Balance point principle guidance

Draft for comment

9 July 2026

ELECTRICITY AUTHORITY
TE MANA HIKO

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Version

Version	Date	Notes
0.9		July Draft for comment.

Contents

1. Purpose and scope

1.1. This paper provides draft guidance on how the Electricity Authority Te Mana Hiko (Authority) intends to implement the balance point principle framework recently introduced through an amendment to the Electricity Industry Participation Code (Code).[1]

Purpose

1.2. Guidance does not (and cannot) override Code requirements. Its purpose is to assist stakeholders to understand:

(a) process – the Authority's intended approach to monitoring pricing methodologies and engaging with distributors

(b) pricing principles – how the Authority intends to assess whether pricing methodologies align with the balance point principle.

Scope

1.3. The balance point principle focuses on:

(a) pricing methodologies – the methods distributors use to determine charges (rather than individual quotes, prices or charges)

(b) connection charges – charges for new or upgraded connections, including capital contributions (cash) and in-kind contributions (vested assets)

(c) total contribution – the total charge for a new or upgraded connection, including connection charges and lines charges.

1.4. While the focus is on connection pricing methodologies, methodologies for setting lines charges are also relevant. This is because the total contribution from a connection depends on both connection and lines pricing methodologies.

1.5. The balance point principle does not apply to secondary networks – ie, it only applies to distribution networks that connect directly to the transmission network (rather than via another distribution network).

Guide to usage

1.6. The guidance is structured as follows:

(a) background and key concepts – introduces the balance point principle and key pricing concepts, including a 'reference' pricing methodology

(b) process guidance – covers the three-step process through which the Authority may work with a distributor to amend its pricing methodologies

(c) pricing guidance – covers the two limbs of the balance point principle and how to establish whether pricing methodologies align.

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[1] The Code amendment is also reproduced in Appendix A. The Authority's decision to amend the Code can be found at: Reducing barriers for new connections: up-front charges, distributor obligations and WACC.

1.7. The guidance also has three appendices:

(a) glossary – explains terms used in this guidance

(b) illustrative scenarios – provide top-down perspective on pricing outcomes

(c) Code amendment

1.8. Distributors may wish to use the guidance to:

(a) self-assess how well their pricing methodologies align with the balance point principle

(b) self-assess whether they could make changes to improve alignment, or whether any planned changes risk worsening alignment

(c) consider information they could produce, retain or publish to assist with demonstrating alignment

(d) understand information they may need to produce should the Authority engage with them regarding alignment of their pricing methodologies with the balance point principle.

Reference connection pricing formula

1.9. The guidance includes a reference connection pricing formula that illustrates one way we consider full compliance with the balance point principle can be achieved. The formula is introduced in the 'key concepts' section from paragraph 2.35.

1.10. The reference formula is useful because a distributor can test how outcomes from their pricing compare with reference outcomes. Some distributors may choose to amend their pricing to implement the reference formula, but this is not a requirement.[2]

1.11. The reference formula is not a fully developed connection pricing methodology, but is designed to work with methodologies already included in the Code (ie, for estimating the incremental cost of a connection – enhancement and capacity costing methodologies – and for estimating the minimum subsidy-free connection charge – charge reconciliation).

Illustrative scenarios

1.12. The reference formula provides a 'bottom up' perspective on the balance point principle – ie, it shows how a connection pricing methodology can be designed to produce outcomes consistent with the principle.

1.13. Most (or all) distributors will not have used the reference formula, and it is necessary instead to take a 'top down' approach – ie, to observe outcomes and test whether they are consistent with the balance point principle.

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[2] The Authority is separately considering the issues for further reform of distribution connection pricing and will release an issues paper for consultation shortly. The paper seeks feedback on whether a more a standardised approach to connection pricing may be appropriate. One possible approach could draw on the reference allocation formula used in this guidance. See: Distribution Connection Pricing in -Further reform.

1.14. The guidance discusses high-level metrics that can be used to monitor alignment. Where high-level metrics suggest possible non-alignment, it may be necessary to unpick the drivers of observed outcomes.

1.15. The guidance includes illustrative scenarios that may help provide additional 'top-down' perspectives on the second limb of the balance point principle. Each scenario illustrates movements (from year to year) in cost and revenue components and interprets whether they align with the balance point principle.

Feedback

1.16. We welcome any feedback or engagement that may assist to improve the guidance – eg, to improve clarity or completeness. If you wish to provide feedback or set up a discussion on your particular circumstances, please email connection.feedback@ea.govt.nz with 'BPP framework guidance' in the subject line before 7 August 2026.

2. Background and key concepts

2.1. This section provides a brief overview of relevant background, and introduces key concepts related to connection pricing and the balance point principle.

Background

2.2. The Authority and the Commerce Commission (Commission) have complementary roles in the regulation of electricity distribution services. The Commission sets information disclosure requirements and, for non-exempt distributors, determines revenue paths and associated incentive arrangements.

2.3. In practice:

(a) revenue paths determine how much revenue a non-exempt distributor may recover through lines charges each year (ie, their target revenue)

(b) connection pricing methodologies determine what portion of the incremental cost of a connection is recovered through up-front charges, with the balance financed by a distributor and recovered through target revenues (and hence lines charges)

(c) lines pricing methodologies determine how a distributor allocates target revenue between consumer groupings, and how prices are structured (eg, with some mix of fixed and usage-based components).

2.4. This means there are links between connection and lines pricing methodologies. Both work together to determine whether a connection will cover its incremental cost and the contribution it will make (over time) to shared network costs.

Lines pricing

2.5. The Authority's oversight of lines pricing methodologies has, to date, mostly involved monitoring and guidance rather than regulatory requirements. Key components are:

(a) distribution pricing principles – the Authority maintains a high-level statement of principles and distributors are required (under the Commission's information disclosure requirements) to publish self-assessments of how well their pricing methodologies align

(b) practice note and open letters – the Authority maintains a practice note and has written open letters providing guidance on good practice

(c) scorecards – the Authority occasionally reviews and publicly reports on the quality of distributors' pricing methodologies.

2.6. Distributors are also required to consult with retailers ahead of changing their pricing methodologies, and to disclose information including their pricing methodology and tariff details and data.

2.7. None of these interventions prevent a distributor from shifting its allocation of target revenue between consumer groupings – ie, all customers are (once connected) exposed to the risk of a distributor shifting cost recovery to their customer grouping. A distributor may also:

(a) introduce new consumer groupings, and reassign customers to new groups

(b) alter pricing structures in ways that alter the distribution of cost recovery within a consumer grouping. For example, towards customers with lower usage or whose demand is more aligned with network peaks.

Connection pricing methodologies

2.8. In practice, most distributors document connection pricing methodologies through a combination of:

(a) capital contribution policy – a required disclosure that covers the basis for determining cash contributions[3] towards assets

(b) vested asset policy – covers requirements for in-kind contributions – eg, where a customer must contract for equipment or works and hand assets over to the distributor to own and operate.[4]

2.9. The Authority encourages distributors to develop (and publish) well documented connection pricing methodologies that bring together relevant information – including:

(a) costing methodologies – how the distributor estimates the incremental cost of a connection (including by complying with mandatory connection pricing methodologies for enhancement cost allocation and capacity costing)

(b) allocation methodologies – how the distributor determines what portion of incremental cost it will recover through connection charges (including in a way that complies with both limbs of the balance point principle)

(c) network development policy – in what circumstances the distributor treats costs as network development (rather than incremental to a connection) and how it recovers such costs

(d) vested asset policy – whether and how the distributor accepts or requires in-kind contributions, how it determines what it will pay to acquire vested assets, and how this translates into connection pricing outcomes

(e) network capacity costings – how the distributor uses posted network capacity rates when estimating incremental cost, including how it determines design capacities[5]

(f) posted charges and rates – any posted connection charges (with associated charge reconciliations) and posted extension rates

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3 See clauses 2.4.6(1) and (3) of the Electricity Distribution Information Disclosure Determination Current information disclosure requirements for electricity distributors | Commerce Commission

4 See clause 2.4.6(2)

5 Network capacity costs are (in most cases) determined for each network tier by multiplying the applicable posted rate by an after-diversity demand assumption. Distributors can enhance transparency and predictability by publishing default demand assumptions for each consumer grouping.

(g) consumer groups – a description of the distributor's consumer groupings and how connection pricing settings and shared network cost allocation outcomes differ by consumer grouping.

2.10. High quality documentation helps provide clarity for a distributor and its customers and will assist the Authority to assess a distributor's alignment with the balance point principle.

Fast-track measures

2.11. Since 2023, the Authority has been working on a programme to develop its oversight of connection pricing methodologies.[6] The work programme aims to improve the efficiency of network pricing, including by:

(a) improving consistency between distributors so that pricing is more predictable and easier to navigate for access seekers

(b) enhancing cost-reflectivity so that pricing encourages efficient decisions by access seekers

(c) mitigating coordination challenges, such as first-mover disadvantage, so that efficient investment is not stalled or disrupted

(d) improving the predictability and efficiency of shared cost recovery so it does not inefficiently deter or dampen connection demand

(e) improving distributor incentives to manage costs and deliver services that align with customer preferences

(f) maintaining or enhancing competitive supply of connection works.

2.12. In July 2025, the Authority decided to amend the Code to introduce four 'fast-track' connection pricing methodologies:

(a) enhancement cost allocation – costing methodology addressing the treatment of customer- and distributor-selected enhancements to the 'minimum scheme' connection solution

(b) capacity costing – costing methodology for consumption of capacity within the shared network. Provides standard methodology for estimating capacity costs and, from April 2027, limits circumstances in which 'last-straw' pricing may be used

(c) pioneer schemes – methodology for reallocating costs when a first-mover funds a network extension that is later used to supply other connections. Only applies when certain criteria (including minimum values) are met

(d) charge reconciliation – information-only methodology for testing whether a connection will be subsidised (and, by extension, estimating how much a connection will contribute in excess of its incremental cost).

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[6] See: Distribution connection pricing reform | Our projects | Electricity Authority

Interim safeguard

2.13. In July 2026, the Authority decided to amend the Code to also introduce the balance point principle framework. This complements the fast-track measures by providing a framework for safeguarding:

(a) existing customers from pricing that increases their costs by subsidising new connections (or upgrades) – this is the first limb of the balance point principle

(b) access seekers from pricing that increases their costs by shifting recovery of shared network costs from existing to new (or upgrading) customers – this is the second limb of the balance point principle.

2.14. The framework includes the balance point principle, and a three-step process for monitoring, close examination and directions.

2.15. The Code amendment includes a sunset clause, so the ability to direct changes to methodologies will expire on 1 April 2030, which is the starting date for new revenue paths for non-exempt distributors (ie, revenue paths for the fifth default price-quality path, or DPP5).[7]

2.16. This reflects that the balance point principle may be superseded by further reform measures put in place in time to flow into the capital expenditure forecasts used to inform DPP5 revenue paths.[8]

Code provisions

2.17. Appendix A reproduces the Code amendment for implementing the balance point principle. The principle has two limbs:

(a) first limb (subsidy-free floor or 'neutral point') – the costs of new connections and upgraded connections are not subsidised by existing connections, and

(b) second limb (cost-shifting restraint or 'balance point') – new connections and upgraded connections otherwise make a similar (or lower) contribution to shared network costs as similar existing connections.

2.18. Both limbs also apply to connection upgrades – ie, where connection capacity is increased or made more secure or firm.[9]

2.19. This principle is applied through a three-step process of:

(a) scanning – the Authority monitors publicly available information to review whether any pricing methodologies may potentially be inconsistent with the

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[7] Although the timeframe specified in a direction given under clause 6B.11B of the Code within which consistency with the balance point principle must be achieved may extend beyond 1 April 2030.

[8] The Authority will soon publish an issues paper on further reform of connection pricing methodologies. DPP5 is the fifth default price-quality path, starting from April 2030 for non-exempt distributors.

[9] For example, when upgrading from a flexi connection to a standard connection.

balance point principle. The Authority may also engage with distributors to assist with scanning

(b) close examination – if scanning indicates a pricing methodology may produce outcomes that are inconsistent with the balance point principle, the Authority will work more closely with a distributor to test whether this is the case and determine how to ensure alignment

(c) direction – if required, the Authority may direct a distributor to amend its pricing methodologies to align with the balance point principle.

