Reducing barriers for new connections: up-front charges and distributor obligations

Consultation paper

17 November 2025



Executive summary

Electricity connections are an essential input for economic growth. They are necessary for new housing, business activities, infrastructure, and more broadly, the electrification of New Zealand.

Electricity distribution is a natural monopoly service, and regulation by the Electricity Authority Te Mana Hiko (Authority) and the Commerce Commission is necessary to promote an efficient and competitive electricity market that works for the long-term benefit of consumers.

This consultation paper addresses two related issues where we think the existing regulatory arrangements are not achieving this objective as well as they could be. Currently, regulations do not limit up-front costs for some parties wanting to connect to the distribution network or upgrade an existing connection. Excessive up-front costs could deter business growth, new infrastructure, housing development and electrification in general.

As well, regulatory arrangements are unclear around distributors' rights to refuse to provide or maintain connections, creating inconsistency or uncertainty for those wanting to connect. These issues need to be considered together as limits on up-front costs could encourage distributors to refuse to connect at all.

There is a balance to be struck. Charges for new connections should be cost-reflective so distributors can afford to invest, connection applicants can properly assess if connecting to the network is the best way to meet their energy needs, and existing customers do not have to pay to extend the network for the benefit of others.

We're proposing targeted intervention of connection pricing where up-front costs are too high

In July 2025, we introduced four new measures to improve pricing methodologies for connecting to distribution networks.¹ These measures lay a foundation for more comprehensive reform to help ensure connection pricing methodologies are efficient and consistent across distributors. We are working towards 2030 as a target date for potential further reform to allow time for the first set of measures to bed in and to align with the Commerce Commission's regulatory processes.²

This paper focuses on concerns that a small number of distributors have been requiring new connections to pay for an increasing portion of their wider network costs. Some are projecting they will charge new connections more than 100% of their direct cost up-front, while also paying the same charges, once connected, as existing customers.

We're proposing a targeted intervention framework that involves identifying where there are excessively high up-front charges and engaging with those distributors to understand what is driving high prices. If warranted, we would direct those distributors to reduce their connection charges.

This approach provides two opportunities to assess the costs and benefits of intervention – first, in introducing the framework and then again in deciding whether to direct a distributor to

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To enable reformed connection pricing to be implemented in revenue paths from 2030, distributors would need to include updated assumptions in the forecasts they finalise in early 2028.

reduce its charges. This two-stage approach helps address the challenge inherent³ in determining whether to regulate connection charge levels ahead of 2030.

We expect to identify a small number of distributors with high up-front connection charges, and intervention will be warranted in only some of these instances. Deeper examination will help us separate changes in pricing practices from other drivers of observed trends.

Intervention may remove a near-term gain for some existing users on some networks. However, more efficient pricing encourages new connections that both meet their own connection costs and contribute to paying for wider network costs. This grows the use of the network in a way that delivers more benefit to more consumers. Intervening also benefits distributors by enabling them to engage with the Commerce Commission to adjust their revenue paths to support growth of their networks.

We think explicit obligations to provide connections are needed

Distribution networks are the gateway to the national electricity system. For all but the very smallest or most remote sites, access to the national system is an essential service. But New Zealand is an outlier for not having clear obligations for distribution networks to provide new connections.⁴ The Electricity Industry Participation Code 2010 includes obligations that only apply to some types of connections and are not clearly defined.

We think there should be explicit obligations for distributors to offer and maintain connections, and connection upgrades, and these should be coupled with complementary arrangements to ensure the obligations are neither undermined by onerous connection requirements nor requiring inefficient subsidisation of new connections. Complementary arrangements would include requiring distributors to publish standards, policies or methodologies that prioritise network access alongside other relevant objectives.

Minor amendments to existing connection pricing requirements

As parties work to implement new connection pricing requirements from April 2026 some issues with the Code have been identified. This paper proposes some minor amendments to Electricity Industry Participation Code (Connection Pricing Requirements) Amendment 2025 in response.

Next steps

For targeted intervention of connection charges, this paper sets out our rationale for intervention, options we have considered, and a proposed Code amendment. If the Authority decides to go ahead, we would amend the Code in 2026 to enable reduction of excessively high connection charges from April 2028 – two years ahead of our 2030 target for more comprehensive reform. This could prevent connection prices from climbing as high as currently forecast and accelerate the process of unwinding recent increases.

For obligations to provide connections, this paper details our rationale for intervention and preferred direction. Subject to submissions, we would develop a Code amendment proposal for consultation in 2026. We aim to have clear obligations and complementary arrangements in place ahead of any targeted connection pricing intervention to ensure refusal to connect does not undermine that reform.

There are costs and benefits to weigh up, including the costs of reconsidering price-quality paths, altering a distributor's cost of financing connection investment versus the benefit of enabling efficient electrification investment.

⁴ Refer to Appendix C CEPA independent report

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1. What you need to know to make a submission

What this consultation is about

- 1.1. The Electricity Authority Te Mana Hiko (the Authority) is seeking feedback on options to further regulate pricing and obligations relating to distribution network connections.
- 1.2. In this paper, we set out:
 - (a) the case for interim restraints on charges for new connections and connection upgrades
 - (b) our preferred restraint option
 - (c) the case for clarifying obligations to provide and maintain connections
 - (d) our preferred direction for clarifying these obligations
 - (e) proposed minor amendments to the Electricity Industry Participation Code (Connection Pricing Requirements) Amendment 2025.

How to make a submission

- 1.3. The Authority's preference is to receive submissions in electronic format (Microsoft Word) in the format shown in Appendix A. Submissions in electronic form should be emailed to connection.feedback@ea.govt.nz with 'Distribution connection pricing and obligations' in the subject line.
- 1.4. If you cannot send your submission electronically, please contact the Authority on connection.feedback@ea.govt.nz or 04 460 8860 to discuss alternative arrangements.
- 1.5. Please note the Authority intends to publish all submissions it receives. If you consider that the Authority should not publish any part of your submission, please:
 - (a) indicate which part should not be published and explain why you consider we should not publish that part, and
 - (b) provide a version of your submission the Authority can publish (if we agree not to publish your full submission).
- 1.6. If you indicate part of your submission should not be published, the Authority will discuss this with you before deciding whether to not publish that part of your submission.
- 1.7. However, please note all submissions received by the Authority, including any parts that the Authority does not publish, can be requested under the Official Information Act 1982. This means the Authority would be required to release material not published unless good reason existed under the Official Information Act to withhold it. The Authority would normally consult with you before releasing any material that you said should not be published.

When to make a submission

- 1.8. Submissions close on 4 February 2026 for feedback on targeted intervention to address inefficiently high up-front charges some face when wanting to connect to distribution networks (Part A in the consultation paper); and approach for clarifying and introducing obligations on distributors so it's clear when they must offer and maintain connections (Part B in the consultation paper). Cross-submissions for Part A and C are due by 5pm, 23 February 2026 to accommodate this extension.
- 1.9. Submissions close on 19 December 2025 for feedback on the proposed minor Code amendments (Part C in the consultation paper) with cross-submissions due by 5pm, Thursday 5 February 2026. These proposed minor Code amendments aim to improve clarity of the Code wording and more accurately reflect the policy intent of the decisions announced in July 2025.
- 1.10. Authority staff will acknowledge receipt of all submissions electronically. Please contact the Authority at info@ea.govt.nz or on 04 460 8860 if you do not receive electronic acknowledgement of your submission within two business days.
- 1.11. There will be an opportunity to make cross-submissions. The cross-submission period will close at **5pm**, **Thursday 5 February 2026**.

2. Introduction

- 2.1. This paper focuses on two important and related distribution network access issues:
 - (a) ensuring the up-front cost of obtaining or upgrading a distribution network connection is not inefficiently high. Some distributors have increased connection charges steeply and there are signs this is harming connection activity especially for price-sensitive electrification investments
 - (b) clarifying distributor obligations to supply and maintain connections. This is an essential complement to regulating distribution revenues, because it guards against distributors refusing to supply economic connections.
- 2.2. This paper follows from two earlier decision papers:
 - (a) Distribution connection pricing Code amendment Decision paper (18 July 2025) decisions to amend the Code to introduce four new distribution connection pricing requirements (**pricing decision paper**)
 - (b) Network connections project (stage one) Decision paper (18 July 2025) decisions on a suite of changes to arrangements for distribution network connection processes and requirements (access decision paper)⁵.
- 2.3. These papers deferred decisions on two matters that are addressed in this paper:
 - (a) Inefficiently high up-front connection costs the Authority had earlier proposed to introduce 'reliance limits' to regulate the portion of growth investment that distributors could fund using up-front capital contributions. Following feedback, it was decided more time was needed to consider this issue and consult on an amended proposal.
 - (b) Distributors' obligation to connect the Authority had earlier proposed arrangements that would extend existing distributor obligations to connect generation to also include load connections.⁷ The Authority did not progress this proposal in the access decision paper, stating it would consider the issue further before making decisions⁸
- 2.4. In both of the earlier decision papers, the Authority set out its view that pricing and connection obligations are interrelated matters that should be considered together. This would ensure obligations are not:
 - (a) unduly onerous ie, do not impose obligations distributors cannot reasonably meet or costs they cannot reasonably expect to recover, as this would elevate the risk (and the cost) of distribution services
 - (b) inefficient ie, do not encourage uneconomic connection activity (where the cost of a connection outweighs the benefits) by requiring new connections to be subsidised.

Network connections project (stage one) technical consultation | Our consultations | Our projects | Electricity Authority

For a description of the reliance limit proposal, see pp 52 to 57 of Electricity Authority, <u>Distribution</u> connection pricing proposed Code amendment: Consultation paper, published 25 October 2024.

https://www.ea.govt.nz/documents/5956/Network_connections_project_stage_one_amendments_consultation_paper.pdf

https://www.ea.govt.nz/documents/8347/Network connections stage one - Final decision paper.pdf

- 2.5. Ensuring pricing and obligations are efficient, in turn, supports the long-term benefit of electricity consumers by promoting efficient supply, where:
 - (a) connections only proceed when the benefits outweigh the costs
 - (b) all parties are incentivised to optimise investment and usage
 - (c) growth spreads shared cost recovery across a larger customer base.
- 2.6. Efficient pricing and obligations also protect small consumers in their dealings with distributors when seeking a new connection or a connection upgrade.
- 2.7. This paper brings these two issues together by seeking feedback on:
 - (a) A Code amendment proposal to implement our preferred option for addressing an upward trend in shared network costs allocated to connection applicants
 - (b) the Authority's preferred direction for clarifying obligations on distributors to provide services to connection applicants to inform a future Code amendment proposal
- 2.8. This paper also seeks feedback on proposed minor amendments to the Code provision on the Connection Pricing Requirements to apply from April 2026 which were recently gazetted.⁹
- 2.9. Subject to submissions, the Authority aims to amend the Code to introduce a targeted intervention framework for connection pricing and to develop and consult on a further Code amendment proposal for distributor supply obligations.
- 2.10. The Authority is also progressing related work to reform:
 - (a) connection pricing requirements this is likely to include introducing enduring restrictions on costs allocated to connection applicants with effect from the start of the next regulatory control period (April 2030)
 - (b) pricing arrangements for injecting connections¹⁰ this includes upcoming consultation on proposed amendments to distributed generation pricing principles
 - (c) network access arrangements this includes work on distributors' processes, review of small-scale distributed generation application processes and processing fees, and export limits.
- 2.11. The balance of this paper includes:
 - (a) a summary of the background to this paper, context relevant to connection pricing, and the Authority's understanding of the problem these proposed reforms aim to address
 - (b) a more detailed description of the Authority's proposals, including how they are intended to operate, the rationale, and evaluation against alternative approaches
 - (c) an outline of potential costs and benefits of preferred options, including impacts on access seekers, existing consumers and suppliers.

⁹ <u>Electricity Industry Participation Code</u> <u>Connection Pricing Requirements Amend 4H518Bt.pdf</u>

The term 'distributed generation' has been used historically but in practice the pricing arrangements also apply to non-generation injection sources such as battery electric storage systems (BESS).

3. Framework for determining pricing methodologies and obligations

3.1. This chapter provides an overview of the statutory framework relevant to the Authority's oversight of pricing methodologies and connection obligations and the statutory interaction with regulation under Part 4 of the Commerce Act 1986.

Authority's objectives

- 3.2. The Authority's main objective is to promote competition in, reliable supply by, and the efficient operation of, the electricity industry for the long-term benefit of consumers. Its additional objective is to protect the interests of domestic and small business consumers in their dealings with industry participants.¹¹
- 3.3. The Authority may amend the Code to include provisions that are consistent with the Authority's objectives and are necessary or desirable to promote any or all of the matters set out in section 32(1) of the Electricity Industry Act 2010 (Act). These matters include promoting competition in the electricity industry, reliable supply of electricity to consumers, the efficient operation of the electricity industry, the protection of the interests of domestic consumers and small business consumers (small consumers) in relation to supply of electricity to those consumers, and the performance by the Authority of its functions.
- 3.4. The Act defines consumers as including 'any person who is supplied, or applies to be supplied, with electricity other than for resupply'. This means consumers include connection applicants, and existing network users.
- 3.5. Efficient connection pricing and obligations support the long-term benefit of consumers by promoting efficient supply. Efficient pricing is cost-reflective and subsidy-free and supports investment and usage coordination. This in turn supports:
 - (a) deterring inefficient connections, for which the cost of supply does not outweigh the benefits, because they are not subsidised
 - (b) efficient connections, for which the benefits of supply outweigh the costs, because charges are not excessively high and distributors cannot refuse to supply
 - (c) encouraging connection applicants to optimise their connection because charges are cost-reflective
 - (d) new connections contributing to shared costs so that connection growth benefits consumers overall through more affordable electricity over time.
- 3.6. The proposals relating to connection obligations in the paper also support the Authority's additional statutory objective. Obtaining network access or upgraded network access is a matter that can involve direct dealings between small consumers and distributors.

