These events are called BBC adjustment events.

This Information Sheet provides an overview of:

- what BBCs are
- the different types of BBC adjustment event.

Separate Information Sheets on other aspects of BBCs have also been published:

- the BBC standard methods
- the Appendix A BBIs
- BBC adjustment events
- a BBI's covered cost.

The requirements for BBC adjustment events are in Part F of the TPM.

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	29 September 2022	n/a
2	1 February 2023	Minor editorial changes, explanation of ramping up vs staging of new generation.

1 What are benefit-based investments?

Benefit-based investments (BBIs) are investments in interconnection assets and interconnection transmission alternatives (interconnection investments). They typically include investments in the replacement and refurbishment of existing interconnection assets and transmission alternatives that avoid or defer the need to invest in interconnection assets.

There are two types of BBI:

- Appendix A BBIs (also referred to as 'historic BBIs'). These are seven pre-July 2019
 interconnection investments for which the Authority calculated the starting BBI customer
 allocations and specified these in Appendix A of the TPM.
- Post-2019 BBIs. These are interconnection investments commissioned after 23 July 2019.
 Starting BBI customer allocations for post-2019 BBIs are calculated by Transpower using a standard method or the simple method in the TPM.

2 What are benefit-based charges?

Benefit based changes (BBCs) recover the costs of a BBI, from customers identified as expected beneficiaries of the BBI.

A customer is expected to be a beneficiary of a BBI if it has expected positive net private benefit (EPNPB) from the BBI. A customer's starting allocation for the BBI is the customer's share of total EPNPB.

The cost recovered through the BBCs for a BBI is referred to as the BBI's "covered cost". A BBI's covered cost includes capital components (return on and of investment) and an allocation of Transpower's total operating costs (including overheads). The covered cost is calculated annually, for each BBI.

Each customer's starting allocation for a BBI is calculated to be broadly in proportion to the EPNPB the customer is expected to derive from the BBI, as expected at an early point in its lifecycle (in most cases, some point before the investment decision is made). That is, the BBC paid by a customer reflects the positive NPB that customer is expected to receive from the BBI (if any), relative to all other customers.

A customer's BBC for a BBI is the BBI's covered cost multiplied by the customer's allocation for the BBI.

Each customer's allocation for a BBI is fixed over the life of the BBI, unless a change to the allocation is triggered by one of the adjustment events in Part F of the TPM.

BBC adjustments are the subject of this information sheet.



3 What are BBC adjustment events?

The BBC adjustment events are listed in clause 81(1). Most of them result in immediate step changes to BBC allocations.¹

BBC adjustment events affecting BBC allocations can be divided into two groups - those that are, or are treated as analogous to, customer entry or exit,² and those that are not:

Customer entry/exit and analogous events	Other
Customer entry or exit (clauses 83 and 84)	Sale of customer's business (clause 89)
Grid-connected plant ³ connection or disconnection, including large upgrades and de-ratings (clause 85)	Substantial sustained change in grid use (SSCGU) (clause 91)
Large embedded plant connection or disconnection, including large upgrades and de-ratings (clause 85)	
Substantial sustained increase in grid- connected plant consumption (clause 86)	
Substantial sustained increase in large embedded plant consumption (clause 86)	
New distributor grid exit point (GXP) (clause 87)	
Change in large plant point of connection, including grid-connected to embedded and vice versa (clause 88)	

The BBC adjustment events in paragraphs (a) (material damage) and (k) (voluntary under-recovery) of clause 81(1) result in reductions in the BBCs paid by all beneficiaries but do not change their BBC allocations (i.e. they are scaling adjustments). The adjusted BBC allocations following a substantial sustained change in grid use (SSCGU) take effect at the start of a pricing year only.

² Customer entry means a customer who is not already grid-connected connecting to the grid. Customer exit means a customer disconnecting entirely from the grid.

³ "Plant" means generating or consuming plant, not including networks.

Plant is "large" if it is grid-connected or has capacity of at least 10 MW. A plant upgrade or derating is large if it changes the plant's capacity by at least 10 MW. The large plant connection or disconnection adjustment event is not triggered merely by plant ramping up or down.

New plant connecting in stages is treated as a large plant connection adjustment event if the incremental stages total 10MW or more (i.e., the incremental changes to capacity would constitute a large plant connection if undertaken at the same time).

A "substantial sustained increase" is an increase of at least 25% in large plant consumption or generation since the last time the relevant customer's BBC allocations were calculated that is expected to persist for at least five years.

A "substantial sustained change in grid use" or SSCGU is a very significant change to how the grid is used – a change in total grid injection or offtake of at least 5% of average annual injection or offtake over the past five years that is expected to persist for at least five years.