2.20. The process is designed to:

(a) ensure any intervention by the Authority is appropriately targeted – ie, most distributors should not be subject to a direction to amend their pricing methodologies because their pricing methodologies align with the balance point principle, and close examination is only applied where monitoring is not sufficient to establish that alignment is occurring or will be occur.

(b) allow for well-informed and nuanced decisions in circumstances where a consistent historical information base is not available and pricing methodologies vary widely in how they operate and how well they are documented

(c) operate prospectively by modifying future pricing methodologies, while using historical pricing methodologies (and outcomes) as a reference point – ie, because the balance point relates to changes in pricing over time (including prior to introduction of the framework) that have the effect of shifting cost recovery to new connections

(d) allow non-exempt distributors needing to change their pricing an opportunity to engage with the Commerce Commission (if applicable) to adjust revenue path settings for future years (ie, to reflect higher net capital expenditure).[10]

2.21. While the ability to direct changes to pricing methodologies expires from 1 April 2030, directions may provide for pricing to be changed over a timeframe that extends beyond that date.

2.22. While the focus is on connection pricing methodologies, both limbs require consideration of the total contribution from a connection (ie, through connection and lines charges):

(a) the first limb (subsidy-free floor) tests whether incremental costs will be recovered through connection and lines charges

(b) the second limb (cost-shifting restraint) tests whether new connections will make a similar contribution to shared network costs through their connection and lines charges as existing connections.

[10] The Commerce Commission uses forecasts of capital expenditure and capital contributions as inputs to revenue paths and related expenditure efficiency incentives (which share the benefit (or cost) of expenditure unders (or overs) between a distributor and its customers).

Key concepts

2.23. This section introduces key concepts relating to the balance point principle framework.

Cost types

2.24. Cost categorisations relevant to connection pricing include:

(a) incremental cost – the additional cost of establishing and maintaining a new connection (or upgrade). Includes direct and indirect costs, including extension costs (ie, of tying a connection to the network) and network capacity costs (ie, of consuming capacity headroom within the network)

(b) network development costs – costs of modifying a network to enable connection growth. May include adding capacity or extending coverage proactively ahead of connections arriving

(c) shared network costs – costs that are not incremental to a connection, including the cost of network development, renewal of older connections and other shared business and network asset and operating costs.

2.25. Incremental cost is a key concept because:

(a) a connection is subsidised by existing customers if it does not at least generate enough revenue to cover its incremental cost. Pricing below incremental cost encourages inefficient connections, while shifting costs to existing customers

(b) charges that vary depending on incremental cost are cost-reflective and encourage efficient choices by access seekers (ie, as to where and how they should connect).

2.26. Due to the cost structure of distribution networks, recovering only the incremental cost of each connection would not cover the total cost of supply. Also, distributors generally do not use connection charges to recover:

(a) ongoing connection maintenance or end-of-life renewal costs

(b) network development costs.

2.27. This means lines charges will typically cover:

(a) the balance of incremental costs not recovered through a connection charge – usually including opex plus some share of extension and capacity costs

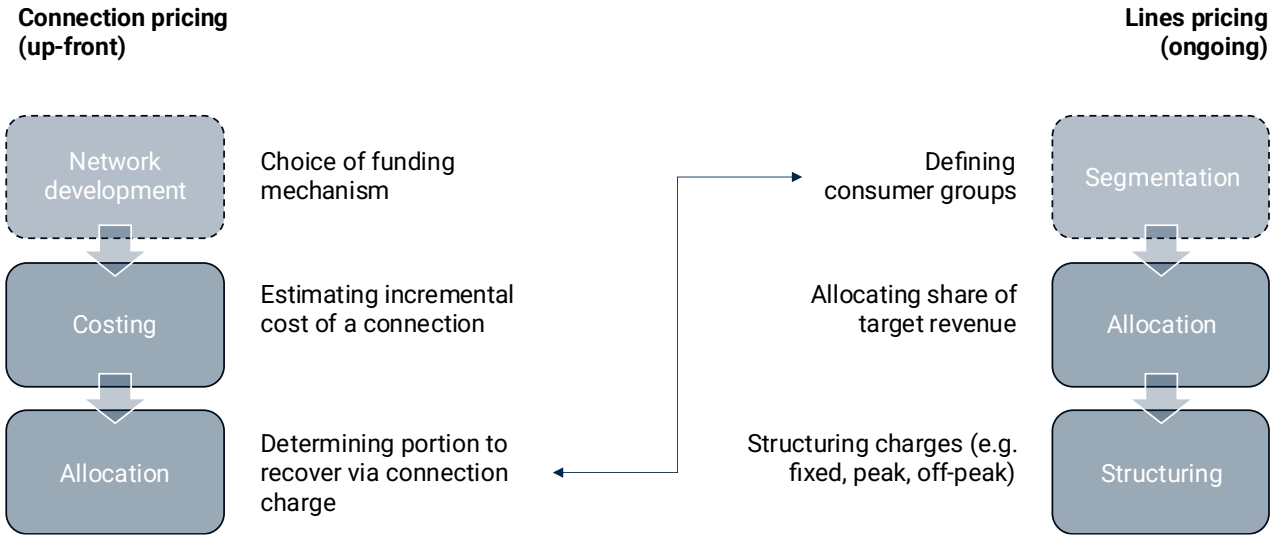
(b) shared network costs – including connection maintenance and renewal costs, network development costs and other non-incremental opex and capex costs.

2.28. There is not necessarily a ‘bright line’ between network development and connection costs. In principle, the latter is directly customer-initiated, while the former involves a distributor electing to build in anticipation of future connection activity.

Pricing process

2.29. Figure 1 provides an overview of the steps involved in connection pricing, and related lines pricing steps.

Figure 1: Pricing process overview



2.30. Whether a connection covers its incremental cost and the contribution it makes to shared network costs depends on both of the allocation steps:

(a) the connection pricing allocation step determines what portion of incremental cost will be recovered through connection charges (and hence the balance to be recovered through lines charges over time)

(b) the lines pricing allocation step determines how target revenues are allocated between consumer groupings, and hence how the balance of incremental costs plus shared network costs are recovered.

2.31. An access seeker considering whether to invest will consider both their connection charge and their expected lines charges – ie, their total contribution.

Individual pricing

2.32. Some large connections are not assigned to consumer groups and, instead, have individual pricing. This creates a different context from other connections because:

(a) individual contribution to shared network costs is determined directly at time of connection

(b) cost recovery structure (ie, balance of connection vs. lines charges) is tailored to each connection.

Consumer groups

2.33. A consumer group is "…a category of consumer used by [a distributor] for the purposes of settings prices".[11] This is relevant to the balance point principle because:

(a) the basis for consumer groups is that connections are similar enough that they should have the same tariffs

(b) target revenue is allocated between consumer groups as part of lines pricing

(c) consumer group assignment is a key factor in estimating the contribution a connection will make via lines charges

(d) accordingly, whether a connection will cover its incremental cost, and how much it will contribute to shared network costs, depends on consumer group assignment.

2.34. This makes consumer groups a natural starting point for assessing compliance with the balance point principle, noting:

(a) consumer groups may be amalgamated where they are used to provide tariff diversity for otherwise similar consumers, for example, low-user, standard-user and time-of-use variations of a residential consumer group[12]

(b) a distributor's connection pricing methodology may use segmentation that is more granular consumer groups. For example, a distributor may have a single consumer group spanning all small consumers (residential and small non-residential) but apply different connection pricing settings.

Reference connection pricing formula

2.35. The reference connection pricing formula provides a 'bottom up' perspective on the balance point principle – ie, it shows one way a connection pricing methodology can be designed to produce outcomes consistent with the principle.

2.36. Some distributors may choose to amend their pricing to implement the reference formula, but this is not a requirement.[13]

2.37. The reference formula is not a fully developed connection pricing methodology, but is designed to work with methodologies already included in the Code for estimating:

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[11] As defined in the Commerce Commission's information disclosure requirements. See: https://www.comcom.govt.nz/assets/pdf_file/0026/363365/Electricity-Distribution-Information-Disclosure-amendments-related-to-IM-Review-2023-Amendment-Determination-2024-red-lined-version-27-November-2024.pdf

[12] Noting low user and standard tariffs are designed to be equivalent for a customer at the eligibility boundary, connections may be reassigned between these tariffs multiple times over their life, and the phase-out of low-user charges is almost complete. Similarly, connections may be reassigned between time-of-use and uniform tariffs and these tariffs should generally produce equivalent bill outcomes for a typical customer. In other words, some consumer groups are used as a tool to enable variation in pricing structure rather than differences in shared network cost allocation.

[13] The Authority will soon release an issues paper focussing on further reform of connection pricing. This includes consideration of requiring a standardised approach to connection pricing from 2030. Such a requirement could be based around the reference formula used in this guidance.

(a) incremental cost of a connection – ie, enhancement and capacity costing methodologies

(b) minimum subsidy-free connection charge – ie, charge reconciliation.

2.38. The reference formula is:

$$CC = IC - \alpha_{CG}\overline{IC}_{CG}$$

where:

CC	is the connection charge for a given connection
IC	is the estimated incremental cost for that connection
$\overline{IC}_{CG}$	is the incremental cost of a representative new connection for the consumer group to which the connection will be assigned (updated annually, or every few years)
α_{CG}	is the connection pricing allocator for that consumer group – representing the portion of (representative) incremental cost to be recovered through lines charges.

2.39. The term $\alpha_{CG}\overline{IC}_{CG}$ is the fixed amount a distributor funds for each connection of a given type – ie, that the distributor will finance and recover over time via lines charges. In other words, this is the net capex per connection. The balance of the incremental cost of each connection is recovered through connection charges.

2.40. With this approach:

(a) α_{CG} can be set at a level that ensures connections are not subsidised – ie, that complies with the first limb of the balance point principle. The upper-bound for subsidy-free α_{CG} varies by distributor and consumer group

(b) if α_{CG} is held stable from year-to-year, then new connections make a similar contribution to shared network costs as existing customers – ie, pricing complies with the second limb of the balance point principle.

2.41. The formula also produces connection charges that are cost-reflective– ie, charges vary 1:1 with incremental cost (at least down to the point where the connection charge is zero).

2.42. The term $\overline{IC}_{CG}$ is framed as the cost of a 'representative new connection' rather than as the 'average cost of a new connection'. This is because the value should update with changes in input costs (or design requirements) but should look-through year-to-year volatility in the profile of connection activity.

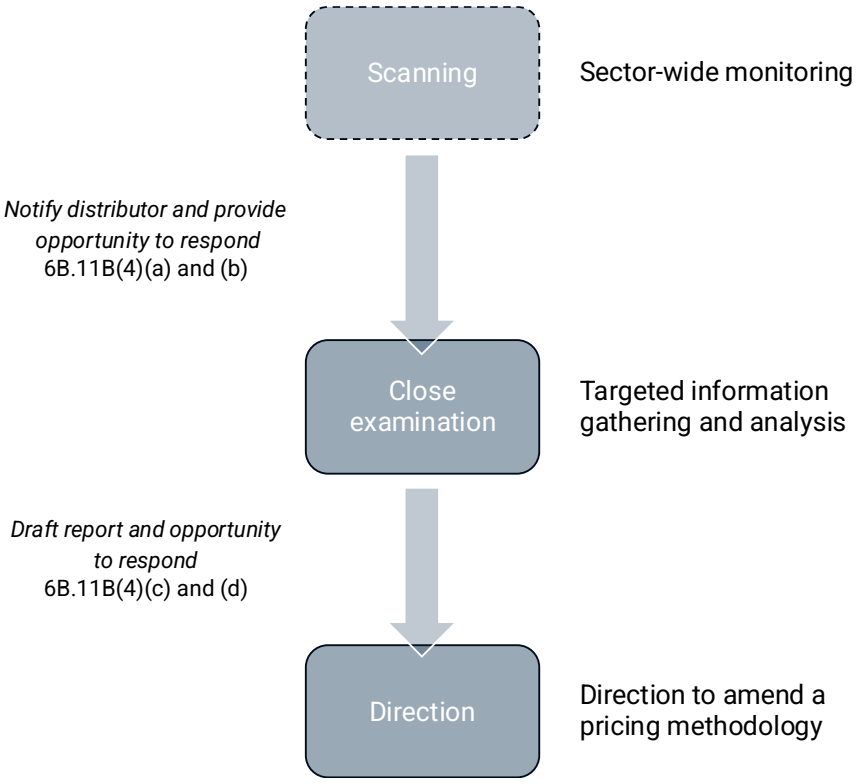
2.43. For larger connection types, the formula can be modified to apply on a capacity unit rate basis – eg, using $ per kVA instead of $ per connection. The formula can also be applied to upgrades, with values of α_{CG} selected to ensure pricing coherency (ie, that the amount a distributor funds for a connection that is built then upgraded is consistent with what it would fund for a new connection at the upgraded capacity).