Electricity Industry Act 2010, section 15. The additional objective applies only to the Authority's activities in relation to the dealings of industry participants with domestic consumers and small business consumers.

- 3.7. The Authority is also required to have regard to the Government Policy Statement electricity industry (GPS), issued in October 2024, which specifically refers to efficient network pricing:
 - 14. Efficient network pricing is essential:

. . .

- b) For connections to enable efficient investment in new electricity consumption, including electrifying transport and process heat in industry.
- 3.8. The proposals in this paper are directly aimed at improving the efficiency of network pricing, which is consistent with the GPS.

Relationship with Part 4 of the Commerce Act

- 3.9. The Act empowers the Authority to set pricing methodologies, even if these matters could be regulated by the Commerce Commission (the Commission) under Part 4 of the Commerce Act.
- 3.10. The Authority's power to set pricing methodologies and connection obligations operates alongside regulation by the Commission under Part 4 of the Commerce Act, while allowing for differences in their respective statutory functions, purposes and objectives.
- 3.11. Specifically, section 32(4) of the Act provides the Authority must not purport to regulate anything in the Code that the Commission is authorised or required to do or regulate under Part 4 of the Commerce Act 1986 except for:
 - (a) quality or information requirements for Transpower or distributors, in relation to access to transmission or distribution networks:
 - (b) pricing methodologies for Transpower or 1 or more distributors.
- 3.12. The Code amendments proposed in this paper are consistent with this framework.
- 3.13. The proposal to limit costs allocated to up-front connection charges is a pricing methodology it sets out how a distributor must go about determining (an element of) its pricing structure. The Authority's ability to regulate in this area is explicitly covered in section 32(4)(b).
- 3.14. The proposal to clarify distributor supply obligations:
 - (a) addresses in part matters the Commerce Commission is not authorised or required to regulate under Part 4 of the Commerce Act. This is relevant to obligations:
 - i. for exempt distributors¹²
 - ii. to extend services to applicants who are not existing customers (or acting on behalf of existing customers)
 - (b) otherwise addresses 'quality ... requirements for ... distributors, in relation to access to ... distribution networks' including:
 - i. timeliness of provisioning

The Commerce Commission must apply information disclosure to all suppliers of electricity lines services, but price-quality regulation only applies to non-exempt suppliers. The Commerce Act 1986 excludes certain suppliers from the definition of electricity lines services (refer section 54C).

- ii. managing network capacity and congestion
- iii. setting network connection standards.
- 3.15. Under section 54V of the Commerce Act, the Authority is required to consult with the Commission before amending the Code in a manner that is likely to affect the Commission's exercise of its functions and powers in relation to distributors.
- 3.16. In addition, the Commission must also:
 - (a) take account of the Authority's pricing methodologies and quality requirements when exercising its powers, and
 - (b) must, if requested to do so by the Authority, reconsider a section 52P determination for distributors, to take account of any Code amendment that will result in increased costs or otherwise affect pricing methodologies, quality or information requirements, and other matters set out in section 54V(4).¹³
- 3.17. As explained below:
 - (a) altering connection pricing methodologies to reduce connection charges can increase the costs to be recovered through lines revenues regulated by the Commerce Commission
 - (b) some distributors may consider that the clarification of connection obligations will, in conjunction with proposed pricing methodologies, put upward pressure on the capital expenditure forecasts that were used to set revenue paths.
- 3.18. The proposed requirements also interact with the Part 4 requirements in other ways, for example both the Authority and the Commerce Commission administer information disclosure requirements.
- 3.19. The Authority engages with the Commission regularly on distribution pricing and access matters. Formal consultation on the proposed amendments has also commenced and will continue during and after the consultation process.

Relationship with supply obligations

- 3.20. Legislation currently contains some requirements on distributors to create or maintain connections:
 - (a) Section 105 of the Act requires distributors to maintain supply to certain historical connections;
 - (b) Part 3 of the Electricity Act 1992 sets out requirements including around rights to access land to inspect, maintain, and operate the works (matters dealt with under this Act cannot be regulated under the Code);
 - (c) Part 6 of the Code requires the connection of distributed generation where an application has been properly made, the distributed generator will meet health and safety requirements and the distributed generation complies with the Act and Code and meets the distributor's connection and operation standards (clause 3(2) of Schedule 6.1).
- 3.21. There is however currently no overarching requirement on distributors to offer to connect or maintain connections to their networks.

The Commerce Commission is required to reconsider a determination but is not required to amend the determination unless it considers it 'necessary and desirable to do so'.

4. Background and context

4.1. This chapter details work leading up to this paper and provides updated information on the context for reform.

Sector context

- 4.2. Distribution networks have a critical role to play in the electrification of New Zealand. This role will continue to grow in importance as more energy users such as industrial plants, EV charge point operators, housing developers, businesses look to connect directly to the network or upgrade their existing connections.
- 4.3. Efficient pricing is one of the keys to unlocking more network connections and promoting efficient investment to enable those connections.
- 4.4. It is important that connection pricing encourages efficient investment by access seekers and distributors including through the incentives and transaction costs it creates.
- 4.5. In 2023 and 2024, residential customers' electricity demand surpassed the industrial sector, to become the largest group of electricity users. This can be largely attributed to the steady growth in the number of residential connections, combined with the decline in industrial consumption since 2019. However, as more existing commercial and industrial users switch to electricity and biomass for their process heat, electricity demand is expected to increase.¹⁴
- 4.6. Consumers and communities are also increasingly interested in meeting their energy demands at a local level. As the costs of solar, batteries and other distributed energy resources decrease, applications for 'hybrid' connections serving both load and generation are likely to increase. The Authority is progressing work to address this type of connection activity through:
 - (a) Energy Competition Task Force initiatives that encourage consumers to shift their use away from peak times and incentivise consumers to supply electricity at peak times.¹⁵
 - (b) reforming pricing arrangements for injecting connections upcoming consultation on proposed amendments to distributed generation pricing principles.¹⁶
 - (c) seeking views on the opportunities and challenges of a more decentralised electricity system.¹⁷

Access seeker views

4.7. Access seekers have indicated that connection pricing (and processes) have delayed or deterred projects or resulted in increased overall project costs. For example, in response to the Authority's October 2024 *Distribution connection pricing proposed Code amendment consultation paper*, bp NZ submitted that it has

Transpower Whakamana i te Mauri Hiko, Monitoring report, October 2024; MBIE Energy in New Zealand 2025

¹⁵ Energy Competition Task Force | Our projects | Electricity Authority

The term 'distributed generation' has been used historically but in practice the pricing arrangements also apply to non-generation injection sources such as battery electric storage systems (BESS).

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- "...experienced a number of applications that we have not been able to pursue due to the high cost of connections". 18
- 4.8. Rewiring Aotearoa submitted: 19

We regularly hear examples of the challenges businesses and farms face with seemingly unfair charges for connections, and a lack of transparency over where all the costs come from. Too often these costs stop businesses and farms from electrifying their fossil fuel use.

- 4.9. Complaints lodged with the Authority, Utilities Disputes Limited (UDL) and the Commerce Commission²⁰ indicate that some access seekers are provided quotes that do not necessarily match the scope of works completed.²¹ In one instance, an access seeker received three quotes for the same job from the same distributor, ranging from \$20,537.39 to \$76,738.17 across a six-month period.
 - (a) In many instances, access seekers raised concerns about lack of transparency in quotes with requests for an itemised breakdown not met or met after multiple requests.
 - (b) Contestability was a common complaint, particularly on large networks with a limited number of approved contractors. A stakeholder has equated this to a "refusal to supply", meaning that unless they accept using a distributor's approved contractor, the distributor will delay processing the application.
 - (c) Traffic management costs and project management fees are another common complaint. Traffic management costs fluctuate in line with council and transport agency requirements. However, some access seekers said the costs were disproportionate to the work undertaken.
- 4.10. Access seekers who lodged complaints often still proceeded with the connection project citing they did not have an option given the monopoly position of distributors.

Distributor investment issues

- 4.11. For many distributors, the investment required to support increasing demand on their networks as the economy electrifies coincides with the investment needed to rebuild or replace aging assets that are nearing the end of their lives. Investment may also be needed to increase resilience in the face of more frequent and extreme weather events.
- 4.12. This current operating environment presents challenges for distributors who face a changing profile of access seekers, changing demand profiles (eg, as households and businesses electrify) and resilience challenges that can all add pressure on regulatory allowances.
- 4.13. Distributor investment is categorised in a variety of ways, and how distributors categorise expenditures also varies. Capex drivers can be grouped into three broad categories:
 - (a) Connection driven investment to supply new connections, including new service lines, network extensions and upstream capacity upgrades.

https://www.ea.govt.nz/documents/6276/BP NZ - Combined submission 2024 I7niT4n.pdf, page 2

https://www.ea.govt.nz/documents/6258/Rewiring Aotearoa - DCP submission 2024.pdf

The Authority received anonymised data from UDL and the Commerce Commission

Some cases have been highlighted in the media, for example, <u>'We thought it was a mistake': \$25k power</u> connection blindsides couple

- (b) Organic growth investment to add capacity or capability to accommodate growth in peak demand (or injection) from existing connections.
- (c) Non-growth all other investment, including investment to increase resilience, replace aging assets or add capability.
- 4.14. How a distributor categorises expenditure may vary based on what they decide is the primary driver for a project, and whether they decide to apportion costs across categories.²²
- 4.15. Investments often have multiple drivers and multiple outcomes for example, a new transformer may add capacity to accommodate connection and organic growth while also replacing an aging asset and improving resilience.
- 4.16. This means reported data on investment and connection charges is not necessarily consistent across distributors or over time.

Impacts of Part 4 regulation and connection policy on distributor pricing

- 4.17. In November 2024, the Commerce Commission reset the revenue paths for 16 non-exempt distributors for the period from 1 April 2025 to 31 March 2030. Decisions were determined in the context of high interest rates and inflation and allowed for less expenditure than non-exempt distributors had forecast in their 2024 asset management plans.²³
- 4.18. Depending on a distributor's access to capital and position on regulated returns, changes in connection policy may help them grow or limit the size of their regulated asset base (RAB). A change in connection policy will have an immediate and targeted impact on new connections and a gradual (decades) and diffuse (all customers) impact on RAB size and monthly lines charges.
- 4.19. The Authority is concerned that distributors can use connection charges as a lever to manage the size of their financing task the overall allocation of financing between connection applicants and the distributor. Allocation is not an incentive-free choice; it impacts efficiency and is more directly consequential for distributors than the structure of monthly lines charges.
- 4.20. Some distributors remain concerned about financeability under the Commission's process for setting revenue paths for non-exempt distributors. Some distributors' submissions on the Commission's draft default price-quality path 2025–2030 (DPP4) decisions highlighted uncertainty over the timing and volume of customer-driven expenditure.
- 4.21. Creating incentives for better network asset management and investment, and more cost-reflective connections to the network flows through to lower overall investment costs for connection applicants, distributors and existing users.

The Commerce Commission defines seven capital expenditure reporting categories, including 'consumer connection' and 'system growth' and provides high-level guidance on how distributors should link reporting to primary drivers and when they may apportion costs across several drivers.

²³ 17% or \$1.3 billion less.

Commerce Commission. IM review Final decision: summary paper. 13 December 2023. page 30;
Commerce Commission. IM Review Final decision: Risks and incentives topics paper. 13 December 2023. page 96

- 4.22. Distributors may be driven to use high up-front connection charges to reduce the initial price impacts for existing customers. However, high up-front charges may negatively impact outcomes for consumers if they:
 - (a) deter efficient connection growth
 - (b) weaken distributor incentives for efficient cost control
 - (c) deter efficient investment options.
- 4.23. More efficient connection pricing supports more efficient allocation of costs. New connections should at least meet their own costs (over time), rather than expecting a subsidy from existing users. Pricing should also be non-discriminatory, so similar types of connections are treated the same, and new connections make a similar contribution to older connections. These are basic principles that ensure everyone benefits from the cost-spreading effects of connection growth.