3.1 Customer entry and analogous

A new customer must have a BBC allocation for each BBI of which the customer is a beneficiary.

There are different methodologies for calculating a new customer's starting BBC allocations, and then adjusting other beneficiaries' BBC allocations, depending on whether the BBI in question is a post-2019 BBI or an Appendix A BBI:

- For a post-2019 BBI, the previously calculated expected positive regional NPB for each regional customer group of which the new customer is a member (determined from the new customer's connection location and whether it is expected to be an offtake or injection customer or both) is used to calculate the new customer's individual NPB. The new customer's individual NPB as a proportion of the total of all existing beneficiaries' individual NPBs is the new customer's unscaled BBC allocation. All beneficiaries' BBC allocations, including the new customer's unscaled BBC allocation, are then scaled down so they add up to 100%. This methodology is illustrated by an example in clause 83(5).
- The methodology is different for an Appendix A BBI because the BBC allocations for them were calculated by the Authority and are not based on regional customer groups, regional NPB or individual NPB. For an Appendix A BBI, one or more comparator beneficiaries are selected for the new customer depending on its type and connection location. The comparator beneficiaries' "benefit factors" are used to calculate the new customer's unscaled BBC allocation. All beneficiaries' BBC allocations, including the new customer's unscaled BBC allocation, are then scaled down so they add up to 100%. This methodology is illustrated by a simple example in clause 83(9).

The analogous BBC adjustment events work the same way by treating the relevant change (new or upgraded plant, new connection or substantial sustained increase) as attributable to a notional new customer. At the end of the process, the notional customer's BBC allocations are attributed to

the relevant actual customer, or host customer in the case of embedded changes.⁴ The analogous events can occur at the grid interface or behind the relevant customer's grid connection (i.e. embedded).

Because a host customer receives the BBC allocations for any new large plant it hosts, it is possible the connection of new embedded generating plant to a distribution network or grid-connected consuming plant will increase the host customer's BBC allocations for existing BBIs. Similarly for the connection of new consuming plant to grid-connected generating plant.

The TPM prevents a large plant owner reducing its, or its host customer's, BBC allocation for a BBI by changing its point of connection, including from grid-connected to embedded and vice versa.

3.2 Customer exit and analogous

The BBC allocations for an exiting customer are re-allocated to the remaining beneficiaries of the relevant BBI on a pro rata basis. This methodology is illustrated by an example in clause 84(4).

However, Transpower will not increase the remaining beneficiaries' BBCs for the pricing year during which the exiting customer exits.

As for customer entry, the analogous BBC adjustment events work the same way by treating the relevant change (disconnected or de-rated plant) as attributable to a notional exiting customer and, at the end of the process, attributing (by way of reduction) the notional customer's former BBC allocations to the relevant actual customer or host customer. The analogous events can occur at the grid interface or behind the relevant customer's grid connection (i.e. embedded).

In some circumstances an exiting customer's, or notional existing customer's, BBC allocation for a BBI will continue after exit. This will be the case if the BBI is less than 10 years old and a related party of the customer, or the customer itself in the case of disconnected or de-rated plant, remains a customer after the exit. This is the "continuing BBI" mechanism.

3.3 Sale of customer's business

If a customer sells all or part of its business,⁵ Transpower must apportion the customer's BBC allocations between the purchaser and vendor taking into account the size and nature of the transferred business. The whole of the vendor's BBC allocations will go to the purchaser if the vendor has sold its entire business.

⁴ Another difference for embedded changes is that Transpower must determine a grid point of connection at which to locate the notional new customer.

This would be a sale of assets. Sale of the customer's shares would not trigger an adjustment.

3.4 Substantial sustained change in grid use

If there is an SSCGU, Transpower must carry out a full re-calculation of BBC allocations for any BBI valued at more than \$20m at the time (a high-value BBI)⁶ and for which the distribution of regional NPB is likely to have been affected by the SSCGU. An SSCGU is a "start again" level adjustment event for high-value BBIs.

However, the BBC allocations for a BBI are not re-calculated if the occurrence of the SSCGU was factored into the original calculation of those allocations (i.e. was a market scenario, with any weighting, used in the calculation).



TRANSPOWER NEW ZEALAND | TPM INFORMATION: BENEFIT-BASED CHARGES: ADJUSTMENT EVENTS v2 | FEBRUARY 2023

It is possible a BBI that was originally high-value will have ceased to be high-value at the time of the SSCGU owing to depreciation, for example.

TRANSPOWER.CO.NZ