3. Process guidance

3.1. This section provides guidance on how the Authority intends to operate the balance point principle framework, including to the process involved in proceeding through the stages of scanning, close examination and direction.

3.2. Figure 2 provides an overview of the three-step targeted intervention process and the Authority's obligations to seek feedback from a distributor before advancing through the steps.

Figure 2: Targeted intervention process overview



Scanning

3.3. The framework includes a scanning step so that close examination can be suitably targeted (in terms of distributors and issues).

3.4. Preliminary analysis indicates many distributors may not warrant close examination because their pricing is:

(a) consistent, or close to consistent, with the balance point principle, or

(b) inconsistent in a way that likely reflects temporary factors.

3.5. Examples of temporary factors may include:

(a) timing mismatches between capital contributions and completion of assets

(b) one-off network development costs (or other non-connection system growth)

(c) last-straw approach to network capacity upgrade costs

(d) infrequently updated posted connection charges.

3.6. For many distributors, publicly available information may be sufficient to enable the Authority to determine close examination is not warranted. For example, a distributor with net growth capex per connection that has been stable or growing (in real terms) is unlikely to be inconsistent with the second limb of the balance point principle.[14]

3.7. Key sources of publicly available information are published pricing methodologies, information disclosures (ie, annual disclosures of capital expenditure, capital contributions, connection numbers, lines charges, etc) and connection charge reconciliations.[15]

Pricing methodologies

3.8. While published pricing methodologies should be useful in assessing consistency with the balance point principle or whether a close examination is warranted, they do:

(a) vary considerably in quality and completeness

(b) vary in how they frame the pricing process and allocation formulae

(c) sometimes use inputs that will alter shared network cost recovery each time they are updated (ie, without any change in the written methodology).

3.9. Also, changes in other policies or commercial practices not covered in connection pricing documents may alter allocation outcomes produced by a given methodology. For example, changes to:

(a) the scope of work treated as customer-initiated – for example, treatment of network development costs or bundled works (such as incidental renewals)[16]

(b) the way distributor-approved contractors allocate their cost recovery between customer- and distributor-funded works[17]

(c) upstream network capacity assumptions – ie, how much capacity a new connection is estimated to consume.

3.10. Finally, assessing alignment with the second limb involves considering whether and how methodologies have changed over time and historical connection pricing methodologies are not always available.

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[14] Growth capex is consumer connection capex plus system growth capex. Net growth capex is growth capex minus capital contributions. If net growth capex has been stable or growing in real terms, then this indicates the distributor has been funding a consistent share of connection costs via lines charges.

[15] A customer may request a reconciliation for the connection charge quote. Distributors must also supply with Authority with reconciliations for all connection quotes. These are not published directly, but will be available to the Authority for use in the scanning step.

[16] Distributors are required to record expenditure and contributions according to the 'primary driver' for the work. In practice, capital projects often have a mix of drivers and deliver a mix of outcomes such that there are a range of ways a distributor could legitimately record associated expenditure and contributions.

[17] A distributor may contract a field services provider to deliver work for the distributor and also approve that provider to deliver customer-initiated work. Through its control of who can carry out connection works, the distributor can extend its market power to the field services provider, enabling the provider to offer subsidised rates to the distributor funded through higher rates for connection works. This has the effect of shifting costs to new connections via spillover market power.

Information disclosures

3.11. Information disclosures required under Part 4 of the Commerce Act provide a time series showing the aggregate annual value of:

(a) capital contributions broken down into consumer connection, system growth, asset relocation and other categories

(b) expenditure on assets (ie, gross capex) broken down into the same categories

(c) new connections broken down into distributor-selected categories

(d) lines revenue, broken down by consumer group.

3.12. From this data, we can derive time series for various metrics, including:

(a) reliance levels – such as consumer connection reliance (percentage of consumer connection expenditure funded through capital contributions), total growth reliance (consumer connection plus system growth) and total reliance (all network capital expenditure)

(b) net (of capital contributions) consumer connection, system growth or (total) growth capex per connection.

Charge reconciliations

3.13. From 2026, distributors are required to supply copies of charge reconciliations to the Authority. These provide a direct indication of any pricing below the neutral point (ie, the subsidy-free floor).

3.14. Over time (as a time series is built up) reconciliation data will also provide an indication of balance point consistency.[18]

Additional information

3.15. Other publicly available information that may assist the Authority to determine whether close examination is warranted could include:

(a) asset management plans – these provide additional context on investment drivers and outputs

(b) regulatory submissions on related matters – these may provide context on organisational concerns, priorities, and rationale for pricing approaches

(c) company disclosures, such as annual report commentaries – these may provide additional context on operating environment or changes in accounting practices or policies.

3.16. Where publicly available information does not support a clear conclusion, a distributor may be able to supply company-held information that would allow scanning to be concluded without proceeding to close examination.

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[18] Noting that charge reconciliation requirements are new and may take some time to embed and mature.

3.17. The Authority may engage directly with distributors during the scanning stage, including to enable distributors to provide the Authority with information that could assist with weighing up whether to proceed to close examination. This could include information that:

(a) supports a conclusion that observed metrics are best explained by a scenario that aligns with the balance point principle

(b) demonstrates non-alignment is temporary and will soon be resolved

(c) shows the distributor is making methodology changes that will ensure alignment.

Close examination

3.18. Based on information reviewed during the scanning stage (including public information and any preliminary engagement with the distributor), the Authority will consider whether it can be satisfied that the distributor's pricing is:

(a) consistent, or close to consistent, with the balance point principle, or

(b) inconsistent in a way that likely reflects temporary factors or is otherwise unlikely to continue.

3.19. It is also possible that the Authority may have been provided with information to satisfy it that there are no material efficiency concerns with the distributor's price despite an apparent misalignment with the balance point principle, or that the costs of the distributor applying the balance point principle would outweigh the benefits, although these matters are more likely to be identified at the close examination stage.

3.20. If the Authority cannot be satisfied of one or more of the matters referred to in paragraph 3.18 (or paragraph 3.19) above, it will consider proceeding to the close examination stage.

3.21. Before proceeding to close examination, the Authority must:

(a) notify the distributor that it is considering close examination of whether to issue a direction in respect of the distributor's pricing methodologies (clause 6B.11B(4)(a))

(b) give the distributor sufficient information about the reasons why the Authority is considering close examination, and an opportunity to respond within a reasonable timeframe specified by the Authority (clause 6B.11B(4)(b)).

3.22. These requirements reflect that close examination is a more resource-intensive step for the distributor (and Authority), and recognise that a distributor may be able to provide information that readily explains why a close examination would not be warranted.

3.23. A notification may include information on:

(a) which limb(s) of the balance point principle the Authority is considering

(b) information and analysis the Authority has relied upon

(c) the Authority's assessment of non-alignment with the balance point principle, and an explanation of the Authority's concerns

(d) an indication of matters the Authority would seek to clarify or confirm through close examination

(e) an indication of information the Authority may request during close examination

3.24. As noted above, a distributor may respond to a notification with information that satisfies the Authority that close examination is not warranted, such as:

(a) analysis demonstrating alignment is better than indicated

(b) information that clarifies alignment

(c) information that clarifies that non-alignment is temporary

(d) information on intentions and a plan to improve alignment – ie, by amending pricing methodologies.

3.25. If a distributor indicates an intention to address non-alignment without requiring a direction, the Authority will consider the credibility of the distributor's commitment and the associated risks.

3.26. If the Authority decides not to proceed with close examination, this does not preclude the Authority from issuing another notice in future based on new information or further analysis.

3.27. If, having considered any response from the distributor to the notification, the Authority decides it is appropriate to proceed with close examination, it will work with a distributor to obtain information and undertake analysis to enable a decision on whether to proceed to a direction.

3.28. Examples of information the Authority may request could include:

(a) segmental analysis – breakdowns of disclosed data, eg, by consumer group, or exclude generation connections and connections with individual pricing[19]

(b) connection growth capex – consumer connection and system growth capex adjusted to exclude expenditures not driven by connection growth (such as telecommunications, automation and some capacity investment)

(c) historical connection pricing methodologies and supporting analysis, customer communication, or governance documents that accompanied any changes

(d) internal policies, guidance, analysis or governance papers regarding regulatory accounting that show how contributions and expenditures are recorded against reporting categories or captured for use as inputs to pricing

[19] The balance point principle does not apply to generation connections. Also, generation connections do not make any contribution to shared network costs so the second limb would not be engaged anyway. Generators may contribute less than incremental cost, but this is permitted under the distributed generation pricing principles in Schedule 6.4 of the Code. For connections with individual pricing, contribution to shared costs is determined directly and case-by-case rather than through the interaction of consumer group assignment and connection pricing methodologies.

(e) other internally held information, analysis or governance documents regarding differences between contractor or equipment costs for connection-funded works and for other distribution works

(f) draft (or internally approved) connection pricing methodology amendments, evidence of implementation plans, and supporting analysis or decision papers.

3.29. If, during the course of close examination, the Authority is satisfied of one or more of the matters referred to in paragraphs 3.18 or 3.19 above, the Authority may decide to cease the close examination without issuing a draft report. This does not preclude the Authority from issuing a future notice that the Authority is considering close examination based on new information or further analysis.

Direction

3.30. If, following close examination, the Authority provisionally decides to make a direction, the Authority must provide the distributor:

(a) a draft report setting out the Authority's analysis of why the distributor's pricing methodologies are not, or will not be, consistent with the connection charge balance point principle (clause 6B.11B(4)(c)(i))

(b) the reasons for the Authority's proposed direction and proposed timeframes for it to apply, and any other requirements the Authority proposes to set under the direction (clause 6B.11B(4)(c)(ii))

(c) an opportunity to respond within a reasonable timeframe specified by the Authority (clause 6B.11B(4)(c)(iii)).

3.31. The explanation of reasons will include an assessment of the materiality of efficiency concerns with the distributor's prices, and anticipated costs of complying with the direction and an assessment of why the costs do not outweigh the benefits of the direction. This may include:

(a) for the first limb, an assessment of the extent to which connections are subsidised and the impact of the subsidy on existing customers

(b) for the second limb, an assessment of the extent of cost shifting and the impact on the total contribution made by new connections

(c) estimated volume and value of connection activity impacted by the direction

(d) consideration of the complexity of pricing methodology change, including whether it may prompt regulatory revenue path reconsideration

(e) consideration of timeframes for change, including potential disruption to connection queuing and distributor capital planning.

3.32. Before deciding to make a direction, the Authority will provide the distributor:

(a) an opportunity to respond to the draft report in accordance with clause 6B.11B(4)(c)(iii); and

(b) [where appropriate,] an opportunity to voluntarily address the issues identified in the draft report within a reasonable timeframe in accordance with clause 6B.11B(4)(d).

First limb

3.33. A direction to address an issue with the first limb would involve requiring a distributor to increase costs allocated to new connections or some subset of new connections.[20]

3.34. We consider adverse impacts of this type of direction are generally likely to be limited for all parties:

(a) directions are prospective, so would not impact existing connections or live connection applications

(b) the prospect of higher charges may prompt some applicants to accelerate their connection requests to secure more favourable pricing

(c) complying with the direction would, all things being equal, relieve pressure on the distributor's capex allowances (if applicable)

(d) if any prospective connections (ie, that would be impacted) are abandoned, this would generally be an efficient outcome.

3.35. Accordingly, the Authority anticipates that:

(a) a distributor would likely voluntarily act to address compliance with the first limb

(b) failing voluntary action, the threshold for the Authority to act on the first limb may be lower than for the second limb.

Second limb

3.36. A direction to address an issue within the second limb would require a distributor to reduce costs allocated to new connections (or some subset of new connections).