Distribution network connection pricing reform

- 4.24. The Authority is taking a staged approach to improve the efficiency of connection pricing, with some fast-track measures implemented while more comprehensive reform is further developed.
- 4.25. In July 2025, the Authority announced its decision to proceed with three new requirements that will apply to distribution connection pricing for quotes for load applications received from 1 April 2026, and a fourth new requirement that will apply for applications received from 1 April 2027.²⁵ These decisions will benefit consumers by improving the efficiency of investment in connections by distributors and access seekers.
- 4.26. The three requirements for connection applications received from 1 April 2026 are:
 - (a) Connection enhancement cost allocation distributors must set prices with reference to a 'minimum scheme' and any enhancement costs are paid by whichever party required it (distributor or customer). The 'minimum scheme' is determined by the distributor with reference to applicable standards. In addition, the customer may request consideration of a lower-cost flexible connection. This improves cost reflectivity and safeguards against misallocating enhancement costs.
 - (b) Pioneer scheme policy distributors must develop and publish a policy for establishing 'pioneer schemes'. Pioneer schemes ensure the applicant who funds a network extension receives rebates from those who follow and utilise the extension. This helps address the 'first-mover' disadvantage problem where the first applicant pays disproportionately higher costs than those that follow.
 - (c) Connection charge reconciliation distributors must prepare a reconciliation that breaks down their quoted connection charge into incremental cost, incremental revenue and network cost components. This improves transparency of how costs are allocated to new connections. It will also build an information base to support further reform.

https://www.ea.govt.nz/documents/7857/Distribution connection pricing Code amendment - Decision paper.pdf

- 4.27. The fourth requirement for connection applications received from 1 April 2027 is:
 - (a) Capacity costing if a distributor chooses to allocate upstream capacity costs, they must do so using published rates that allocate costs as capacity is consumed not when it is built. This enhances predictability and removes 'last-straw' pricing where a connection provides up-front funding for a capacity upgrade that will serve other connections in the future. The timeframe for applying this requirement allows distributors to trial capacity costing (which is used in charge reconciliations) before using it to set charges.²⁶
- 4.28. The new requirements are also supported by a dispute resolution process. These processes do not override a distributor's ability to determine how prices are set consistent with the new pricing requirements but provide an avenue for ensuring the new pricing requirements are applied.
- 4.29. The Authority continues to work towards further reform of distribution connection pricing with a view that 1 April 2030 is an appropriate target date as this aligns with the main revenue-setting cycle. This timing may be adjusted (including brought forward) based on information, analysis and sector performance in the interim.

Distribution network access reform

- 4.30. The Authority made decisions on non-price distribution network access arrangements for medium (>69kVA) and large (>500kVA) load connections and distributed generation in parallel with decisions on connection pricing for load. This first stage of network access reform introduces eight changes to Part 6 of the Code to remove barriers and create efficiencies in the application process.²⁷ The changes respond to the Authority's focus on improving medium and large distributed generation application processes, bringing load application processes into the Code, and improving the visibility of network capacity and applications to connect.
- 4.31. The Authority is implementing an approach that provides flexibility for distributors to design and manage their own connection processes. The Authority is also engaging with Electricity Networks Aotearoa (ENA) and the Electrical Engineers' Association (EEA) to develop industry best practice guidelines and policies as part of the Streamlining Connections Programme.²⁸
- 4.32. The Authority will monitor whether the industry-developed processes provide standardisation and improvements for consumers and will consider further regulation if those benefits are not forthcoming.
- 4.33. An exposure draft of the Code amendment was open for technical consultation from 9 September to 7 October.²⁹ Following finalisation of the Code, the rule changes will come into effect:
 - (a) 12 months after Code is gazetted (late 2026): All proposals come into effect (except load processes)
 - (b) 18 months after Code is gazetted (mid-2027): Part 6 load application processes come into effect.

The capacity costing requirement applies for reconciliation purposes for connection applications received from 1 April 2026.

Network connections project (stage one): Decision paper

²⁸ About Streamlining Connections - eea.co.nz

Network connections project (stage one) technical consultation | Our consultations | Our projects | Electricity Authority

- 4.34. Reform of distribution network access is ongoing, with the next stage of work focused on review of small-scale distributed generation application processes, processing fees, and export limits.
- Q1. Do you agree with the assessment of the current situation and context for connection pricing described in section 4? Why, why not? What, if any, other significant factors should the Authority be considering?

PART A - Connection charges

5. Case for intervention

- 5.1. This section details the rationale for restraining up-front connection charges.
- 5.2. In summary:
 - (a) Due to their market power, distributors can dictate the portion of network costs allocated to new connections. There is evidence of some distributors sharply increasing the share of costs allocated to connections over time ie, setting higher up-front charges for new connections without offsetting reductions in lines charges for those connections.
 - (b) New connection pricing requirements applying from April 2026 and April 2027 are designed to improve efficiency of connection pricing and increase transparency. However, they do not prevent (or unwind) the trend toward higher connection charges.
 - (c) The Authority is planning further reform with a target date of April 2030 designed to align with the timing for new distribution revenue paths. This is the least disruptive time to introduce substantive sector-wide changes in allocation settings.
 - (d) In the meantime, there are signs of stress from access seekers ie, signs that excessive connection charges are deterring some connection activity, slowing the development of new housing, business growth and electrification.
 - (e) Interim intervention could reduce inefficiently high connection charges ahead of 2030, unlocking more connections for new housing, business growth and electrification that both cover their own costs and contribute to shared costs.

Impacts of connection charge allocation in electricity distribution

- 5.3. Distributors determine the portion of costs they allocate as up-front connection charges versus recovering over time through monthly lines charges.
- 5.4. For most connections, customers pay:
 - (a) a tailored up-front connection charge
 - (b) monthly charges based on 'posted' tariffs that are common across all customers in a consumer group.³⁰
- 5.5. For these connections, altering up-front connection charges alters overall lifetime costs allocated to new connections. This is because monthly charges respond weakly and slowly over time to changes in connection charges. This is because:
 - (a) annual connection volumes are small compared to the population of existing connections. This means new connections have a gradual impact on perconnection metrics (including target revenue per connection).
 - (b) distribution network assets are long-lived. If connection charges were low in the past, then a high portion of historical connection costs will have entered a

The term 'consumer group' is defined in the Commerce Commission's <u>information disclosure</u> determination as "...the category of consumer used by the EDB for the purposes of setting prices". The term 'price category' is also used in the Code and has a similar meaning.

distributor's regulatory asset base and will influence monthly lines charges for decades.³¹

- 5.6. The Authority has previously developed two terms to describe connection pricing policy settings:³²
 - (a) neutral point upfront and ongoing revenue from a new connection covers the incremental cost of the connection with no contribution to shared and sunk costs. This is the lowest subsidy-free pricing level (the 'floor price') and means existing users are unaffected by new connections³³
 - (b) balance point new connections contribute to sunk and shared costs at a level that is commensurate with similar existing connections. Balance point pricing involves maintaining a consistent approach over time, and the level of the balance point will vary by distributor (depending on their historical approach to connection pricing).
- 5.7. For consumer groups with posted tariffs, a trend of increasing connection charges is likely to indicate pricing above the balance point. For larger customers with tailored lines charges, higher connection charges may (or may not) be directly offset by lower lines charges.
- 5.8. Efficiency concerns relating to these pricing policy settings are:
 - (a) pricing below the neutral point increases the risk of enabling inefficient connections (ie, connections that would not have gone ahead with neutral point pricing) while shifting costs to existing users
 - (b) pricing above the neutral point will deter some efficient connection demand (ie, connections that would have gone ahead with neutral point pricing) and may raise the cost of financing connection investment
 - (c) pricing above the balance point increases the lifetime cost of a new connection (compared to similar existing connections) which will further deter some efficient connection demand. Preventing pricing above balance point also supports investment confidence for prospective connection applicants by safeguarding against hold up.³⁴
- 5.9. These efficiency concerns could support an argument that connection charges should be set no higher than the neutral point. Neutral point pricing would be most likely to promote efficient investment and usage where:

A large portion of monthly lines charges covers the cost of financing assets in a distributor's regulatory asset base. Asset values are both indexed (to CPI) and depreciated over time. Costs are recovered (and financed) over their physical life. Standard physical life assumptions are 45 – 60 years for lines, cables, substations and transformers (refer Schedule A of the EDB input methodologies, https://www.comcom.govt.nz/assets/pdf file/0017/60542/electricity-distribution-services-input-methodologies-determination-2012-consolidated-as-of-23-april-2024.pdf).

While the terms are novel, they relate to orthodox economic concepts. Neutral point pricing is also known as net incremental cost or subsidy-free floor price. Refer to paragraph 102 of CEPA report Distribution Connection Pricing — Assessment of submissions. Balance point is a way of describing pricing that is consistent over time.

Unaffected in present value terms. Also, connection charges are not usually set below zero, so connections with low up-front costs may in practice contribute to shared and sunk costs.

A hold up problem arises when an access seeker makes a case-specific, sunk investment and then engages with a distributor to connect. The distributor may be able to extract some of the gains from the access seeker's sunk investment, distorting investment incentives.

- (a) demand for new and upgraded connections is more price sensitive than demand for existing connections (ie, the disconnection rate)³⁵
- (b) the cost of capital for electricity lines services is low relative to the cost to consumers of financing an electricity distribution connection
- (c) the cost and disruption of transitioning to neutral point pricing does not outweigh the gains
- (d) neutral point pricing proves to be durable, even though it provides more favourable pricing for new connections than for existing users.³⁶
- 5.10. In principle, connection demand is likely to be more price sensitive than the disconnection rate. In particular:
 - (a) disconnection involves stranding sunk assets, whereas connections and connection upgrades involve committing to new fixed asset formation
 - (b) connection pricing settings have a focussed impact on the cost of new connections and a diffuse impact on the level of lines charges
 - (c) access to capital can be a limiting factor for some access seekers.
- 5.11. In principle, the cost of capital for lines services is also likely to be lower than the cost of a consumer financing a connection. In particular:
 - (a) electricity distribution is a relatively low risk monopoly service
 - (b) most connections will serve multiple users over their life, so the risk associated with a population of connections is lower than the risk associated with the initial use of a given connection
 - (c) at least some connection applicants have difficulty accessing financing.
- 5.12. The balance point for each distributor depends on their historical policy settings. For example:
 - (a) a distributor that has historically priced near the neutral point would have a balance point near the neutral point. The distributor would have relatively low up-front charges and relatively high lines charges³⁷
 - (b) a distributor with a balance point well above the neutral point would have comparatively high connection charges but relatively low lines charges.
- 5.13. In either case, pricing above the balance point (ie, increasing connection charges over time) means:
 - (a) a new connection pays higher up-front and higher lifetime charges than a similar historical connection – this may worsen the inefficiencies discussed above associated with charging above the neutral point
 - (b) connection activity may be further deterred by what amounts to discriminatory pricing behaviour.

Lines charges are becoming more cost-reflective, with higher fixed charges and lower off-peak usage charges. This reduces the risk that higher lines charges would inefficiently deter usage of sunk connection assets – hence price sensitivity would manifest as disconnections.

It is not possible for all customers to pay no more than their incremental cost, because there are residual costs that must be allocated somewhere. Neutral point pricing adjusts connection charges down to ensure new connections do not contribute to those residual costs.

This is because their annual charges are recovering a relatively large share of the cost of historical connection investment.

- 5.14. Pricing above the balance point is discriminatory in the sense that it results in newer connections contributing more than historical connections. In other words, pricing above the balance point is discriminatory as between customer cohorts.³⁸
- 5.15. Prohibiting undue price discrimination by monopoly suppliers can address the 'hold-up problem' that can harm investment confidence and lead to under-investment.
- 5.16. Where pricing is determined case-by-case, a distributor can set charges at a level that extracts maximum value from an applicant that has made sunk investments prior to procuring their connection. For example, an applicant may invest in property, planning and design prior to securing an electricity connection (or upgrade). If the applicant cannot proceed without the connection, and does not have a choice of distributors, the distributor is in a position to 'hold up' the applicant and extract the value from their investment.
- 5.17. This case-by-case discrimination is particularly relevant to pricing for large connections with individual pricing. For other connections, the risk can be mitigated by requiring distributors to develop and publish connection pricing methodologies that limit discretion and support confident investment planning (by prospective applicants).
- 5.18. However, prospective applicants are also exposed to the risk that distributors will alter their pricing policy to increase costs allocated to new connections. In this way, permitting a distributor to alter its pricing policy to increase connection charges can also deter efficient investment.

Does discriminatory pricing harm efficiency?

The Authority's main statutory objective is to promote efficiency, rather than equity. So, is it valid for the Authority to consider the non-discrimination rationale for balance point pricing? Yes.

Economic consultancy CEPA discusses the efficiency basis for balance point pricing in its companion paper to the Authority's July 2025 decision to introduce the connection pricing rules.³⁹ CEPA identifies two efficiency-related factors in support of balance point pricing:

- 1. preventing undue price discrimination that can undermine incentives to make investments or explore economic opportunities that rely on access to the distribution network
- 2. to avoid a form of position-in-queue problem that arises from inter-temporal inconsistency in the allocation of common costs.

CEPA observes:

... in a world in which there are common network costs to be recovered it may not be possible to charge all connecting customers only the incremental cost (NIC) of connection. In other words, each customer must also be charged a contribution to the common network costs. As we have seen, that contribution to common costs should be chosen in such a way as to minimise any harm from pricing above the Neutral Point. If we must charge some customers above incremental cost in order to

The reverse can apply when a distributor reduces its connection charges below long-standing levels – this discriminates between cohorts in favour of newer cohorts. This can additionally lead to a period of time (decades) of pricing below the neutral point. In such a scenario, increasing charges to remove below-neutral pricing more quickly can enhance efficiency.

Refer paragraphs 138 to 165. Distribution Connection Pricing – Assessment of submissions

recover the full costs of the network, then the desire to prevent intertemporal price discrimination reasonably leads us to suggest that similar customers should be charged similarly.

CEPA concludes:

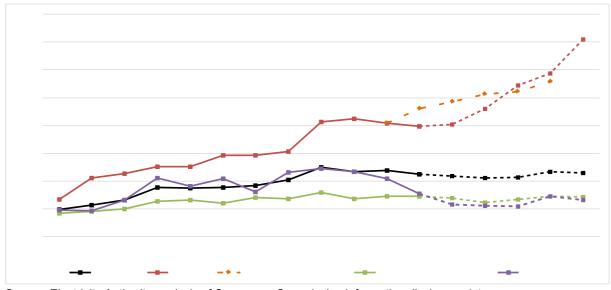
We agree that it is possible to view the Balance Point through a lens of equity. However, we have emphasised the role that the Balance Point plays in providing an assurance to connecting customers that they will not experience price discrimination, which could potentially undermine any investments they have made, deterring their attempt to seek connection in the first place. This is an efficiency argument.