3.37. The impacts of this type of direction are more significant than the first limb:

(a) directions are prospective so would not impact existing connections or live connection applications. However, if the change is material, some applicants may wish to abandon existing applications and attempt to restart them once pricing has reduced

(b) the prospect of lower charges in the future may prompt some intending applicants to defer their connection requests to secure more favourable pricing

(c) complying with a direction would, all things being equal, increase pressure on the distributor's capex allowances (if applicable) and financing capacity. A distributor may need to:

(i) reprioritise other expenditure to offset changes in net connection capex

[20] This could apply to all new connections, specific consumer groups, large connections with individual pricing, or some other subset (eg, high-cost or low-use connections).

(ii) if non-exempt, engage with the Commission about reconsidering its capex allowance (and potentially its revenue path)[21]

(iii) manage its financing – eg, by adjusting some combination of its revenue profile, distributions and debt.[22]

3.38. In considering whether to direct a distributor to amend its pricing methodologies, the Authority will assess if efficiency concerns are material and if benefits are likely to outweigh costs. Reasons against proceeding could include:

(a) the extent of cost-shifting is relatively immaterial or is transitory

(b) value of connection activity is small (eg, due to network size or context)

(c) charges are low relative to peer networks.

Substance of a direction

3.39. Under clause 16B.11B(2), a direction may:

(a) provide for a distributor to amend its pricing methodologies in a way that allows for consistency with the connection charge balance point principle to be achieve over time, for example, but changing the allocation of costs between existing and new connections in steps (clause 16B.11B(2)(a));

(b) specify a reasonable timeframe or timeframes within which consistency may be achieved (clause 16B.11B(2)(b)); and

(c) specify a timeframe that extends beyond 1 April 2030 (clause 16B.11B(2)(c)).

3.40. A direction may therefore include:

(a) a lead time for modifying pricing – this may allow a distributor to align changes with the next pricing year, or some other date (earlier or later) to limit connection queue disruption or allow for implementation processes

(b) a phasing-in profile – allowing changes to be phased in – eg, by consumer segment or in steps to limit connection queue disruption, allow for implementation or manage revenue path or financing impacts.

3.41. Implementation processes may include:

(a) developing an amended methodology, and any associated business change process (eg, new inputs, systems, training or customer communications)

(b) engaging with the Commission on capex allowance or revenue path reconsideration

(c) implementing balance sheet changes (eg, amending dividend policies, or sourcing debt or equity).

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[21] Capex allowances set a baseline for incentive arrangements, so impact that portion of capital expenditure a distributor will recover over the lifetime of an asset. Revenue paths impact the near-term time profile of cost recovery.

[22] For example, a distributor may need to reduce dividends to grow equity, or source new equity or debt.

3.42. The Authority's power to issue a direction expires on 1 April 2030, but directions may extend beyond this 'sunset' date:

(a) a lead-time or phase-in profile may extend beyond the sunset

(b) the Authority would retain the power to enforce a direction, provide an exemption or otherwise modify a direction beyond the sunset

3.43. Directions would not otherwise impose an enduring restraint – ie, beyond the timeline of a direction. A distributor could adjust its pricing, subject to any enduring pricing requirements.

3.44. A direction may be structured with some mix of input requirements (ie, make specified changes to a pricing methodology) and outcome requirements (ie, change pricing methodologies to produce a specified outcome).

3.45. Examples of input directions could include to:

(a) add a subsidy-test

(b) update posted charges more frequently

(c) clarify boundary between network development and connection costs.

3.46. Examples of outcome directions could include:

(a) increase (or decrease) net connection growth capex per connection

(b) reduce (or increase) reliance metrics.

4. Pricing guidance

4.1. This section provides guidance on the two limbs of the balance point principle.

First limb

4.2. The first limb requires that "…the costs of new connections and upgraded connections are not subsidised by existing connections". We refer to this as the subsidy-free floor or 'neutral point'.

4.3. Drivers of non-alignment with the subsidy-free floor could include:

(a) favourable pricing for connections with individual pricing – for example, where cost estimates used for pricing exclude capacity costs or where large connections do not make any contribution to shared network costs (leaving no buffer for under-recovery risk)

(b) outliers – remote or high-cost connections, combined with pricing methodologies that are not sufficiently cost-reflective

(c) posted charges – for example, if eligibility criteria for posted charges is too permissive or if charges are not regularly updated to reflect increases in incremental cost levels

(d) low lines charges – for example, if a consumer grouping is allocated a proportionately low share of target revenue

(e) unallocated upgrade costs – for example, connection upgrades that increase consumption of shared network costs without increasing connection or lines charges.

Connection charge reconciliations

4.4. Since April 2026, distributors have been required to prepare connection charge reconciliations that are designed to indicate whether connections are subsidised:

(a) the connection charge reconciliation formula includes a network contribution (NC) term that indicates how much a connection is expected to contribute in excess of its incremental cost

(b) a negative network contribution (ie, $NC < 0$) indicates a connection is not expected to cover its incremental cost – ie, that the connection may be subsidised.

4.5. Whether charge reconciliations indicate a subsidy is sensitive to assumptions, including:

(a) revenue life – a shorter assumed revenue life makes it more likely a reconciliation will indicate a subsidy. The Code provides for default revenue lives of 30 years for residential and 15 years for non-residential connections

(b) network capacity cost – a high assumed demand for shared network capacity makes it more likely a reconciliation will indicate a subsidy.

4.6. As such, if a distributor's charge reconciliations indicate a material number of materially subsidised connections, it may be appropriate to review reconciliation assumptions as a first step.

Reference formula

4.7. If a distributor were to use the reference connection pricing formula, connections would be subsidised if the value of α_{CG} were too high. – ie, if the portion of incremental cost funded through lines charges were high.

4.8. If this is combined with a low allocation of target revenue to a given consumer grouping (ie, low lines charges) then some connections in that consumer grouping may be subsidised.

4.9. At a consumer group average level, connection pricing is above the neutral point if:

$$\overline{CC}_{CG} \geq (\overline{IC}_{CG} - \overline{IR}_{CG})$$

where:

$\overline{CC}_{CG}$	is the average connection charge for the consumer group
$\overline{IC}_{CG}$	is the incremental cost of a representative new connection for that consumer group
$\overline{IR}_{CG}$	is the average expected (present value of) revenue from a connection in that consumer group

4.10. This means a reasonable upper bound is given by the formula $\alpha_{CG} \leq \overline{IR}_{CG}/\overline{IC}_{CG}$. At this upper bound, $CC = IC - \overline{IR}_{CG}$ and $CC + \overline{IR}_{CG} = IC$ – ie, the contribution from connection charges plus incremental revenue equals incremental cost.

4.11. Using this upper bound for α_{CG} may be acceptable for consumer groups with limited variation in expected revenue – for example, because costs are largely recovered through fixed charges and revenue life assumptions are consistent. In these cases, a top-down approach to estimating incremental revenue is appropriate.[23]

4.12. For consumer groups with a wider variation in lines charge revenue per connection, some buffer below the upper-bound may be needed to ensure connections with low lines charge revenue are not subsidised.

Vested assets

4.13. Distributors that rely on in-kind contributions (ie, vested assets) are unlikely to consistently subsidise connections unless they make sizeable payments to acquire vested connection assets.

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[23] A top-down approach divide revenue from a consumer group by the connections in a consumer group to derive an average revenue per connection value. See Example 1a in Distribution connection pricing – worked examples

4.14. Where the amount a distributor pays to acquire vested assets is set at $\alpha_{CG}\overline{IC}_{CG}$, subsidies could arise if the value of α_{CG} is higher than the upper limit introduced earlier.[24]

4.15. Another scenario in which in-kind contributions could produce subsidies for some connections could be where:

(a) network capacity cost are high compared to extension cost

(b) the in-kind contribution (which relates to extension cost) is therefore small compared to incremental cost (which includes extension and network capacity costs)

(c) the distributor does not require a capital contribution toward the network capacity cost.

Information disclosures

4.16. While connection charge reconciliations directly identify subsidised connections, information disclosures provide a longer time series. As such, they may have a role in high-level screening, including:

(a) low reliance levels may provide a high-level indicator of potential subsidy (for distributors that do not rely on in-kind contributions)

(b) the time series may identify whether a distributor's pricing methodologies have produced subsidies in the past.

Restoring alignment (first limb)

4.17. The first limb of the balance point principle (subsidy-free floor) effectively 'overrides' the second limb (cost-shifting restraint) – ie, a distributor can increase charges to remove subsidies, even if that shifts shared network cost recover to new connections.[25]

4.18. Methods for achieving consistency with the first limb could include:

(a) adding a 'side-constraint' so that connection charges are topped-up if reconciliation indicates a negative contribution to network costs

(b) increasing target revenue allocation to a consumer group. This would also ensure connection renewals are not subsidised

(c) introducing more granular consumer groupings – for connection charges, lines charges, or both. This could include geographic granularity or increased customer segmentation (eg, splitting 'general' consumer groups into residential and non-residential)

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[24] This payment level is discussed in Appendix D of the Authority's issues paper on further reform – ie, as the payment level that supports contestability.

[25] The second limb includes the qualifier 'otherwise', indicating it does not override the first limb

(d) modifying connection pricing methodologies to address underlying drivers of subsidised connections. For example, by changing from shallow to deep estimates of incremental cost (with an offsetting increase in the value of α_{CG} or equivalent)

(e) implementing a pricing methodology based on the reference formula, with values of α_{CG} calibrated appropriately.

Second limb

4.19. The second limb requires that "…new connections and upgraded connections otherwise make a similar (or lower) contribution to shared network costs as similar existing connections". We refer to this as the cost-shifting restraint or 'balance point'.

4.20. Drivers of inconsistency with the cost-shifting restraint could include:

(a) change in incremental cost allocation methodology – ie, allocating a larger share of estimated incremental cost to connection charges

(b) change in costing methodology – eg, increasing the 'depth' of incremental cost estimates without an offsetting change in incremental cost allocation methodology

(c) revenue-linked methodology – eg, setting connection charges based on estimated incremental cost less (some portion of) incremental revenue

(d) change in pricing approach for connections with individual pricing – ie, allocating similar large connections a growing share of network costs.

4.21. The next sections provide more information on each of these potential drivers.

Change in allocation methodology

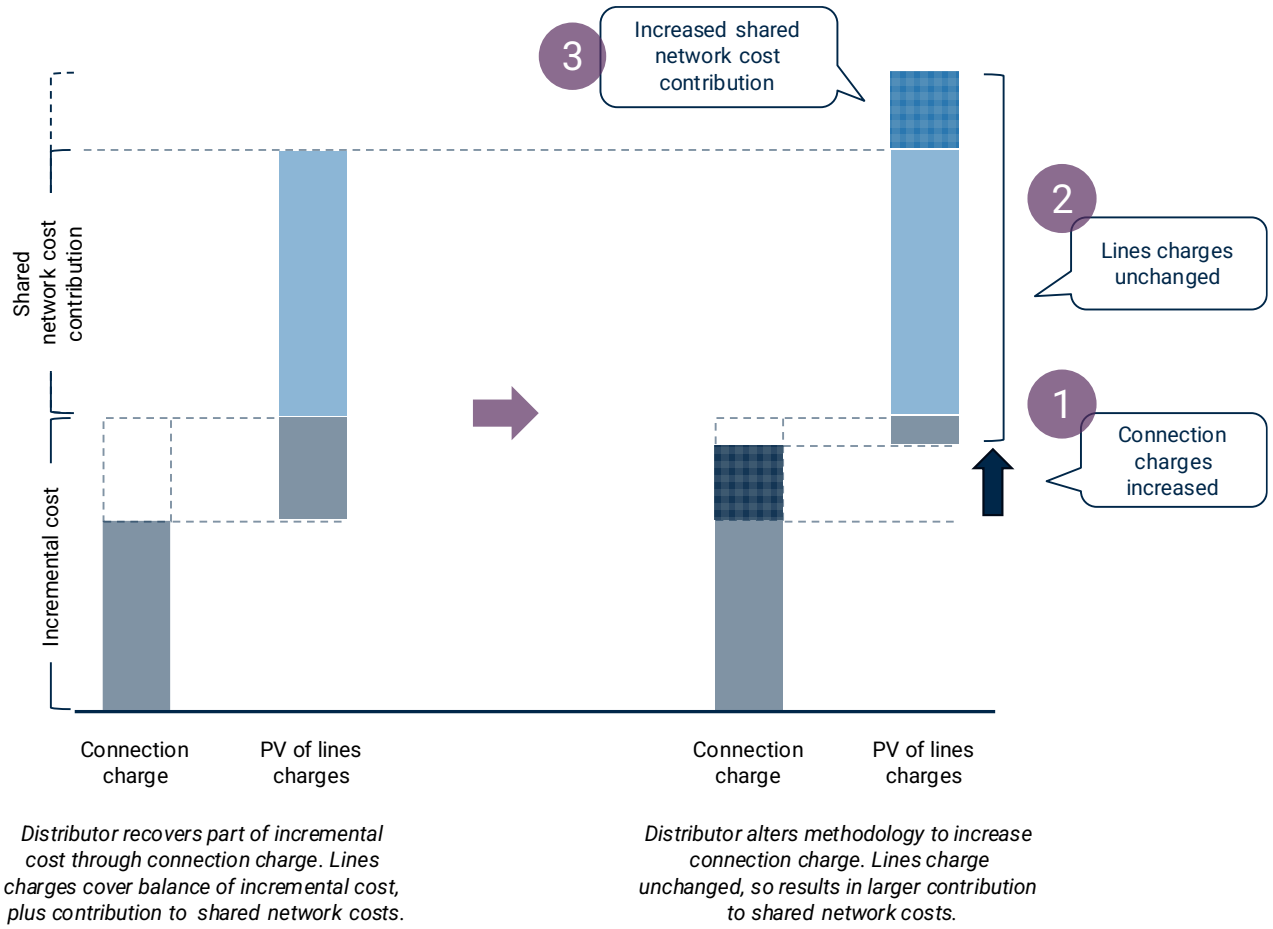
4.22. Figure 3 illustrates how a change in allocation methodology can be inconsistent with the cost-shifting restraint. In the diagram:

(a) a distributor increases the share of estimated incremental cost allocated to connection charges

(b) new connections then pay a higher connection charge, but the same lines charges as existing connections – ie, a higher total contribution

(c) since the increase does not reflect any change in incremental cost, the higher total contribution means new connections are making a larger contribution to shared network costs – ie, the change has shifted shared network cost recovery from existing to new connections.

Figure 3: Interaction between connection pricing and shared network cost recovery



4.23. This outcome would not arise if new connections had different (lower) lines charges than existing customers. In practice, this type of 'cohort pricing' is impractical and would add significant complexity and confusion for distributors, retailers and consumers.

4.24. Similarly, this outcome does not arise for connections with individual pricing – ie, because lines charges and connection charges can be set together on a case-by-case basis. This means higher connection charges can be directly offset by lower lines charges.

4.25. This non-aligned scenario is equivalent to:

(a) increasing reliance levels over time (ie, the share of incremental cost recovered through connection charges)

(b) using the reference formula and decreasing the value of α_{CG} (ie, the share of incremental cost funded through lines charges)

(c) otherwise not to increase net connection growth capex per connection in line with increasing incremental costs (eg, in line with input cost escalation, design changes or capacity cost increases).

Change in costing methodology

4.26. A change in costing methodology can have the same effect as a change in allocation methodology. This can occur if:

(a) underlying incremental cost has not changed – ie, the change is driven by the distributor estimating incremental costs more completely

(b) higher estimates of incremental cost are not offset by a change in allocation methodology (ie, to preserve the same distributor contribution).

4.27. The cost-shifting restraint does not prevent a distributor from altering their costing methodology, provided they also adjust their allocation methodology. This is illustrated in Figure 4 where:

(a) a distributor alters their costing methodology to include deep (network capacity) costs, increasing estimated incremental cost for a representative connection from 6 to 10

(b) at the same time, the distributor alters their allocation methodology to increase the portion of estimated incremental cost that they fund from 0.5 to 0.7

(c) as a result:

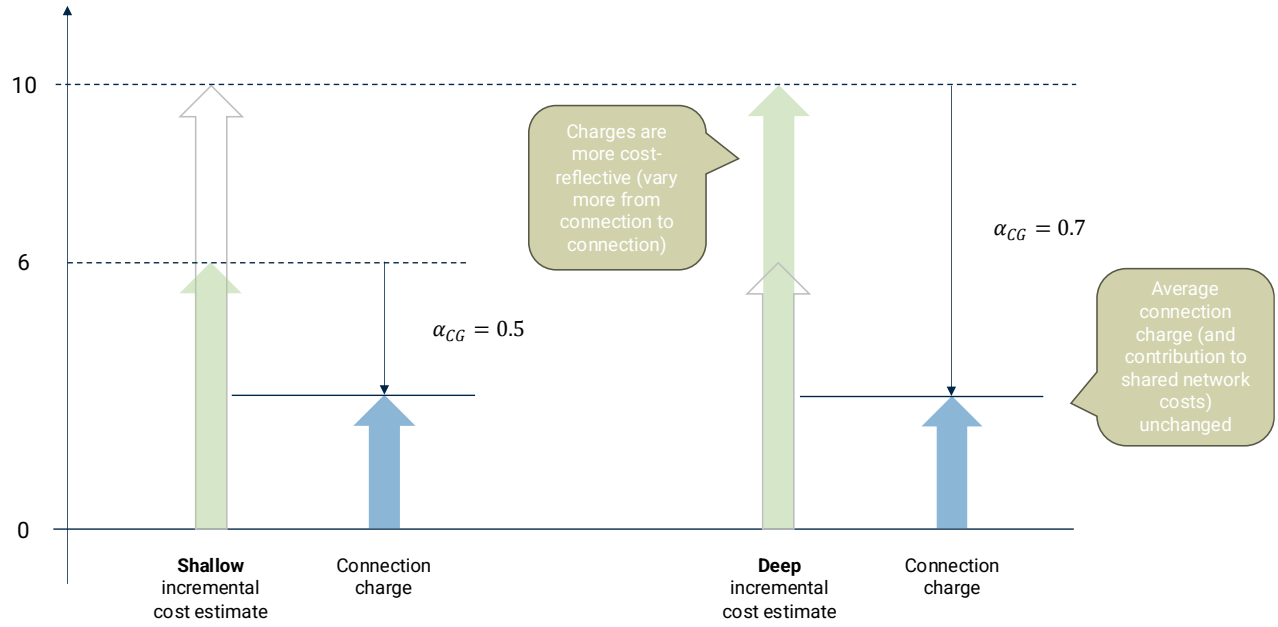
(i) a typical connection pays the same connection charge

(ie, $0.5 \times 6 = 0.3 \times 10 = 3$),

and makes the same contribution to shared network costs, as before the change

(ii) connection charges now signal both shallow and deep incremental costs. This improves incentives for connection applicants to right-size their connection, or to consider a flexible connection.

Figure 4: Balance point consistent change to costing methodology



4.28. Another change distributors may make is to convert from a 'last-straw' approach to a capacity costing approach. With this type of change:

(a) connection charges more consistently signal (and recover) capacity costs – ie, costs are signalled as capacity is progressively consumed rather than when it is sporadically added. This improves signalling of capacity costs and mitigates adverse position-in-queue dynamics (ie, to avoid being the last-straw). This change is also required for any distributor wishing to allocate network capacity costs from April 2027[26]

(b) the on-average-over-time contribution to capacity costs may not change, unless capacity costing brings in more capacity costs from network tiers than the distributor's historical approach

(c) as such, alignment with the balance point principle can be preserved – either with no further change (if on-average-over-time contributions are unchanged) or by increasing the distributor's contribution to estimated incremental cost

(d) assessing whether pricing is aligned may require considering an extended time-series (to capture sporadic historical capacity investments) or using a capacity costing approach to assess historical outcomes.

4.29. These examples (increasing depth and introducing capacity costing) illustrate that the second limb is best assessed at a consumer group level – ie, a change may align with the cost-shifting restraint, even if it will alter the distribution of outcomes within a consumer grouping.

Revenue-linked methodology

4.30. Some distributors set charges using a methodology that involves:

(a) estimating incremental cost (IC)

(b) estimating (the present value of) incremental revenue (IR)

(c) deducting some portion of IR from IC to determine a connection charge.

4.31. This is often referred to as an 'NPV' (or net present value) pricing approach. As a pricing formula, it can be represented as:

$$CC = IC - \beta_{CG}\overline{IR}_{CG}$$

where:

CC	is the connection charge for a given connection
IC	is the estimated incremental cost for that connection

[26] Refer clause 6B.5 of the Code. Part 6B—Distributor pricing methodologies, information requirements and other requirements | Electricity Authority

$\overline{IR}_{CG}$	is the incremental revenue from a representative new connection for the consumer group to which the connection will be assigned (updated annually, or every few years)
β_{CG}	is the connection pricing allocator for that consumer group – representing the portion of (representative) incremental revenue to be applied to covering the cost of the connection.

4.32. This approach has two potential drivers for non-alignment:

(a) the term $\beta_{CG}\overline{IR}_{CG}$, which determines distributor funding, does not increase with changes in incremental costs. If the rate of increase in incremental cost ($\overline{IC}_{CG}$) outpaces the rate of increase in incremental revenue ($\overline{IR}_{CG}$) then the allocator (β_{CG}) must be adjusted (increased) to avoid shifting shared network costs to new connections

(b) changes in $\overline{IR}_{CG}$ can be driven by factors that are independent of incremental costs – such as steps changes in allowable return (WACC), target revenue allocation, or pass-through costs (such as rates, levies and transmission costs). If $\overline{IR}_{CG}$ decreases year-on-year, then existing customers enjoy lower lines charges while new customers face higher connection charges. This shifts shared network costs to new connections.

Individual pricing

4.33. Alignment can be inherently challenging to assess for individual connections because:

(a) connection volumes are low and each connection is unique. This makes it difficult to identify 'similar' connections and difficult to establish a view of the baseline contribution to shared network costs

(b) compounding this difficulty, it can be efficient for a distributor to offer prudent discounts (ie, allocate shared network costs below the baseline). This can further obscure the baseline allocation (ie, the value that should be assumed by large access seekers as they develop their investment plans)

(c) pricing methodologies do not necessarily document the shared network cost allocation baseline or the distributor's prudent discount policy.

4.34. On the other hand, establishing alignment for future connections is relatively straightforward – ie, it can be achieved by clearly documenting a baseline approach to allocating shared network costs for large connections along with a prudent discount policy.

4.35. Unlike for connections assigned to consumer groups, shared network cost allocation outcomes are not tied to target revenue allocation and historical connection pricing settings.

Analysing historical movements

4.36. If distributors had historically used the reference pricing formula, then alignment with the second limb could be established by examining historical changes in

costing methodologies, the allocation parameter (α_{CG}) and characterisation of representative connections – ie, through 'bottom up' analysis.

4.37. Since this is not the case, approaches to assessing alignment with the second limb may include:

(a) indicator metrics – review high-level indicator metrics, such as:

(i) stable reliance levels – stable reliance levels indicate the portion of incremental cost funded through connection charges ($1 - \alpha_{CG}$) has probably not changed over time. This aligns with the second limb, because it means shared network cost recovery is probably not shifting to new connections.

(ii) declining reliance levels – declining reliance levels align with the balance point principle, provided contributions do not fall so low that new connections do not cover their incremental cost (ie, don't align with the first limb)

(iii) stable (or growing) real net connection growth capex per connection – this is consistent with a stable (or growing) allocation parameter (α_{CG}) under conditions where incremental costs are stable in real terms

(iv) comparing actual methodologies with reference methodology – if a distributor has a full record of how it has updated its methodologies over time, then the outcomes produced by its historical methodologies can be compared with the reference methodology to identify potential drivers of non-alignment

(b) simulated bottom-up analysis – assess how the allocation parameter would have changed had the distributor used the reference formula. This involves:

(i) developing consistent incremental cost estimates for historical years – eg, by adjusting today's incremental cost estimate for historical cost drivers (input cost escalation and design changes)

(ii) deriving estimated historical connection charges – eg, by dividing capital contributions (for consumer connection and system growth expenditure) by connection numbers

(iii) dividing the estimated charge by the estimated incremental cost to estimate the allocator value

(c) illustrative scenarios – to complement the methods outlined above, it may be useful to consider how movements compare to illustrative scenarios. These illustrate how various movements in cost and revenue components align with the second limb. Illustrative scenarios are presented at Appendix B.