The Authority agrees with CEPA on these points and considers balance point pricing is preferable to setting no upper bound and inviting the risk of increasing connection charges providing a windfall for existing customers while deterring efficient connection investment.⁴⁰

Some distributors have been increasing connection charges

- 5.19. The Commerce Commission's information disclosure regime has the most comprehensive dataset for assessing whether distributors have been allocating a higher share of costs to connections over time (ie, pricing above the balance point). The data shows a clear increase in:
 - (a) the value of capital contributions for consumer connections
 - (b) capital contributions for consumer connections and system growth as a portion of those same expenditure categories (the 'reliance level')
 - (c) capital contributions in total as a portion of total capital expenditure ('total reliance level').
- 5.20. Figure 5.1 shows the increase in reliance level over time. Vector is presented separately because it is the largest distributor and has shown rapid increases in its reliance level in recent years.

Figure 5.1 Capital contributions as a percentage of total growth capital expenditure, 2014 - 2030 (actual and forecast)



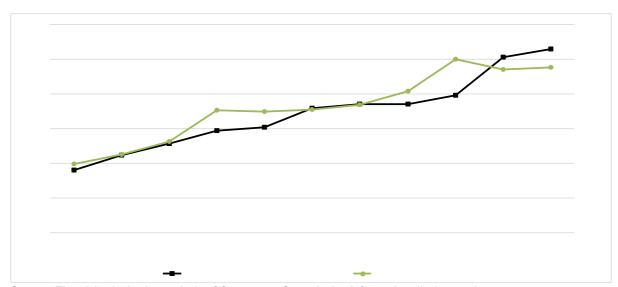
Source: Electricity Authority analysis of Commerce Commission information disclosure data

Increasing connection charges above the balance point produces a windfall gain because sunk costs are allocated away from existing users – including costs of existing users' connections.

- 5.21. To rule out alternative explanations for this trend (ie, other than pricing above the balance point), the Authority:
 - (a) requested information from distributors on historical changes in their reliance on 'in-kind' contributions. In-kind contributions involve an applicant directly funding (or building) a connection and then transferring ownership to a distributor. The full value of this form of connection charge is not included in information disclosures and is not always visible to distributors. Therefore, the trend of increasing reliance could be explained by distributors switching from in-kind to capital contributions (ie, a change in form and visibility of contributions, rather than a change in actual share of costs funded through contributions).
 - (b) examined disclosures on the volume of 'non-standard' consumer connections

 that is, connections with special pricing. A trend of increasing reliance could
 be explained by growth in the number or size of non-standard connections,
 which tend to have higher reliance levels than standard connections.
- 5.22. Information received indicates that 10 distributors account for and accept in-kind contributions as part of their capital contribution policies.⁴¹ These distributors' approach to in-kind contributions has remained largely unchanged between 2015 and 2025, with only one example of changes to the form of contributions received.⁴² There is some variability in how distributors track and register the value of vested assets in their company register.
- 5.23. Figure 5.2 shows an increase in non-standard connections over time that tracks against a trend of increased reliance levels over time. The increase in non-standard connections is largely driven by a subset of distributors: Unison Networks, The Lines Company, Powerco, Network Waitaki, Network Tasman, Counties Energy and Alpine Energy.

Figure 5.2 Overall sector reliance levels and number of non-standard connections, 2014 - 2024



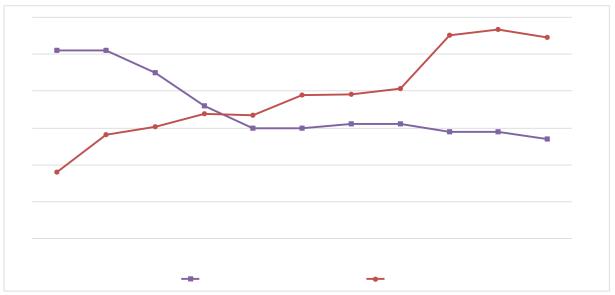
Source: Electricity Authority analysis of Commerce Commission information disclosure data

⁴¹ Alpine Energy, Electra, Buller Electricity, Firstlight Network, Horizon Energy, Nelson Electricity, Network Tasman, Northpower, The Lines Company, Orion

In July 2021, Northpower removed a rebate paid to customers upon assets being vested.

- 5.24. Despite an annual growth rate in non-standard connections of at least 10%, the reliance levels for these distributors do not have a corresponding upward trend. Some of these distributors such as Alpine Energy, Network Waitaki and The Lines Company have a reliance trend that is more variable from year to year compared to others.
- 5.25. Vector is presented separately in Figure 5.3, which shows a clear downward trend in the number of non-standard connections and rapid increase in reliance levels over time. Non-standard connections have accounted for a declining percentage of target revenue recovery, decreasing from 5% in 2014 to 1.4% in 2024.⁴³

Figure 5.3 Vector's reliance level has increased while number of non-standard connections has decreased, 2014 - 2024



Source: Electricity Authority analysis of Commerce Commission information disclosure data

- 5.26. Some submitters have suggested that increasing input costs (ie, the underlying cost of building a connection) could also explain the trend.
- 5.27. We do not think this could offer an explanation because increasing input costs would flow into both the numerator (capital contributions for growth) and denominator (capital expenditure on growth).
- 5.28. To cause an increase in observed reliance limits, input costs for the portion of consumer connection and system growth costs allocated to connection charges would have to grow faster than input costs for the portion recovered through lines charges. This seems unlikely, and distributors have not provided any evidence that this is occurring.
- 5.29. One other way this could occur would be if distributors that have a 'last straw' approach to connection pricing for network capacity (ie, where capacity costs are allocated to the connection that triggers a capacity upgrade, rather than the broader set of connections that consumed headroom ahead of the upgrade) have had an increasing volume of 'last straw' events. In practice, this amounts to a change in

⁴³ Vector. <u>Pricing methodology | Vector Limited.</u>

allocation – ie, from a period where capacity was not allocated to a burst of capacity cost allocation. As such, this explanation would not alleviate the underlying concern.

5.30. Note that:

- (a) Vector is forecasting further increases
- (b) similar pressures and incentives ie, sourcing investment cashflows for growing capital programmes – exist for other distributors, so there could be a risk of others following suit by increasing connection charges as a source of investment inflows.

Signs of connection stress

- 5.31. It is axiomatic that increasing prices will generally decrease demand. This is relevant to the observations that:
 - (a) pricing above the neutral point will deter some efficient connection activity that would have occurred if prices were lower
 - (b) pricing above the balance point will further deter some efficient connection activity that would have occurred if pricing policies had remained consistent over time.
- 5.32. In addition to these dynamics, connection activity may be further deterred if prospective applicants are worried that a lack of constraint on discriminatory pricing by distributors exposes them to hold up risk.⁴⁴
- 5.33. There is no systematic source of information on deterred or delayed connections, and this activity is inherently difficult to observe. For example, deterred and delayed connections can include:
 - (a) connections for which an application was made and then downsized, progressed slowly or abandoned by the applicant
 - (b) applications that never eventuated, because preliminary analysis by the prospective applicant indicated that a connection (or upgrade) would not be viable
 - (c) projects that never progressed to preliminary analysis due to general awareness of the magnitude of connection costs
 - (d) new connections that were delayed because capital was tied up in funding earlier connections
 - (e) demand that was not satisfied because connection costs raise the cost of supply (eg, for housing or electrification).
- 5.34. There were seven submissions and cross-submissions from access seekers in the October 2024 consultation paper that proposed connection pricing methodologies and an interim constraint.⁴⁵ These submissions⁴⁶ highlighted the variability in costs faced by access seekers who operate across multiple regions. As noted in paragraph 4.70, bp NZ submitted that it has not been able to pursue electrification projects due to high up-front charges. Rewiring Aotearoa submitted that an Otago

Refer paras 5.8 and 5.13 to 5.18 of this paper and section 4.1.4 of <u>Distribution Connection Pricing</u> – Assessment of submissions

Electricity Authority, Distribution connection pricing proposed Code amendment consultation paper, October 2024

For example, Meridian Energy, ChargeNet, bp NZ, Rewiring Aotearoa

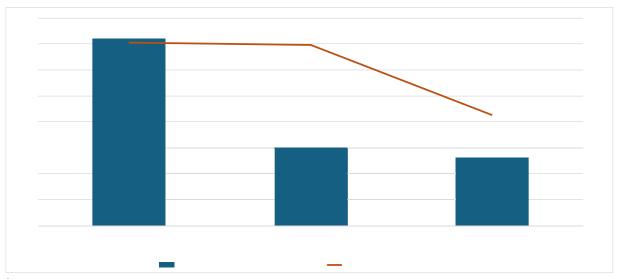
- orchard may continue to use fossil fuels, rather than electrify their irrigation system due to high up-front connection charges.
- 5.35. As an access seeker operating across 18 networks, Fonterra submitted that the significant differences between distributors' processes and contractual arrangements "... adds significant cost and effort to ensure that Fonterra is not being unfairly disadvantaged ... and is paying only for the direct equipment needed for its electricity supply".⁴⁷
- 5.36. Other access seekers, who did not want to be named, have told the Authority that some distributors' connection pricing practices and lack of contestability increases project costs with flow-on effects to consumers.
- 5.37. For example, for developers, projects often need to be completed within a certain timeframe to meet consent deadline pressures. This limits their ability to negotiate or challenge a quote as it risks delaying the project and incurring additional costs, which are passed on to buyers. One stakeholder indicated that "inflated infrastructure costs significantly impact project feasibility and may deter future development in the regions, particularly affecting smaller developers with limited upfront equity".
- 5.38. Another stakeholder indicated that while current connection pricing practices have not deterred a project, distributors are often delayed, which adds costs. For example, delays between communications and approvals, poor coordination with contractors and other infrastructure providers, and lengthy turnaround time for quotes from approved contractors.
- 5.39. The Authority has also analysed data from EECA's Public EV Charger Dashboard, focusing on the number of battery electric vehicles (BEVs) per public charge point and per kilowatt (kW) of public charging capacity.⁴⁸ In comparing three major regions across New Zealand, we observe that:⁴⁹
 - (a) The Auckland district has more than twice the number of BEVs per public charge point compared to Wellington cities and Christchurch and Selwyn (ie, Auckland has less public charging infrastructure)
 - (b) Wellington cities have a similar number of BEVs per kW of public charging capacity as Auckland despite significantly fewer BEVs per public charge point (in other words, Wellington cities have a larger number of lower-capacity public charge points compared to Auckland)
 - (c) There is significant variation within Wellington cities, with lower ratios in Lower Hutt and Wellington compared to Upper Hutt and Porirua.

Fonterra - DCP Submissions 2024.pdf

Public EV Charger Dashboard | EECA. Accessed 3 October 2025.

As with other empirical data, this analysis cannot isolate connection pricing from other factors – such connection process, roading authority and local government policies, geography, EV fleets and travel patterns, ChargePoint Operator strategies, etc. Also, charge point and vehicle data quality is variable and can be skewed by the vehicle registration and inspection locations recorded for fleet vehicles.

Figure 5.4 BEVs per public charge point and per kW public charging capacity in select urban regions



^{*} Wellington cities include Wellington, Lower Hutt, Upper Hutt and Porirua

Summary

- 5.40. In summary, the Authority considers that:
 - (a) There is a well-established case for regulatory oversight of distribution network pricing to promote efficient outcomes in the electricity industry for the long-term benefit of consumers.
 - (b) Network costs are larger than the sum of incremental costs, so some or all customers must be charged more than their incremental costs – that is, distributors must allocate shared network costs as between consumer groups and as between existing and new connections.
 - (c) Consistency over time in shared network cost allocation (ie, non-discriminatory or 'balance point' pricing) promotes efficiency, because it supports the ability for access seekers to plan and invest in preparatory efforts that lead to connection growth. This supports the balance point as an efficient above-neutral point for connection pricing.
 - (d) This provides an efficiency rationale, consistent with the Authority's statutory objective, for bringing connection charges back down to balance point (or lower) if allocation has been trending up ie, to unwind increases. Doing so is likely to increase growth in connections that both cover their costs and contribute to shared costs (over time) supporting efficient electrification, and business and housing growth.
 - (e) Unwinding increased up-front charges ahead of 2030 incurs additional costs for distributors associated with potential revenue path adjustments, so the Authority must carefully weigh up whether those costs are warranted.
 - (f) Weighing up whether unwinding increases is warranted given the costs cannot rest fully on direct empirical evidence because non-activity is inherently unobservable, hence the Authority must exercise its judgement.

- 5.41. CEPA⁵⁰ concludes that there is clear evidence that up-front connection charges have materially increased for a subset of distributors. Their view is that:
 - ...given the potential for an adverse exercise of market power in connection charging, combined with a clear shift in connection charging policy, and an absence of mechanisms for connecting parties to mitigate the effects of that market power, the Authority is right to propose stricter regulatory intervention. In short, we consider that the Authority is following good regulatory practice in considering the application of more direct controls in this circumstance.
- 5.42. CEPA also notes that even if there was a systematic source of information on deterred or delayed connections, it would be unlikely to provide a comprehensive account of issues given that the chilling effect of market power is likely felt prior to any connection application being made.
- Q2. Do you agree with the rationale for considering interim restraint on connection charges described in section 5? Why, why not?
- Q3. Have you observed or experienced signs of connection stress where current connection charging arrangements caused problems when seeking to connect to the network (eg. projects delayed or deterred as a result of price-related barriers)? If so, please describe.