4.38. Indicator metrics are well suited to the scanning phase. Aggregate metrics support high-level monitoring, and disclosed data provides limited scope for robust segmental analysis.

4.39. Simulated bottom-up analysis may lend itself to more nuanced analysis where high-level scanning indicates potential non-alignment.

4.40. The illustrative scenarios provide an additional logic sense-check.

Restoring alignment (second limb)

4.41. To restore alignment with the second limb, a distributor would need to reduce the share of estimated incremental cost allocated to connection charges. This is equivalent to increasing:

(a) α_{CG} values (in reference formula terms)

(b) net connection growth capex per connection – ie, increasing the share of incremental cost recovered through lines charges so that new connections are not worse off than existing connections.

4.42. How much change is required to restore alignment depends on when, and by how much, net capex (ie, α_{CG}) has decreased historically. The key dynamic to consider is how much current lines charges still reflect historical connection pricing settings – ie, to what extent are new connections contributing to historical connection costs that remain embedded in lines charges.

4.43. Figure 5 provides stylised illustration of how the adjustment needed to restore alignment declines with elapsed time – in other words, the balance point is dynamic. In the diagram:

(a) a distributor historically funded a comparatively large share of the incremental cost of each connection (α_0) through lines charges

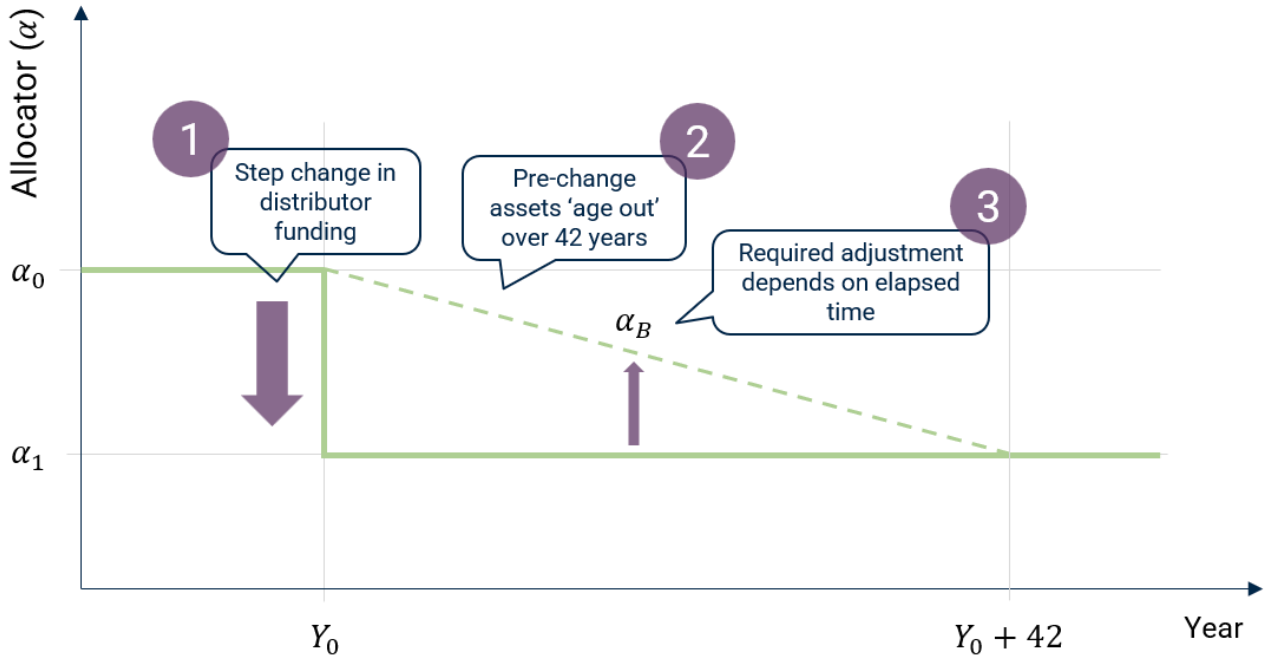
(b) the distributor then alters its connection pricing methodology – reducing the portion funded through lines charges from α_0 to α_1 in year Y_0

(c) this change shifts shared network cost recovery to new connections – ie, because they pay a higher up-front charge with no change in their lines charges

(d) each year, some pre-change assets are fully depreciated (or replaced) and new post-change assets are added

(e) if connection pricing is not altered again, then 42 years later all pre-change assets have fully depreciated (or been replaced) and pricing has fully transitioned to a new equilibrium.

Figure 5: Asset aging and diffusion alter the balance point over time



4.44. Factors that influence the balance point include:

(a) aging out – distribution assets have an accounting life of 42 years. This means that 42 years after a change in allocator, all pre-change assets have either fully depreciated or been replaced. At that point, pricing has fully transitioned to a new equilibrium with no ongoing shifting of shared network cost recovery to new connections

(b) diffusion – the shape of the transition is influenced by changes in connection growth rates. If connection growth accelerates, then post-change assets more quickly diffuse into asset values and lines charges, more quickly shifting the balance point and reducing the change needed to restore alignment.

4.45. Practical considerations influence how this model can be applied, including:

(a) some distributors will have progressively altered allocation settings, rather than making a step change. In other cases, allocation outcomes will have been volatile year-to-year rather than exhibiting a clear step or trend

(b) initial asset values for distributors were established around 15 years ago based on 2009 values (with some adjustments). 2009 values were the product of legacy valuation techniques, involving indexation of estimated 'optimised deprival valuations'. As such, there is not in practice a clear line of sight as to how pre-2010 connection assets influence today's lines charges

(c) the time series for information disclosures only dates back to 2013, so there is not a full record of capital contributions and connection growth capex.

4.46. Notwithstanding these points, restoring alignment may typically entail:

(a) estimating pre-change net connection growth capex per connection (in real terms)[27]

(b) adjusting the value down to establish a target value, accounting for:

  (i) elapsed time since the change (more recent change = move closer to pre-change value)

  (ii) any change in connection growth rate (slower growth rate = move closer to pre-change value).

[27] In this context “in real terms” means adjusting for escalation of input costs specific to connections. This may be different from CPI. This may be addressed by focussing on net connection growth capex per connection as a portion of gross connection growth capex per connection – ie, assuming net and gross connection growth capex will have the same input cost escalation.

Appendix A Glossary

A.1. The following table explains terms used in this guidance, including in equations (at the end of the table). Terms marked with an asterisk (*) are defined or referenced in the Code and those marked with a hash (#) are defined by the Commerce Commission. Extracts from source definitions are presented with quotation markets.

Term	Explanation
Allocation methodology	In the context of connection pricing, a methodology for splitting the capex component of estimated incremental cost into connection charge and net capex components (ie, where net capex is the portion financed by a distributor and recovered over time through lines charges). In the context of lines pricing, a methodology for allocating target revenue between consumer groups – ie, for determining how much revenue to recover each year from each class of consumer.
Balance point*	Pricing that results in new connections making a similar (or lower) contribution to shared network costs as similar existing connections.
Balance point principle*	"…the principle that a **distributor's** pricing methodologies should provide that the contribution to **shared network costs** from new connections is commensurate with the contribution from existing **connections**" "…contributions are commensurate when: (a) the costs of new **connections** and upgraded **connections** are not subsidised by existing **connections**; and (b) new **connections** and upgraded **connections** otherwise make a similar (or lower) contribution to **shared network costs** as similar existing **connections**"
Charge reconciliation*	Standardised breakdown accompanying a connection quote (or posted charge) showing network cost contribution.
Connection charge*	An up-front contribution to the cost of establishing or upgrading a connection. Includes capital contributions (cash) and in-kind contributions (assets). Excludes connection fees and pioneer scheme contributions.
Connection fee	A charge for the administrative costs associated with establishing or upgrading a connection.
Connection growth capex	Consumer connection capex plus system growth capex, adjusted for expenditure not linked to connection growth.
Connection pricing methodology	The methodology or methodologies a distributor uses to determine connection charges. Includes costing methodologies and allocation methodologies. Often documented as part of a distributor's capital contributions policy.
Connection quote	The connection charge included in an offer from a distributor to establish or upgrade a connection.

Term	Explanation
Consumer group#	"…means the category of consumer used by the EDB for the purposes of setting prices"[28]
Consumer type#	"…means a category of consumers as defined by the EDB that is typical of the type of consumer connected to the network. This may refer to consumer groups as used for pricing, physical connection attributes or any other attribute that the EDB considers appropriate."[29]
Contribution	Payments by a customer toward the cost of distribution services. Includes connection charges (including capital and in-kind contributions) and lines charges.
Costing methodology	In context of connection pricing, a methodology for estimating the incremental cost of a connection.
Deep	With reference to connection charges or incremental cost estimates, an approach where network capacity costs are *included*. Contrast with *shallow*.
Distributor	With respect to the balance point principle, excludes secondary networks – ie, only includes primary distribution networks that connect to a point of service on Transpower's transmission network. Also, electricity distribution business, or EDB.
DPP5	The price-quality control period that will determine revenue paths for non-exempt distributors for the five years starting April 2030. This will be the fifth regulatory control period for distribution services.
Funding structure	The mix of customer- and distributor-funding for connection expenditure. In other words, how much of the incremental cost of a connection is paid for by the connection party up-front versus financed by the distributor and recovered over time though lines charges.
Incremental cost	The additional cost of establishing and maintaining a new connection or connection upgrade. Includes direct costs and indirect costs, including network capacity costs.
Lines charges	Recurring charges for active connections. Typically billed monthly based on annually updated prices.
Net capital expenditure	Capital expenditure less (net of) capital contributions.

[28] Electricity Distribution Information Disclosure Determination

[29] Electricity Distribution Information Disclosure Determination

Term	Explanation
Network capacity cost*	The cost of consuming or adding capacity in the shared network
Network cost contribution	The amount shown in a charge reconciliation represent how much a connection is projected to contribute in excess of its incremental cost. Expressed in present value terms at time of provide a connection quote. See also *shared network costs*
Neutral point	Pricing that results in a connection just covering its incremental cost.
Posted capacity rates*	Published rates used for network capacity costing. Represent the cost per unit of capacity consumption for different network tiers and costing zones.
Posted charges and rates*	Published values for standard connection types (posted charges) or cost items (posted rates – eg, $ per km of LV mains). May be used by a distributor (at their discretion) to improve predictability.
Posted tariff	A tariff published by a distributor and applying to consumers assigned to a given consumer group. Typically includes a combination of prices – eg, $ per day and $ per kWh – that are updated annually.
Reliance level	The portion of capital expenditure (of a given type or types) funded through capital contributions (ie, up-front cash payments). Annual values are used as an indicator of a distributor's funding structure. Metrics include consumer connection, system growth, total growth (consumer connection plus system growth), connection growth (consumer connection plus that part of system growth linked to connection growth) and total (all network capex).
Shallow	With reference to connection charges or incremental cost estimates, an approach where network capacity costs are *excluded*. Contrast with *deep*.
Shared network*	Any part of a distribution network that is not customer-owned or dedicated assets.
Shared network costs*	Costs that are not incremental to a single connection, including the cost of communal network development, renewal of older connections and other shared business and network asset and operating costs.
Target revenue	The revenue amount a distributor targets when determining its lines charges each year. For non-exempt distributors, must not exceed allowable revenue determined by the Commerce Commission.
Target revenue per connection	Target revenue divided by number of active connections. May be at aggregate level or by customer segment (eg, for a consumer group).

Term	Explanation
Terms used in equations	
α_{CG}	Connection pricing allocation parameter for a consumer group (CG) if using the reference allocation formula. Represents the portion of (representative) incremental cost to be recovered through lines charges.
β_{CG}	Connection pricing allocation parameter for a consumer group (CG) if using NPV pricing. Represents the portion of incremental revenue to be put towards covering the incremental cost of a connection.
CC	The connection charge for a specific connection.
$\overline{CC}_{CG}$	The average connection charge (CC) for a consumer group (CG)
IC	The incremental cost of a specific connection.
$\overline{IC}_{CG}$	The incremental cost (IC) of a representative new connection for a consumer group (CG)
$\overline{IR}_{CG}$	The average expected (present value of) revenue (IR) from a connection in a consumer group (CG)

Appendix B Illustrative scenarios

B.1. The following sections provide stylised representations of pricing inputs and outcomes. They cover several scenarios:

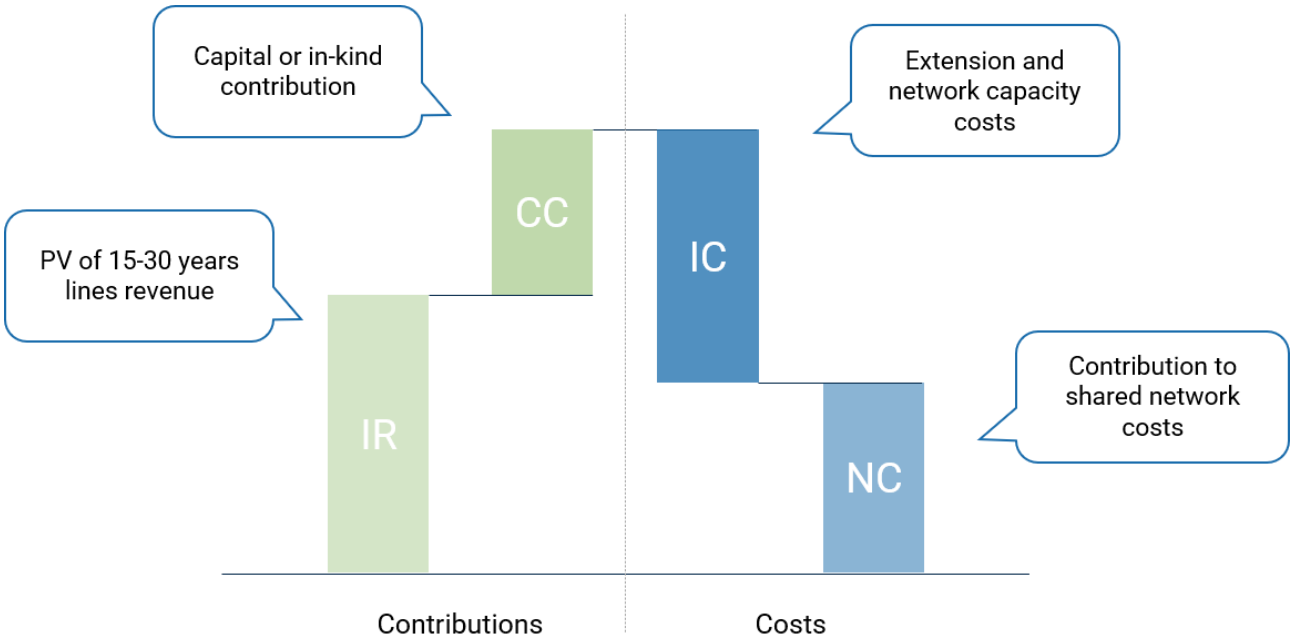
a. one scenario (N1-1) does not align with the first limb (subsidy-free floor)

b. three scenarios (A2-1 to A2-3) align with second limb (cost-shifting restraint)

c. two scenarios (N2-1 and N2-2) do not align with the second limb.

B.2. Each scenarios uses a waterfall representation of charge reconciliation components, with revenue components on the left and cost components on the right, as shown in Figure 6.

Figure 6: Scenario cost and revenue waterfall diagrams



B.3. For each of the scenarios exploring the second limb (2-1 to 2-5), arrows are used to indicate a link between movements from year-to-year in cost and revenue components – eg, how a change on one side of the diagram flows through to a change on the other side.

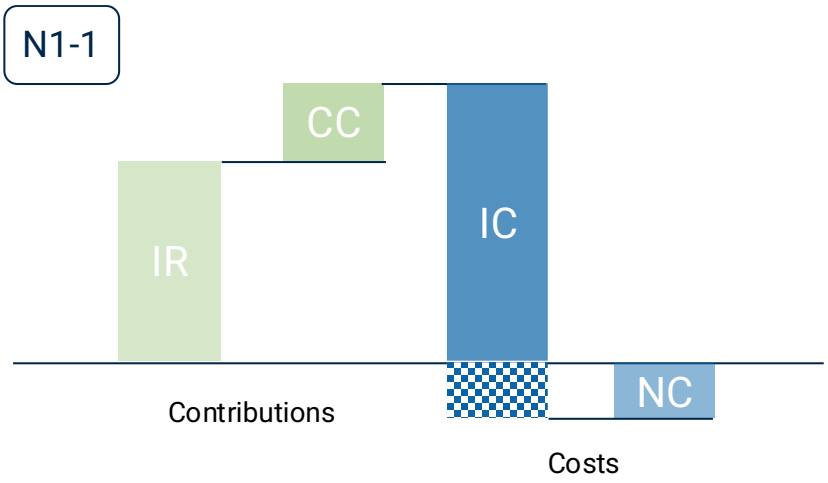
B.4. Each of the second limb scenario considers the impact a single factor that could impact observed outcomes – eg, incremental costs, target revenue, connection pricing settings.

B.5. Real-life outcomes for any given distributor may reflect interactions between several drivers – eg, input costs may have increased at the same time that target revenue per customer increased and the distributor also amended their pricing methodology.

Subsidised connection (N1-1)

B.6. Figure 7 shows a scenario where the total contribution from a connection is less than the incremental cost of the connection.

Figure 7: Scenario N1-1 – subsidised connection (not aligned with first limb)



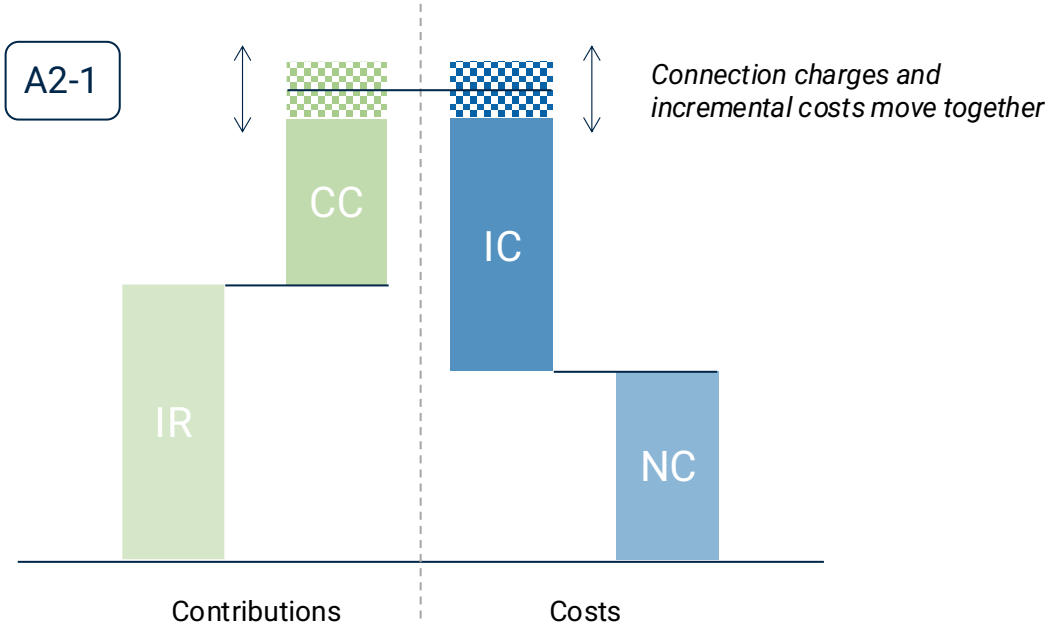
B.7. In this scenario, the connection charge reconciliation would indicate a negative network contribution (NC) because incremental cost (IC) exceeds the total contribution from the connection (IR + CC).

B.8. A negative NC value indicates the connection is expected to shift costs to existing customers.

Cost-reflective pricing with cost variation (A2-1)

B.9. Figure 8 shows a scenario where connection charges and incremental cost vary together – ie, where pricing is cost reflective and connection costs are changing.

Figure 8: Scenario A2-1 – cost-reflective pricing with cost variation



B.10. In this scenario, the total contribution ($IR + CC$) made by identical connections varies depending on time of arrival (ie, which year the connection is built) but the difference:

a. reflects changes in the cost of establishing a connection (IC)

b. does not reflect any change in allocation of shared network costs (NC).

B.11. This outcome is consistent with using the reference pricing formula with:

a. the value of α_{CG} held constant over time

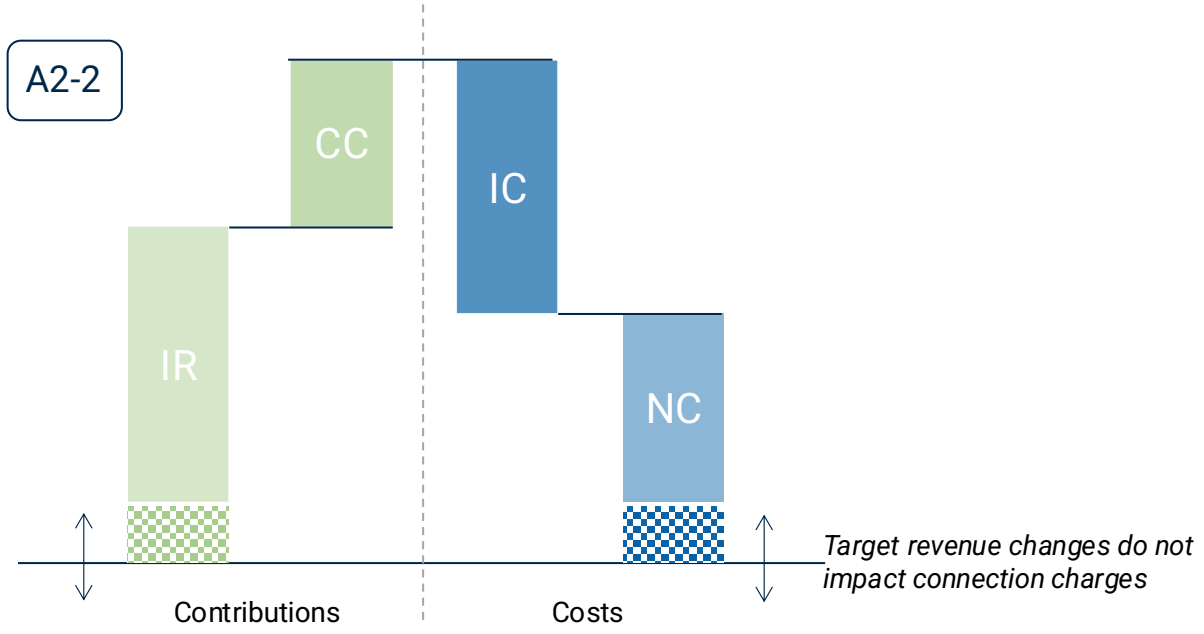
b. the value of $\overline{IC}_{CG}$ updated from year to year

c. variations from year-to-year in the profile of connection activity.

Cost-reflective pricing with revenue variation (A2-2)

B.12. Figure 9 shows a scenario where revenue charges do not impact connection charges – ie, where pricing is cost reflective and target revenue is changing.

Figure 9: Scenario A2-2 – cost-reflective pricing with revenue variation



B.13. In this scenario, the total contribution ($IR + CC$) expected from a connection changes as target revenue expectations evolve, but changes:

a. impact new and existing customers alike

b. do not impact connection charges.

B.14. The conclusion that new and existing customers have the same exposure to changes in target revenue assumes the customers are similarly situated – including that they will both remain connected into the future.