Refer to Appendix C - CEPA Connection obligations and interim restraints on connection charges, 13
November 2025

6. Connection pricing options

- 6.1. We have evaluated a set of five options for restraining connection charges:
 - (a) no specific intervention rely on broader reform process (fast-track requirements and potential further reform) to limit share of costs allocated to connection charges and fees
 - (b) improved reliance limits entity-level reliance limits, with enhancements to improve workability and effectiveness of earlier proposal
 - (c) methodology locks prohibition on updating connection pricing methodologies to increase connection charges
 - (d) targeted intervention (preferred option) framework for identifying where high up-front costs are inefficient and targeted regulation to modify pricing, where required
 - (e) allocation limits connection-level limits on share of costs recovered through connection charges and fees.
- 6.2. Each option is described in more detail below and assessed against three evaluation criteria:
 - (a) effectiveness how well does the option address the problem (ie, improve connection pricing so that efficient operation is promoted for the long-term benefit of consumers)
 - (b) cost how much will the option cost to implement and operate
 - (c) risk what are the risks associated with the option.
- 6.3. Targeted intervention is the Authority's preferred option as it would focus resources more effectively, avoid impact on most distributors, enable closer scrutiny and a tailored, supervised resolution of inefficiently high up-front charges.

No specific intervention

- 6.4. Without intervention, the situation is:
 - (a) The fast-track requirements bring focus and transparency to connection pricing.⁵¹ The requirements do not directly place limits on the share of costs allocated to access seekers, but they do introduce a framework and reporting for gaining a better understanding of allocation outcomes for individual connections, between consumer groups and between distributors
 - (b) At the same time, implementing the new requirements will involve distributors reviewing and updating their connection pricing methodologies, so there will be a period of change as the new requirements take effect from April 2026 and April 2027.
 - (c) The new requirements largely prohibit 'last straw' pricing for upstream capacity, introduce new discipline around documenting relevant standards and identifying minimum scheme connection solutions, and provide more prescription on how rates used to recover upstream capacity costs should be derived and applied.

The new requirements are enhancement cost allocation, pioneer schemes and charge reconciliation from April 2026, plus capacity costing from April 2027.

- (d) The Authority is working toward further reform that is likely to introduce more comprehensive requirements around connection pricing methodologies from 2030.
- 6.5. This means there are four further pricing years (ie, years starting 1 April 2026 to 2029) during which:
 - (a) initial pricing improvements will come into effect, but
 - (b) recently elevated allocation levels could persist and further increases could occur albeit with greater transparency.
- 6.6. It can be appropriate to rely on information measures to drive improvements, however information measures are less effective at overcoming direct financial incentives in this case, incentives to manage financing pressures by increasing connection charges.
- 6.7. In this case, some distributors have pointed to the 'financeability' of their regulatory asset base as a major concern. In a submission to the Commerce Commission on the DPP4 reset, Vector said:⁵²

Vector is not alone in raising the various challenges electricity distribution businesses (EDBs) face in funding future capital investment. These challenges are brought about by inflation pressures and interest rate increases, coupled with growing investment requirements to facilitate the energy transition and enhancing network resilience in the face of more adverse weather caused by climate change.

And

The regulatory regime needs to provide for both debt and equity holders to receive returns (in cash) to incentivise investment at a level required for secure, affordable and resilient electricity networks in the face of increasing severe weather events and increasing demand brought about by the transition to a low emissions economy.

- 6.8. Vector's submission was accompanied by a consultant report jointly commissioned with New Zealand's five other largest non-exempt distributors Aurora Energy, Orion, Powerco, Unison and Wellington Electricity.
- 6.9. In its final decision on DPP4 revenue paths, the Commission applied financeability 'sense checks' and noted that:⁵³

Submitters supported our decision to allow full in-period recovery of building blocks allowable revenue, with ENA noting "the draft DPP4 decision largely ameliorates EDB concerns over the changes' impact on cashflows and financeability."

And

We do not consider it necessary to adjust our decision on alternative rates of change for financeability reasons for any EDB. Our notional analysis of post smoothing prices (ie, after starting price adjustments and alternate X-

vector-ltd-15-march-2024-financeability-submission.pdf

Default-price-quality-paths-for-electricity-distribution-businesses-from-1-April-2025-Final-decision-Reasons-paper-20-November-2024.pdf. para 4.22; 4.48

factors have been applied), shows all EDBs meet the BBB+ reference level for our primary financeability metric, FFO/Debt.

6.10. The Commerce Commission also reiterated its view that:

...infrastructure investors in New Zealand have been prepared to forego dividends at times when significant investment has been required, for example Transpower and Chorus. This is consistent with what we observe in workably competitive markets. Ultimately, we consider that, as long as investment continues to occur, maintaining our approach better promotes the Part 4 purpose, rather than frontloading cashflows in order to allow suppliers to pay dividends, at the same time as they state a need to raise new equity to finance investment.⁵⁴

6.11. This indicates that:

- (a) the electricity distribution sector is entering a period with increased investment pressures, including from connection growth, system growth,⁵⁵ and nongrowth drivers
- (b) some distributors have claimed that control of their lines charges makes it difficult for them to invest in their networks, including because they consider it necessary to maintain dividend payments
- (c) increasing capital contributions provides an avenue for sustaining near-term dividend payments by sourcing more cash from connection applicants.
- 6.12. According to ENA's submission on the Commerce Commission's draft DDP4 decision most distributors are satisfied their approved revenue paths are adequate.⁵⁶ However:
 - (a) Tensions caused by elevated investment pressures still exist and the option to sustain (or boost) near-term dividends by increasing connection charges remains available.
 - (b) Approved revenue paths for some distributors are based on capex forecasts that assume a trajectory of increasing connection charges. Distributors cannot materially alter these trajectories without reconsideration of their approved revenue paths.
- 6.13. As such, without intervention, these forecast increases in connection charges are almost certain to play out and other distributors may also increase their connection charges.
- 6.14. This leaves in place the harm to consumers caused by elevated connection charges that deter efficient investment in new and upgraded connections, including for electrification.⁵⁷

Para G83, <u>EDB-DPP4-Final-decision-Reasons-paper-Attachment-G-Financeability-20-November-2024.pdf</u>

System growth drivers can include supplying more connections as well as increases in peak demand (or injection) from existing connections.

Para 4.22, <u>Default-price-quality-paths-for-electricity-distribution-businesses-from-1-April-2025-Final-decision-Reasons-paper-20-November-2024.pdf</u>

⁵⁷ Refer also to section 5.

Improved reliance limits

- 6.15. The October 2024 consultation paper included the proposal to introduce a requirement that, when updating their connection pricing methodologies, distributors must ensure their reliance level is unlikely to breach prescribed limits.
- 6.16. In the consultation paper, reliance levels were defined as capital contributions for load for consumer connections and system growth divided by gross consumer connection and system growth capex. In other words, the reliance level indicates the portion of growth investment directly funded through up-front connection charges.
- 6.17. We proposed the limit for each distributor would be the higher of 47% (based on the sector average across recent years) or a distributor's own 2024 reliance level. In other words, the reliance limits were designed to arrest further increases rather than lock-in a theoretically ideal level.
- 6.18. This is an imperfect approach in part because reliance levels are an imperfect proxy for efficient pricing and they do not include the value of in-kind contributions.
- 6.19. Submitters raised further concerns with the proposal, including risks of adverse unintended consequences, and some submitters suggested improvements. As such, possible improvements to the original reliance limit proposal are set out in Table 6.1.

Table 6.1 - Reliance limit improvements

Improvement	Comment
Sunset clause (2030)	Require the Authority to extend reliance limits if warranted beyond 2030 (eg, if further reform is not in place).
Exclude connections with special pricing	High connection charges for large connections can be efficient when coupled with low ongoing charges. Excluding these connections avoids unintentionally deterring efficient pricing.
Compliance based on average reliance over three consecutive years	More objective compliance test and provides distributors with a multi-year 'runway' to manage their compliance.
Distributor may apply for higher limit if reference year had high system growth capex	For smaller distributors, system growth capex can vary significantly from year to year. If the reference year for setting limits coincides with a large growth project, then the limit may be unrepresentatively low.
Reliance limit reassessed if distributor increases reliance on in-kind contributions	Prevents distributors bypassing reliance limit by altering their policies to shift from capital to in-kind contributions (ie, increasing use of vested assets).
Complementary restraint on system growth reliance	Makes restraint more effective for distributors whose reliance level appears low due to their use of in-kind contributions.
Complementary restraint on total reliance	Prevents distributors bypassing reliance limit by classifying capital contributions as going towards renewal. Total reliance is all capital contributions divided by all capex.

- 6.20. Improved reliance limits would be significantly more effective and workable than the original proposal. However, they:
 - (a) increase the cost of operating the intervention, including due to the application process for higher limits and the approval process for changes to in-kind contributions
 - (b) do not address the problem that reliance limits are an imperfect proxy for efficient pricing
 - (c) do not eliminate the risk of unintended adverse consequences.

Methodology lock

- 6.21. Some submitters suggested restricting changes to connection pricing methodologies as an alternative to the earlier reliance limit proposal.
- 6.22. This would target allocation changes 'at source' rather than controlling via outcome metrics.
- 6.23. Restrictions would need to target the problem high and increasing allocations without preventing or deterring beneficial changes to methodologies, such as changes that:
 - (a) implement the new mandatory connection pricing requirements (enhancement cost allocation, capacity costing and pioneer scheme)
 - (b) otherwise improve the efficiency of connection pricing
 - (c) improve the quality of methodologies, including their completeness, clarity and sector alignment.
- 6.24. In practice, we do not think this would be workable. The main challenges are:
 - (a) Allocation outcomes typically are not directly specified in methodologies but are a product of the way methodologies identify and allocate a range of cost and revenue items.
 - (b) Many methodologies are incomplete either silent on various topics or deferring to case-by-case judgement.
 - (c) Some methodologies refer to calculations that in turn drive allocation outcomes. For example, Vector's projected year-on-year increases are driven by feeding new capex values into a formula each year, rather than by Vector updating its methodology each year.

Targeted intervention

- 6.25. A key difficulty with the two options above is that they involve applying blanket, policy-level controls on the sector in a context where:
 - (a) The information-base needed for effective control is not available. In particular:
 - The long-running information disclosures are high level, and distributors have considerable discretion as to how they categorise expenditures and contributions. The disclosures also omit information on the value of inkind contributions.
 - ii. Pricing methodology disclosures are non-standardised and of variable quality and completeness.

- iii. Charge reconciliation requirements are new and have not started being applied and disclosed yet. They will take time to mature and produce a time series of quality data.
- iv. Available data does not support an ability to readily distinguish whether contribution trends are driven by changes in activity (eg, type and volume of connections and capex projects, or input costs levels) versus policy (eg, connection pricing methodology settings).
- (b) Efficient contribution levels are situation-specific, depending on a distributor's historical practices (and hence the portion of historical connection costs recovered through monthly charges), its network and the specifics of each connection.
- 6.26. Given these factors, it is appropriate to consider a targeted approach that:
 - (a) uses the available information-base to screen for recurring high up-front costs— ie, where data indicates a *potential* efficiency problem. Examples may include where reliance is high (compared to other distributors) or increasing strongly. Screening could also identify charges that may be inefficiently low (ie, below the neutral point). Screening would be ongoing as new information becomes available
 - (b) enables an in-depth and nuanced analysis of where there are high up-front costs to confirm whether there is a pricing efficiency issue or other factors are at play, such as atypical connection activity or input cost trends. This step would also provide an opportunity for distributors to voluntarily address any areas of concern.
 - (c) where necessary, requires directing a distributor to amend their pricing and, where relevant, requesting the Commerce Commission to reconsider the distributor's revenue path.⁵⁸
- 6.27. This approach would focus resources more effectively, avoid any impact on most distributors (other than deterring adverse changes to pricing methodologies) and enable closer scrutiny and a tailored, supervised resolution of problem areas.⁵⁹
- 6.28. This approach could also be used to address instances of inefficiently low charges ie, where costs allocated to connections are below incremental costs (such that existing customers are made worse off by new connections).⁶⁰

Allocation limits

- 6.29. The mandatory connection pricing methodologies that will come into effect from 1 April 2026 include a standardised methodology for estimating the incremental cost of each connection and the incremental revenue it will generate.
- 6.30. This opens up the opportunity to consider applying constraints using metrics more directly relevant to pricing efficiency.

The Authority may ask the Commerce Commission to reconsider a non-exempt distributor's revenue path to take account of a decision by the Authority under the Code that relates to or affects pricing methodologies. Refer s54V(5) of the Commerce Act 1986. The Commission may be involved if reducing connection charges increases net capex for a non-exempt distributor. This may prompt a revenue path reconsideration process.

⁵⁹ For more information on how targeted intervention would operate, refer to Section 7.

Detecting inefficient low connection charges involves understanding the value of both capital and in-kind contributions.

- 6.31. For example, connection charges could be capped at 95% of incremental cost noting:
 - (a) Efficient connection charges would typically be well below 95% of incremental cost. This is because monthly lines charges are typically high enough to recover a large share of incremental costs (while also contributing to network costs).
 - (b) The efficient level is not a fixed amount, and varies by connection (eg, higher for higher-cost connections), consumer group (ie, higher for consumer group with low lines charges) and distributor (ie, higher for distributors with an extended history of high up-front contributions and hence low lines charges).
 - (c) The Authority does not yet have a dataset of charge reconciliation disclosures to use as a baseline to inform tailored limits.
- 6.32. While this approach is more direct than using reliance limits it does not fully address the challenges of using high-level sector-wide limits. In addition, the standardised methodology is new and may take some time to bed-in and mature enough to provide a reliable basis for this type of approach.