B.15. This scenario could arise from changes such as:

a. variations in revenue inputs, such as allowable return (WACC estimate) or other revenue building blocks

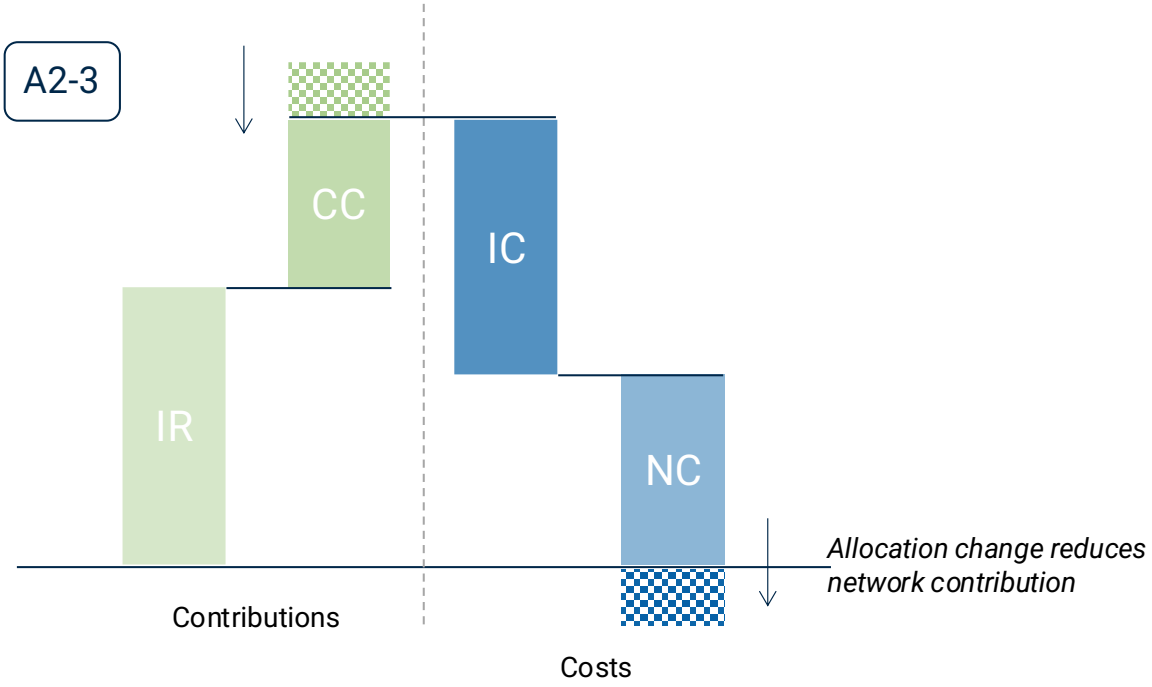
b. changes in target revenue allocation settings (ie, how the distributor allocates costs between consumer groupings)

c. impacts of cost spreading (ie, decline in target revenue per connection as connection numbers grow) or concentration (ie, increase if connection numbers decline).

Connection charge allocation reduction (A2-3)

B.16. Figure 10 shows a scenario where a distributor modifies its connection pricing methodology to *reduce* the portion of incremental costs recovered through connection charges.

Figure 10: Scenario A2-3 – connection charge allocation reduction



B.17. In this scenario, the total contribution ($IR + CC$) expected from a connection reduces. New connections will make a *lower* contribution to shared network costs (NC) than existing connections but are not subsidised (ie, NC remains positive).

B.18. This scenario maintains alignment because the second limb is not symmetrical. This scenario may not be perceived as equitable – ie, new connections are getting a 'better deal' than existing customers – but:

a. the change does not shift shared network costs to new connections

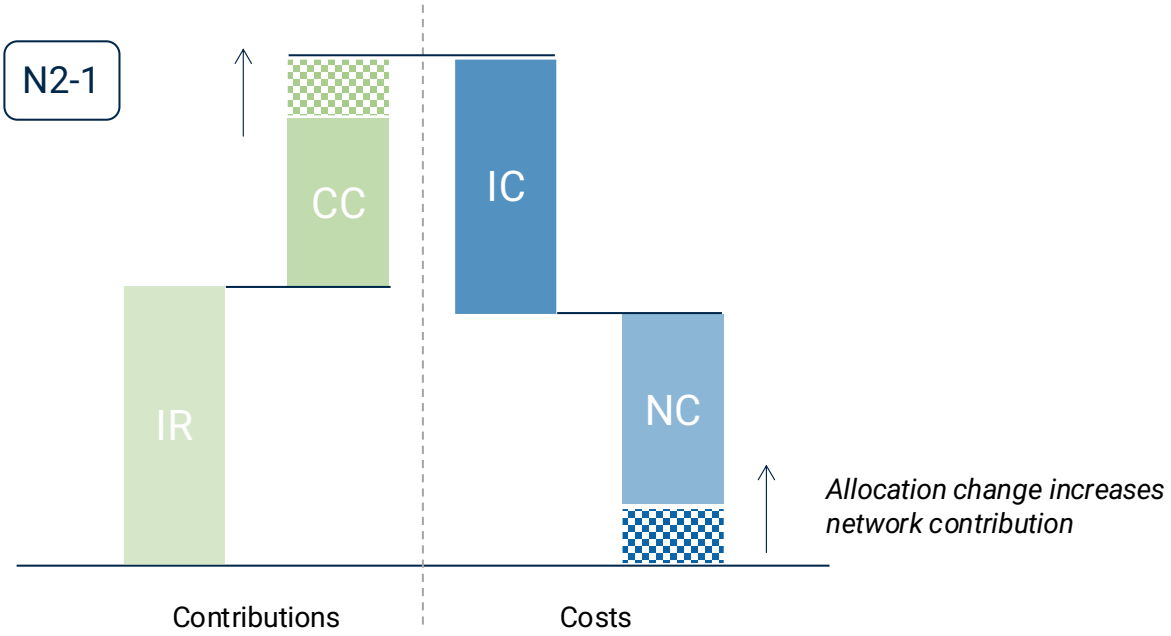
b. new connections do not shift costs to existing customers

c. as long as NC is above zero, existing customers still benefit from the cost spreading effects of connection growth.

Connection charge allocation increase (N2-1)

B.19. Figure 11 shows a scenario where a distributor modifies its connection pricing methodology to *increase* the portion of incremental costs recovered through connection charges.

Figure 11: Scenario N2-1 – connection charge allocation increase



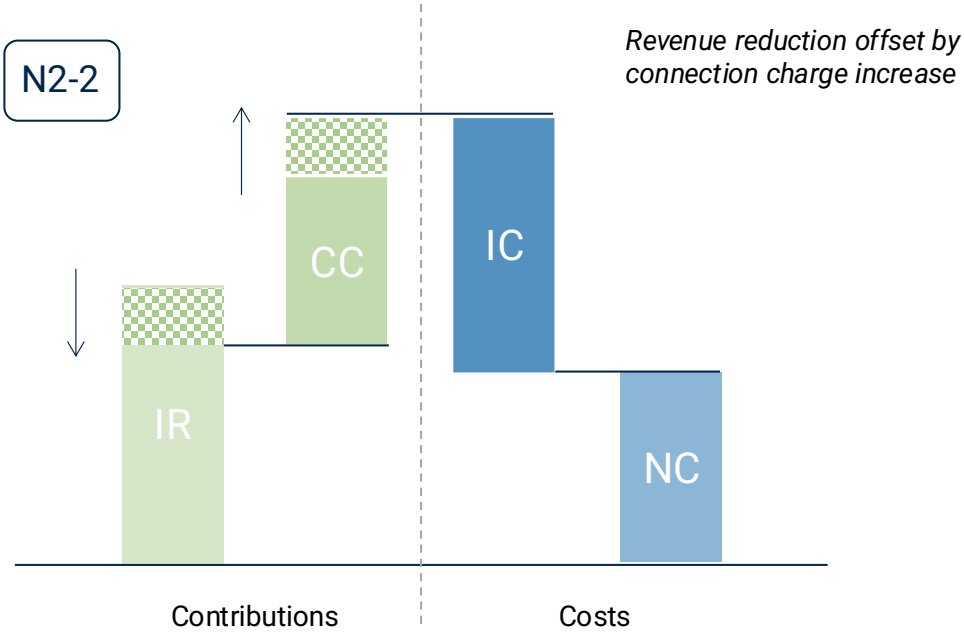
B.20. In this scenario, the total contribution ($IR + CC$) expected from a connection increases even though incremental cost is unchanged. This means new connections will make a *higher* contribution to shared network costs (NC) than existing connections.

B.21. This scenario is not aligned with the second limb, because it shifts shared network cost recovery from existing to new connections.

Revenue-linked connection charges (N2-2)

B.22. Figure 11 shows a scenario where a distributor modifies its connection pricing methodology to *increase* the portion of incremental costs recovered through connection charges.

Figure 12: Scenario N2-2 – revenue-linked connection charges



B.23. In this scenario, connection charges are determined by estimating the incremental cost a connection and netting off some portion of incremental revenue. This means a decrease in target revenue per connection is offset by an increase in connection charges, such that:

a. new connections do not benefit from a reduction in lines charges to the same extent as existing customers

b. when shared network costs fall, the benefit flows to existing customers only – ie, new customers make a larger contribution to a smaller total. This is equivalent to shifting shared network cost recovery from existing customers to new connections.

B.24. As such, this scenario is not aligned with the second limb.

Appendix C Code amendment

C.1. This Appendix reproduces the Code amendment.

Part 1
Preliminary provisions

1.1 Interpretation

(1) In this Code, unless the context otherwise requires,—

connection charge balance point principle means the pricing methodology in clause 6B.11A

shared network costs means the costs of a **distribution network** that are not incremental to a single **connection**, including the cost of:—

(a) communal network development (eg, historical reticulation and grid connection); and
(b) renewal of older **connections**; and
(c) other shared business and network assets and operating expenses (including the balance of **network capacity costs**)

Part 6B
Distributor pricing methodologies, information requirements and other requirements

Connection charge balance point principle pricing methodology

6B.11A Connection charge balance point principle pricing methodology

(1) The **connection charge balance point principle** is the principle that a **distributor's** pricing methodologies should provide that the contribution to **shared network costs** from new **connections** and upgraded **connections** is commensurate with the contribution from existing **connections**.

(2) Contributions are commensurate when—

(a) the costs of new **connections** and upgraded **connections** are not subsidised by existing **connections**; and

(b) new **connections** and upgraded **connections** otherwise make a similar (or lower) contribution to **shared network costs** as similar existing **connections**.

(3) Contributions include **connection charges** and **lines** charges, including forecast **lines** charges.

6B.11B Consequence of not applying connection charge balance point principle

(1) If the **Authority** considers that a **distributor** has not applied, or is likely to not apply, the **connection charge balance point principle**, it must direct the **distributor** to amend its pricing methodologies to make them consistent with the **connection charge balance point principle** provided the **Authority** has identified material efficiency concerns with the **distributor's** prices and the costs of the **distributor** applying the **connection charge balance point principle** do not outweigh the benefits of doing so.

(2) A direction under subclause (1) may—

(a) provide for a **distributor** to amend its pricing methodologies in a way that allows for consistency with the **connection charge balance point principle** to be achieved over time, for example, by changing the allocation of costs between existing and new **connections** in steps; and

(b) specify a reasonable timeframe or timeframes within which consistency must be achieved; and

(c) specify a timeframe that extends beyond 1 April 2030.

(3) If the **Authority**, issues a direction under subclause (1), the **distributor** must make its pricing methodologies consistent with the **connection charge balance point principle** within any timeframes and consistent with any other requirements specified in the direction.

(4) Before issuing a direction under subclause (1), the **Authority** must, in the following order:

(a) notify the **distributor** that it is considering close examination of whether to issue a direction in respect of the **distributor's** pricing methodologies:

(b) give the **distributor** sufficient information about the reasons why the **Authority** is considering close examination, and an opportunity to respond within a reasonable timeframe specified by the **Authority** before commencing close examination:

(c) following close examination and if the **Authority** provisionally decides to make a draft direction, give the **distributor**—

(i) a draft report setting out the **Authority's** analysis of why the **distributor's** pricing methodologies ~~is~~ are not, or will not be,

consistent with the **connection charge balance point principle**; and

(ii) the reasons for the **Authority's** proposed direction and proposed timeframes for it to apply and other requirements that the Authority proposes to set under subclause (2); and

(iii) an opportunity to respond within a reasonable timeframe specified by the **Authority**:

(d) give the **distributor** an opportunity to voluntarily address the issues identified in the draft report within a reasonable timeframe specified by the **Authority**.

6B.11C Clauses expire

(1) Clauses 6B.11A and 6B.11B expire on 1 April 2030.

(2) Despite subclause (1), a **distributor** must continue to ensure that its pricing methodologies are consistent with the **connection charge balance point principle** until the end of the timeframe specified in a direction given under clause 6B.11B(1).