Other variations

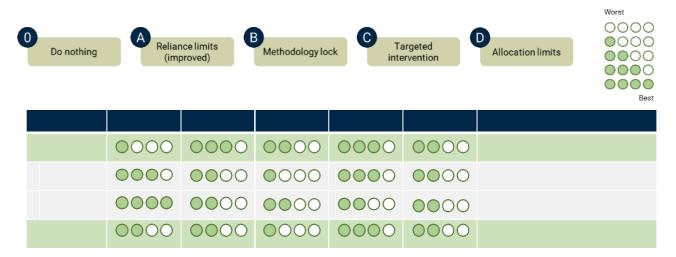
- 6.33. The Authority also considered a variation on the improved reliance limits where limits only apply to a subset of distributors ie, targeted reliance limits. Its view is that this option is not superior to targeted intervention because:
 - (a) while it would remove adverse chilling effects and costs for non-targeted distributors, it would also be ineffective at deterring inefficient increases by those distributors
 - (b) the information-base available for targeting is poor, so the targeting would be less effective than the targeted intervention option (and the method of control is cruder).
- 6.34. One further option considered is focusing on further reform and building in flexibility to bring forward the implementation date (ie, ahead of April 2030) for specific distributors where there are inefficiently high up-front costs. In practice, this option is very similar to targeted reform but with less prospect of achieving improvements from 2028 (ie, since intervention becomes dependent on progressing a larger and more complex policy development programme).

Evaluation

- 6.35. A qualitative evaluation has been completed to consider three criteria for each of the options described above. The criteria are:
 - (a) Effectiveness how well the option responds to the case for intervention by restraining inefficient connection charges. This criterion relates to the benefits of the option in terms of improving the extent to which connection charges promote efficient operation of the electricity industry for the long-term benefit of consumers.
 - (b) Cost the costs to develop and operate the option. The scope of consideration includes costs borne by impacted distributors, regulators (Commerce Commission and Electricity Authority), and the distribution sector as a whole

- (c) Risk the risks associated with the option. The scope of consideration includes the risk of unintended adverse consequences, such as chilling connection pricing improvements or distorting connection activity.
- 6.36. Figure 6.1 below depicts the evaluation of the options. The preferred option is targeted intervention. This deters adverse pricing changes across all distributors and directly reduces inefficiently high charges. Risks are mitigated through distributor-specific intervention and engagement. Resourcing is similar to other options overall, but higher for distributors with high connection charges and lower for others.

Figure 6.1 – Option evaluation



- 6.37. Compared with the preferred option we note the following in relation to the other options:
 - (a) Do nothing unlikely to fully restrain increases because it does not set hard limits and does not trigger revenue path reconsideration (hence locking-in forecast increases). Allows resourcing to focus on longer-term reform and does not trigger new risks beyond those shaped by the fast-track measures and current revenue paths. **Moderate** overall rating
 - (b) Improved reliance limits while improvements increase effectiveness and mitigate risk compared to original reliance limit proposal including by capturing changes to in-kind contribution policies and using an *ex post* compliance test, effectiveness is lower and risk is higher compared to preferred option. Pervasive compliance impact on all distributors, and additional regulatory administration (eg, for in-kind contribution and bespoke baseline assessments). **Moderate** overall rating
 - (c) Methodology locks limited effectiveness and risk of chilling efficiencyenhancing pricing methodology improvements. **Low** overall rating
 - (d) Allocation limits moderately effective, though depends on design (cap level and exceptions). Risk of miscalibration. Moderate resourcing impact and moderate overall rating.

- 6.38. The Authority's preferred option is targeted intervention, since it focuses resourcing where it is most needed, allows for nuanced consideration of distributor-specific issues and directly targets areas of concern. This option:
 - (a) deters all distributors from making changes that would reduce their connection pricing efficiency
 - (b) for distributors with inefficiently high charges, starts bringing charges down from as early as 2028 two years ahead of the target date for further reform. This brings forward the benefit of lower connection charges, while (potentially) lowering their 'peak' level and enabling a more rapid unwinding back to levels that support efficient connection activity that benefits consumers.
- 6.39. In assessing the Authority's suite of options, CEPA considers that there are good arguments for a targeted rather than an aggregate approach to constraining the level of up-front connection charges.
- 6.40. CEPA identified that one of the key risks associated with reliance limits is the potential to adversely impact incentives for distributors to proceed with connections. This risk may be mitigated with the combination of a targeted intervention and a requirement to offer to connect. Overall, CEPA is of the view that a targeted intervention based on the balance point principle is preferred over other options considered.
- 6.41. The next section elaborates on the potential design of a targeted intervention option.

Q4. Do you agree with the Authority's evaluation of the options? Why, why not? Do you have any feedback on the expected impact if the status quo remains?

7. Proposed Code amendment – balance point principle

- 7.1. The Authority is proposing a change to the Code that would introduce a form of targeted intervention centred around balance point pricing ie, pricing where shared costs allocated to new connections are commensurate with shared costs met by similar existing users.
- 7.2. The amendment is designed to identify and address instances where connection charges are inefficiently increasing due to a distributor allocating more shared network costs to new connections ie, where connection pricing is above the balance point.
- 7.3. The intervention could be designed to address other cases where:
 - (a) there is a concern connection charges are too low causing new connections to be subsidised by existing users referred to in this paper as pricing below the 'neutral point'⁶¹
 - (b) connection charges are at a high level (even if not increasing). This can inefficiently deter connection demand, exacerbate coordination challenges and increase the cost of financing connection investment.⁶²
- 7.4. For now, the Authority is focusing on the balance point issue. Broader connection pricing efficiency will be addressed via the further reform process. This approach aligns with the objectives of the earlier reliance limit proposal and is consistent with using interim measures in a targeted way.
- 7.5. CEPA's view is that an intervention based on the balance point principle is consistent with sound regulatory policy as it prevents a form of inter-temporal price discrimination (for selected distributors).
- 7.6. The proposed amendment enables a multi-step targeted intervention process:
 - (a) scanning available information to identify where there may be inefficiently high up-front charges. This is an ongoing process because the information-base will change over time and because distributors may change their connection pricing methodologies at any time⁶³
 - (b) deeper inquiry into identified high up-front charges. This would involve information-gathering and analysis to determine whether the pricing is of concern, and if so, whether further intervention by the Authority is warranted
 - (c) changes to connection pricing where intervention is warranted. This involves the Authority directing a specific distributor to update its pricing in accordance with the balance point principle and, if applicable, asking the Commerce Commission to reconsider the distributor's revenue path.
- 7.7. The Authority considers this will promote the long-term benefit of consumers by supporting more new and upgraded connections that both cover their own cost (over time) and contribute to shared costs.

Neutral point pricing means income from connection charges and lines charges are just enough to cover the incremental cost of a new connection. In other words, the net (of income) incremental cost of a connection is zero. This is the lower bound, 'floor' of the subsidy-free range, and means existing users are made no worse off (and no better off) by new connections.

⁶² Coordination challenges include overcoming first mover disadvantage, investing in anticipatory demand and overcoming final-straw deterrence.

Distributors may change their connection pricing methodologies but from 1 April 2026, must comply with the mandatory connection pricing methodologies under Part 6B of the Code.

7.8. Each step in the process, and the corresponding proposed Code changes, are described below.

Scanning for potential connection pricing efficiency concerns

- 7.9. The aim of this step is to identify pricing that warrants deeper examination.
- 7.10. Scanning would predominantly rely on already-disclosed information, including:
 - (a) Connection pricing methodology documents. Relevant material may be distributed across multiple documents, including capital contributions policy, vested assets policy and distribution pricing methodology. These documents should collectively explain the 'what', 'why', and 'how' of a distributor's approach to allocating costs to connection applicants
 - (b) Charge reconciliations from April 2026, distributors will begin preparing standardised breakdowns of incremental costs, incremental revenue and network contribution for each connection quote. Distributors will be required to provide these reconciliations to the Electricity Authority, along with supporting information (such as capacity costing rates and capacity demand assumptions). This will provide new insight into connection charges, including how they compare between connections, consumer groups and distributors
 - (c) Information disclosures distributors provide additional quantitative disclosures to the Commerce Commission that are publicly available. Relevant information includes forecast and actual aggregate capital contribution amounts (by type), capital expenditure amounts (by type) and lines charge revenues (by consumer group).
- 7.11. These sources of information may be complemented by engaging with a distributor to test or clarify observations, and reviewing a distributor's asset management plan to understand the context for the above information.
- 7.12. Scanning should be an ongoing process, because:
 - (a) new information will become available over time, including annual information disclosures and charge reconciliations
 - (b) distributors will change their methodologies and pricing practices over time
 - (c) continuing to scan extends the effectiveness of the intervention as a deterrent to adverse connection pricing changes.
- 7.13. The focus is to identify distributors whose pricing requires new connections to pay a materially higher contribution to shared network costs than comparable existing connections ie, the pricing does not align with the proposed connection charge balance point principle.
- 7.14. This paper uses the term 'shared network costs' to refer to the balance of costs that are not incremental to a single connection, including:
 - (a) Communal network development costs ie, network establishment costs not recovered incrementally from new connections. This may include the cost of establishing a grid connection, putting higher-voltage network elements in place and, in some cases, putting low-voltage network reticulation in place.
 - (b) Asset renewal costs distributors typically recover renewal costs through lines charges, including the cost of end-of-life replacement for assets that were originally funded through connection charges.

- (c) Residual costs any other costs not recovered through connection charges or fees. This may include residual costs of network capacity, business support, telecommunications, monitoring and control systems, network resilience, system operations and network support, non-network assets, local government rates and levies, transmission charges, regulatory incentive adjustments, and innovation projects.
- 7.15. In assessing whether charges are too high, it is noted that:
 - (a) The focus is at pricing policy and methodology level, rather than individual connection quotes. However, information regarding individual connections, connection types, or consumer groups may be relevant.
 - (b) 'Comparable' connections means connections with similar incremental costs and consumer group.
 - (c) Allocation trend (year-on-year) is relevant to whether charges are high, because historical allocation settings impact the level and make-up of lines charges and therefore the total cost paid by new connections (ie, new customers contribute to historical connection costs via their lines charges).
 - (d) Balance point pricing implies allocation levels are stable over time if there is no change in the type of connection activity (eg, more high-cost connections), relative input cost levels (ie, between connection activity inputs versus other capex or opex inputs) or allocation of shared network costs between consumer groups.
 - (e) Decreases may be efficient if the starting point is overly high allocation levels. This is because the flow-on impact of reduced allocations on existing customers is more muted and disperse than the direct benefits for connection activity. Provided pricing remains subsidy-free, new connections remain beneficial for consumers overall.
 - (f) Increases are efficient where they are needed to prevent new connections from being subsidised.

Inquiries into potential connection pricing efficiency concerns

- 7.16. The inquiry stage involves more in-depth analysis by the Authority to determine whether an upward trend identified through scanning is actually of concern recognising that initial observations may be explained by factors other than pricing above the balance point.
- 7.17. This step is valuable because information available for scanning does not provide a full picture, for example:
 - (a) A trend of increasing contributions could be explained by a change in policy (ie, the portion of network costs allocated to connections) or a change in activity (eg, more remote, large or complex connections with high incremental costs). The former may be of concern, whereas the latter would not.
 - (b) High observed reliance in a given year could be explained by lumpy investment activity or mismatches in timing of accounting recognition between contributions and expenditure. In either case, this may not be of concern in terms of pricing efficiency.

- 7.18. The inquiry phase could involve the Authority:
 - (a) advising the affected distributor that its pricing is being examined, and providing an explanation of the observations that indicate potential pricing efficiency concerns
 - (b) requesting information, analysis and explanations from the distributor to help test whether there are any connection pricing efficiency concerns
 - (c) engaging with access seekers within the distributor's network to gather additional information about the impact of connection charge increases
 - (d) consulting with the Commerce Commission on information disclosure and revenue control implications
 - (e) preparing a preliminary report setting out findings, which may identify concerns, or explain why the Authority considers pricing is not of concern
 - (f) providing an opportunity for the distributor to voluntarily address or otherwise respond to preliminary findings
 - (g) making (and publishing) a formal decision on whether to direct a distributor to amend its pricing by being required to comply with the connection charge balance point principle.
- 7.19. In deciding whether to issue a direction, the Authority would be required to consider:
 - (a) the materiality of the identified efficiency concern eg, how much is allocation shifting and how quickly
 - (b) distributor size and connection application volumes
 - (c) any steps the distributor has committed to take to voluntarily address preliminary findings.
- 7.20. The Authority would provide its direction to the distributor ahead of making it publicly available. The public decision may or may not be anonymised.

Implementing targeted intervention

- 7.21. A decision to direct a distributor to amend its pricing is likely to clearly set out:
 - (a) an explanation of the Authority's analysis of area(s) of concern
 - (b) a direction to the distributor to reform and rebalance its connection pricing to address the concern(s)
 - (c) a timeframe over which the distributor must reform and rebalance its pricing.
- 7.22. For non-exempt distributors, the Authority may also request the Commerce Commission to reconsider the distributor's revenue path. This is because reducing connection charges increases the portion of connection costs recovered over the life of the connection through lines charges.

Proposed Code amendment

- 7.23. Appendix B sets out the proposed Code amendments, and Section 9 provides a regulatory statement assessing the proposed amendments.
- 7.24. The amendments:
 - (a) define a 'connection charge balance point principle' that connection charges should be '...set at a level such that the contribution to shared network costs

- from new connections is commensurate with the contribution from existing connections'
- (b) enables the Authority to direct a distributor to amend its pricing to make it consistent with the principle within a specified timeframe if the Authority considers the distributors has not applied, or is not likely to apply, the connection charge balance point principle, provided the Authority has carried out certain specified steps first
- (c) requires the Authority, as a specified step, to advise a distributor if it plans to examine a potential breach and explain the information and analysis that prompted the examination
- (d) requires the Authority, as a specified step, before directing a distributor, to share a draft report explaining its decision and providing an opportunity for the distributor to respond
- (e) includes a sunset clause so that the new clauses expire on 1 April 2030, by which time more comprehensive and enduring connection pricing reform may be in place.
- 7.25. While the proposed Code amendments expire on 1 April 2030, potentially superseded by further reform, a direction issued under the proposed amendments would continue to have effect.
- 7.26. We are seeking feedback on the proposed Code amendments, including technical feedback on the drafting.

Next steps

- 7.27. Subject to submissions, a decision on whether to finalise the Code amendment is expected to be made by the middle of 2026.
- 7.28. This provides 18 months to the end of 2027 for a process of screening, inquiry, direction, revenue path reconsideration and connection pricing methodology amendment. This means changes to connection quotes (for a distributor subject to a direction) could be in place from pricing year starting April 2028.

Q5. Do you have any comments on the proposed Code amendment and approach to implementation?

8. Impact analysis – balance point principle

8.1. This section outlines consumer impacts of the targeted intervention proposal, which are summarised in Table 8.1.

Table 8.1 – Summary of impacts

Impact	Comment	Quantification
Administrative costs	Includes examining pricing, developing directions, and implementing pricing changes (including revenue path reconsideration) for a subset of distributors.	Dependent on scope of re-forecast and reconsideration required
Financing task	Impacted distributor has to finance a larger regulatory asset base	Indicative scenario impact on RAB and RAB per connection
Lines charges	Reduction in portion of shared costs shifted to access seekers.	Indicative scenario impact on MAR and MAR per connection
Connection charges	Reduction in connection charges	Indicative scenario impact on charge per connection and estimate per household

- 8.2. The impact analysis uses an indicative scenario based on reducing Vector's connection charges by 25% in 2028/29 and 35% in 2029/30 (compared to Vector's latest projections). The selected reductions are broadly equivalent to holding connection charges at 2026/27 levels.
- 8.3. The analysis focusses on Vector because it has the most customers, is projecting steep connection charge increases, and is included in the Commerce Commission's DPP4 financial model (which we have used for the impact modelling).
- 8.4. For the 2029/30 year, the indicative scenario shows (in 2024/25 dollar terms):
 - (a) \$5.7k (35%) reduction in average cost of a new connection (\$60.4m in total)
 - (b) \$104m (2.1%) increase in Vector's financing task
 - (c) \$6.4m increase in lines charges
 - (d) \$0.66 (0.7%) increase in monthly lines charge for an average household.
- 8.5. The indicative scenario only considers direct impacts up to the end of DPP4. Impacts beyond DPP4 will be influenced by factors including the compounding impact of RAB growth, ageing of new connection assets (which reduces their impact on lines charges) and behaviour changes (including connection volumes and underlying cost per connection).
- 8.6. Overall, the modelled impact for the indicative scenario is material for access seekers and comparatively small for distributors and existing customers.

Context - wider reform programme

- 8.7. It is important to consider the impact of the proposed Code amendment in the context of the Authority's full distribution pricing work programme.
- 8.8. Distribution network access arrangements, including connection pricing, are important for the future growth and evolution of the electricity system, and to wider economic outcomes supported by the electricity system. Improving connection pricing is necessary to help realise important benefits for consumers including:
 - (a) streamlining connection processes, leading to more timely and lower-cost growth in new connections and connection upgrades.
 - (b) strengthening incentives for efficient investment by distributors and access seekers, leading to better network planning and lower-cost network development.
 - (c) avoiding very low connection charges that result in existing users on the network subsidising newcomers. Fast-track measures provide a stepping stone to full removal of such subsidies. This means every new connection (or connection upgrade) will benefit existing users spreading network costs across a wider customer base.
 - (d) avoiding excessively high connection charges that inefficiently elevate the cost of new housing, business growth and electrification. Fast-track measures provide a stepping-stone to full removal of such pricing, and the proposals in this paper may bring forward this transition for some distributors.
- 8.9. On the final point, there is a superficially appealing logic to loading costs onto newcomers because at first glance, this creates a gain for existing users. However, it also creates costs and risks that may be less obvious but are nonetheless important.
- 8.10. While electricity network connection may be a small portion of the overall cost of new housing, it is not insignificant and it is reasonable to assume connection costs (and coordination frictions) flow through to housing costs and supply.
- 8.11. For business growth, the materiality of network connection as an input cost varies significantly. However, nearly every new business premises will require a network connection, so high connection charges have a pervasive impact on business growth.
- 8.12. Many households (and smaller businesses) can electrify without needing to alter their connection eg, they can charge an electric vehicle and switch from gas to electric heating without incurring connection charges. Provided distributors have cost-reflective tariffs, the cost impact of such electrification is recovered through changes in those consumer's ongoing charges. Connection charges should not allocate these non-connection growth costs to newcomers.
- 8.13. For most other electrification investments, network costs are a material input cost component that can alter the viability of decarbonisation. This includes electrification of public transport and shipping, public EV charge-points, fast charging at depots and workplaces, and process heat electrification.
- 8.14. The impact of these proposals on consumers will vary between distributors, and between consumers (including between connection applicants, and between newcomers and existing users).

- 8.15. However, the overall impact of our proposals is positive because when connection pricing is both cost-reflective and subsidy-free:
 - (a) Economic connections are supported where the benefits of access to lines services outweigh the costs. This is particularly relevant to large connections, electrification projects, and remote connections ie, where connection costs are material.
 - (b) Uneconomic connections are deterred. Even with an obligation to offer connections, cost-reflective pricing means applicants need to weigh up the cost of obtaining a connection versus their alternative options, including self-supply.
 - (c) If connection charges are not too high, then connection activity is not suppressed. Since charges are above the neutral point, more connection activity means greater spreading of fixed costs (ie, lower lines charges per customer).
 - (d) Some existing customers may face higher lines charges if connection charges are reduced back to the balance point, but only due to removal of a cost-shifting gain that is detrimental to connection activity.
 - (e) Balance point pricing is consistent with non-discriminatory pricing, which enhances efficiency by supporting the ability for access seekers to plan for and invest in new and upgraded connections.

Balance point principle

- 8.16. The proposed Code amendment would have no impact on most distributors and customers, other than to deter un-forecast increases in the portion of shared network costs allocated to new connections.
- 8.17. For some distributors this could mean less flexibility to use allocation changes as a lever for managing un-forecast increases in investment pressures. This is beneficial in terms of connection pricing efficiency and still leaves distributors with a range of regulatory and capital management options for managing investment pressures.
- 8.18. For some distributors, the Code amendment would lead to engagement with the Electricity Authority to provide information, analysis and explanations of their connection pricing. This would only apply to distributors whose available disclosures point to the potential for inefficient pricing.
- 8.19. For one or more distributors, the proposed targeted intervention framework could lead to a direction to change their connection pricing to reverse a trend of increasing allocations ie, to move back toward balance point pricing. Those distributors would need to:
 - (a) implement amended connection pricing
 - (b) potentially engage with the Commerce Commission on reconsideration of their revenue path
 - (c) potentially revisit their capital management eg, by retaining a larger portion of their earnings or raising additional funding to support an increased financing task.
- 8.20. Access seekers for affected networks could potentially delay their applications if they are aware that connection charges will decrease. This could cause a temporary dip in connection activity, followed by a rebound. Lower charges may

also increase connection volumes overall by making network access more affordable. These dynamics are not assessed in the impact analysis below.

Indicative impact

- 8.21. Changes in connection pricing have a material impact on connection costs, and a more muted impact on lines charges paid by new and existing customers. This is because the value of the network is high compared to the annual cost of connection works, and the number of new and upgraded connections each year is small compared to the total number of connections.
- 8.22. To provide an indication of how these dynamics interact, the tables below show estimates of how Vector's customers would be impacted in a scenario where Vector reduces its connection charges. Vector is forecasting large increases in connection charges, so impacts are toward the upper end of the range for all distributors.

Table 8.2 – Indicative impact scenario for Vector (2024/25 dollars)

	2028/29	2029/30
Forecast reliance level (%)	117%	142%
Forecast total connection charges - baseline (\$m) ¹	\$178m	\$172m
Reduction scenario (%)	25%	35%
Reduction scenario (\$)	\$44m	\$60m
Scenario increase in forecast value of commissioned assets ²	18%	25%

Notes:

- Sourced from Vector's RY25 disclosures. Sum of capital contributions for consumer connections and system growth.
- 2. Compared to the financial model used to determine Vector's current revenue path
- 8.23. This scenario ('Reduction scenario') brings Vector's reliance level back to around 90% for the two adjusted years, compared to forecast levels ('Forecast reliance level') for those years well above 100% and the current level of around 80%.
- 8.24. The impact of this scenario on connection charges is shown in Table 8.3.

Table 8.3 – Scenario impact on average charge per connection on the Vector network (2024/25 dollars)

	2028/29	2029/30
Forecast average charge per connection (\$m) ¹	\$13.7k	\$16.5k
Reduction in average charge per connection (%)	25%	35%
Reduction in average charge per connection (\$)	\$3.4k	\$5.8k

Notes:

 Connection additions sourced from Vector's RY25 disclosures. Assume 0.5% of connections are permanently removed each year, based on RY25 data. Current number of connections sourced from EMI metering data.

- 8.25. The reduction in average connection charge ('Reduction (\$)') is relatively material and could make a difference to connection activity ie, whether, how quickly or how many connections occur. It is expected that the reduction for most connections would be lower than the average, while reductions may be much larger for some connections.
- 8.26. If Vector's revenue path was adjusted to allow recovery of its increased asset financing costs for each of these years, the average (per connection) impact on distribution charges would be as shown in Table 8.4.⁶⁴
- 8.27. Average distribution per user is the total distribution revenue divided by the number of network connections. The 'base case' calculation is based on the DPP4 allowances and recent information disclosures. This 'scenario' utilises the DPP4 model to recalculate the revenue allowance assuming an increases in maximum allowable revenue (MAR) to offset a reduction in connection charges by 25% for 2028/29 and 35% in the 2029/30. The year-on-year movement is the increase from one year to the next. As the increases in MAR for DPP4 were smoothed across the regulatory period the rate of change in real dollars is above the forecast inflation rate.

Table 8.4 – Scenario impact on average distribution cost per user on the Vector network (2024/25 dollars)

	2028/29	2029/30
Average distribution cost per user – base case	\$1,043	\$1,108
Average distribution cost per user – scenario ¹	\$1,047	\$1,117
Year-on-year movement – base case	5.9%	6.2%
Year-on-year movement – scenario	6.3%	6.8%

Notes:

 Analysis does not assume any immediate change in connection volumes or cost efficiency due to the reduction in connection charges.

The per-user impact is averaged across all users, including large consumers. The projected impact on household bills, based on an estimate of the current relationship between average cost per user and the average household bill, is shown in

8.28. Table 8.5.

In this scenario, the Authority assumes building block allowable revenue is updated for Vector's current forecast connection costs. It would be more consistent with the Commerce Commission's regulatory arrangements to use Vector's forecast from the time the current revenue path was determined. It is not expected that this would make a material difference to this indicative scenario.

Table 8.5 – Scenario impact on average household across the Vector network (2024/25 dollars)

	2028/29	2029/30
Average lines charge per household – base case ¹	\$1,113	\$1,172
Average lines charge per household – scenario	\$1,115	\$1,180
Scenario impact (annual)	\$2.63	\$7.90
Scenario impact (per month)	\$0.22	\$0.66

Notes:

- Transmission component is estimated by allocating Vector's transmission charges by estimated residential share of kWh. Vector's transmission charges assumed to increase in line with Transpower's approved revenue.
- 8.29. Household impact for existing customers on Vector's network under the above scenario is small, \$2.63 excluding GST per year in 2028/29 and \$7.90 excluding GST per year in 2029/30. This reflects the size of the existing customer and asset base compared to the volume and cost of connection work.
- 8.30. This scenario does not model flow-on impacts, which could include:
 - (a) potential for some access seekers to delay connection applications from 2027 in anticipation of lower charges
 - (b) an ongoing increase in the volume of connection activity due to lower connection charges
 - (c) ongoing reductions in the underlying cost per connection due to the distributor having a greater exposure to those costs, and hence stronger incentive to manage design and construction costs.
- 8.31. The per-user impact increases from 2028/29 to 2029/30 due to the compounding effect of adding more commissioned assets each year. The impacts beyond 2030 have not been modelled because they are less certain. This is because:
 - (a) for non-exempt distributors, 2030 is the start of the next regulatory period. This means the Commerce Commission will determine new revenue paths with an updated cost of capital and potentially other changes and adjustments, such as revenue smoothing
 - (b) there are no robust baseline forecasts for the years beyond 2030
 - (c) the potential ongoing flow-on impacts are also likely to grow over time, which would increase or decrease the overall impact on existing users
 - (d) over a longer horizon, a new connection has a declining per-user impact because the new connection assets depreciate and produce a declining revenue uplift as they age.

Additional analysis

- 8.32. The Authority is undertaking additional analysis to explore contextual issues such as potential longer-term impacts of the proposal on consumer electricity prices. This will be provided in a supplementary technical appendix.
- 8.33. The additional analysis allows more dynamic scenario modelling compared to the near-term indicative impact analysis set out in the previous subsection. This analysis can also act as a useful decision support tool to guide application of proposed targeted reform and contribute to design of potential further reform.

9. Regulatory statement for the proposed amendment

9.1. This section provides the Authority's regulatory statement. In summary, our view is that the proposed Code amendment is consistent with the efficiency limb of our main statutory objective and necessary or desirable to promote the efficient operation of the electricity industry to deliver long-term benefits to consumers.

Objective of the proposed amendments

- 9.2. The proposed amendments introduce a mechanism for directing a distributor to reduce its connection charges if the distributor is requiring new connections to make a larger contribution to shared network costs (ie, costs over and above incremental cost) than existing connections.
- 9.3. The objective is to improve efficiency by reducing overly high distribution network connection costs ahead of planned further reform from 2030.

The proposed amendments

- 9.4. The Authority proposes, subject to the results of consultation, to introduce new Code provisions as described in preceding chapters and set out in Appendix B.
- 9.5. In summary, the proposed amendments:
 - (a) introduce a 'connection charge balance point principle' that new connections:
 - i. at least cover their incremental cost, and otherwise
 - ii. make a contribution to shared network costs that is commensurate with (or lower than) similar existing connections
 - (b) enables the Authority to direct a distributor to amend its pricing to make it consistent with the principle
 - (c) requires the Authority to provide a distributor with information if it is intending to investigate whether to issue a direction
 - (d) requires the Authority to provide a distributor with a draft report before issuing a direction, and to allow the distributor an opportunity to respond (including an opportunity to commit to voluntarily addressing issues identified in the draft report).
- 9.6. The proposed amendments would expire from April 2030.

The benefits of the proposed amendment are expected to outweigh the costs

- 9.7. Costs for distributors and benefits for consumers will vary across the following groups of distributors:
 - (a) unaffected most distributors will be unaffected
 - (b) deterred some may be deterred from increasing connection charges
 - (c) examined some will be examined, with the Authority concluding that pricing either does not conflict with the balance point principle or that action ahead of 2030 is not otherwise warranted
 - (d) amended a small number of distributors may be directed to amend their pricing or may otherwise elect to amend their pricing following an examination.

- 9.8. For deterred distributors, the reasons a distributor may increase its connection charges within a regulatory period would be to:
 - (a) Remove a subsidy if existing pricing results in new connections not covering their incremental cost (over the lifetime of the connection), then a distributor may increase charges to remove the subsidy and deter inefficient connection activity.
 - (b) Obtain windfall gain once a revenue path is set, a distributor can increase its total revenue by shifting costs to connection applicants. If the distributor is non-exempt, then a portion of the gains will be returned to consumers in the following regulatory period. If the distributor is exempt, then it has discretion as to how it allocates the windfall.
 - (c) Manage pressures increasing connection charges is a lever for managing funding pressures, for example, if costs are higher than assumed when setting a revenue path or if the distributor has difficulty sourcing financing.
- 9.9. Increasing connection charges to remove a subsidy is beneficial and is not deterred by the Code amendment.
- 9.10. Deterring an increase in connection charges for windfall gains is beneficial to consumers because, in this case, the windfall brings a risk of deterring efficient (subsidy-free) connection activity that would efficiently grow the use of the network.⁶⁵
- 9.11. Deterring use of connection pricing as a lever for managing funding pressures is acceptable in the context that:
 - (a) increasing connection charges is detrimental to efficient connection activity
 - (b) distributors have other levers available, such as:
 - prioritising across their investment programme (and opex programme) to accommodate pressures on capex envelopes
 - ii. regulatory mechanisms, including reopeners and customised price-quality paths
 - iii. capital management options, such as raising debt, applying retained earnings or raising equity.
- 9.12. Removing access to an inefficient lever that has detrimental impacts on connection activity is likely to be beneficial overall, given other levers remain available.
- 9.13. Distributors that are examined without any resulting action will incur costs associated with servicing the examination. This may include:
 - (a) preparing data and analysis
 - (b) engaging with the Authority
 - (c) coordinating a response.
- 9.14. The Authority considers such activity will still result in benefits, by giving the Authority and customers confidence that the distributor's pricing is not inefficient, applies the balance point principle or otherwise does not warrant intervention at this time. In some cases, the outcome of the examination may be to develop an

Increasing the number of connections to the network can allow for lower cost provision of electricity to consumers through economies of scale and spreading shared cost recovery across a larger customer base.

- improved understanding of how connection pricing efficiency could be improved from 2030. The examination also helps ensure intervention is well targeted ie, that constraint is not applied in cases where connection pricing is already efficient.
- 9.15. In assessing the proposed targeted intervention, CEPA notes the benefit of an 'investigation' or examination phase to gather more evidence prior to directing a distributor to amend its connection pricing. However, they highlight that:⁶⁶

The key disadvantage of this approach is that the process is likely to be associated with administrative cost both for the Authority and any EDBs identified at the screening stage. On the other hand, costs will be lower for EDBs not selected.

- 9.16. For a small number of distributors, the Code amendment may ultimately result in changes to their connection pricing ahead of 2030. This will only occur where the Authority considers that:
 - (a) Connection charges are inefficiently high.
 - (b) The benefit from reducing charges ahead of 2030 warrants the associated costs.
- 9.17. For non-exempt distributors, the costs include revenue path reconsideration ie, administrative costs for the distributor and the Commerce Commission of reconsidering, and potentially amending, the distributor's revenue path.⁶⁷
- 9.18. Costs for a revenue path reconsideration depend on the magnitude and complexity of changes to the distributor's capital contributions forecast. However, the statutory purpose of the default price-quality path regime is to provide a "...relatively low-cost way of setting price-quality paths". 68
- 9.19. For all distributors, costs would include developing and implementing an amended connection pricing methodology.
- 9.20. For some distributors, the amendment may also prompt an adjustment to capital management policy or to shareholder distributions (ie, as more earnings are retained in the near-term to put toward funding connections). Whether this is the case depends on the distributor and the Commerce Commission's assessment of whether and how the revenue path should be amended.
- 9.21. In practice, material changes to capital management seem unlikely in the near-term given:
 - (a) at the earliest, rebalancing of funding away from connection charges would start from April 2028 and impact only the final two years of the current regulatory period
 - (b) capital contributions are small relative to regulatory asset bases (RABs).
- 9.22. To illustrate the last point, Table 9.1 indicates how the size of Vector's financing task would be impacted by a requirement to reduce connection charges by 25% from April 2028 and 35% from April 2029 (indicative percentage reductions).

Refer to Appendix C CEPA independent report

There may be costs associated with staff and governance time or reprioritisation of activities.

⁶⁸ Section 53K of Commerce Act 1986.

Table 9.1 – Illustrative impact on financing task

Value	2028/29	2029/30
Forecast connection charges (\$m) ¹	\$193m	\$191m
Reduction (%)	25%	35%
Additional capex (\$m) ²	\$48m	\$67m
Additional capex (%)	18%	25%
Original closing RAB (\$m) ³	\$5,219m	\$5,388m
RAB increase (\$) ⁴	\$48m	\$115m
RAB increase (%) ⁴	0.9%	2.1%

Notes:

- 1. Sourced from most recent available forecast of capital contributions. Sum of capital contributions for consumer connections and system growth. Nominal terms.
- 2. Assumes no behaviour change, so increase in value of commissioned assets equals reduction in connection charges.
- 3. Sourced from DPP4 financial model, 'aggregate closing RAB value' from 'RAB' tab.
- 4. Derived by adjusting 2028/29 and 2029/30 'value of commissioned assets' in the 'Inputs' tab.
- 9.23. In this indicative example, RAB growth remains modest after reducing connection charges ('Growth in RAB per connection scenario'). To provide further context, Table 9.2 compares the growth in RAB value per connection (in real terms) between the baseline and scenario cases.

Table 9.2 – Scenario impact on real growth in RAB per connection

Value	2026/27	2027/28	2028/29	2029/30
Growth in RAB per connection – baseline	1.6%	0.2%	-0.9%	-0.5%
Growth in RAB per connection – scenario	1.6%	0.2%	0.1%	0.7%

- 9.24. In this instance, the impact of reducing connection charges is to hold RAB value per connection at a small positive value (between 0% and 1%) across the last two years of the period.
- 9.25. This impact comes from reallocating a portion of financing task associated with distribution networks from connection applicants to the distributor. This should result in a reduced financing cost overall because:
 - (a) The cost of capital for investment in distribution network services is low compared to the cost of capital available to most connection applicants.
 - (b) Most connections have a strong revenue generating potential beyond the initial applicant. As such, the distributor's risk exposure across a volume of connections is relatively low.

(c) As illustrated by the scenario, changes in connection charges have a relatively muted impact on the scale of a distributor's financing task.

Alternative means of achieving the objective

- 9.26. The preferred proposal is compared to two alternatives:⁶⁹
 - (a) do nothing fast-track measures are implemented in 2026 and 2027, with no further intervention ahead of potential further reform from 2030
 - (b) improved reliance limits the next best option from the evaluation of connection pricing options.
- 9.27. Compared to targeted reform, doing nothing is expected to result in:
 - (a) Inefficiently high charges for consumers seeking new or upgraded connections in areas where the local distributor has increased (or is planning to increase) shared network costs allocated to connections.
 - (b) The risk that a greater number of distributors will inefficiently increase shared network costs allocated to connections, impacting a larger number of consumers.
 - (c) Avoided administrative costs associated with examining, directing and amending pricing.
- 9.28. Compared to targeted intervention, improved reliance limits would be expected to result in:
 - (a) Less effective constraint of distributors with inefficiently high connection charges.
 - (b) Administrative costs for all distributors associated with ensuring compliance with reliance limits
 - (c) Administrative costs associated with reviewing vested asset policy changes and applications for adjusted reliance limits.
- 9.29. Overall, it is expected the alternative options are less cost-effective at addressing inefficiently high connection charges.

The proposed amendments comply with section 32(1) of the Act

- 9.30. Section 32(1) of the Act says the Code may contain any provisions that are consistent with the Authority's objectives and are necessary or desirable to promote one or all of the factors set out in Table 9.3.
- 9.31. The Authority's main objective under section 15 of the Act is to promote competition in, reliable supply by, and efficient operation of, the electricity industry for the long-term benefit of consumers. The Authority's additional objective is to protect the interests of domestic consumers and small business consumers in relation to the supply of electricity to those consumers. The additional objective applies only to the Authority's activities in relation to the dealings of industry participants with domestic consumers and small business consumers.
- 9.32. The Act defines consumer as 'any person who is supplied, or applies to be supplied, with electricity other than for resupply'. This includes applicants for new connections and for connection upgrades.

Refer also to Section 6 for a more detailed evaluation.

- 9.33. The Authority considers the proposed amendments are necessary or desirable to promote the efficient operation of the electricity industry for the long-term benefit of consumers for the reasons set out in this paper.
- 9.34. The amendments in this case are not primarily intended as measures to promote the protection of the interests of domestic consumers and small business consumers (small consumers), as per the Authority's additional statutory objective. However, the Authority considers the amendments are nevertheless consistent with this additional objective where connection applications involve dealings between consumers and participants. Targeted intervention protects those consumers from inefficiently high connection charges.

Table 9.3 How the proposed amendments promote the factors in section 32(1) of the Act

Item	How the proposed amendments promote the item
Competition in the electricity industry	The proposed amendments do not directly impact competition in the electricity industry because they deal with network pricing for end consumers.
Reliable supply of electricity to consumers	The proposed amendments do not directly impact reliable supply of electricity to consumers, other than by supporting efficient pricing for end consumers wishing to upgrade a connection to improve reliability (for example, to add redundant capacity).
Efficient operation of the electricity industry	The proposed amendments aim to improve the efficiency of connection pricing, which in turn encourages efficient connection activity and network investment and usage.
	More specifically, the proposed amendments aim to reduce the risk of:
	efficient connections being deterred due to charges in excess of the efficient price floor (neutral point)
	inefficient allocation of connection risk and financing burdens.
Protection of the interests of domestic consumers and small business consumers in relation to the supply of electricity to those	The proposed amendments are not intended as measures to protect the interests of small consumers, though the amendments are for the long-term benefit of consumers, which includes small consumers generally.
consumers	The proposed amendments intend to protect consumers overall (including small consumers) from inefficiently high connection charges that are possible due to the monopoly power of distributors.
Performance by the Authority of its functions	Proposed examination and reporting measures support the Authority's Code investigation (16(1)(d)), market facilitation (16(1)(f)) and monitoring (16(1)(g)) functions.
Any other matter specifically referred to in this Act as a matter for inclusion in the Code	The proposed amendments set pricing methodologies for distributors (s32(4)(b)).

The Authority has complied with section 17(1) of the Act

9.35. Under section 17(1) of the Act, the Authority, in performing its functions, must have regard to any statements of government policy concerning the electricity industry that are issued by the Minister for Energy. Table 9.4 below sets out our consideration of the Government Policy Statement on Electricity. ⁷⁰

Table 9.4 How the proposed amendments comply with section 17(1) of the Act

Clause	Consideration
14. Efficient network pricing is essential:	
a. To find the lowest cost solution, which may include demand-side response and flexibility to avoid or defer the need for network capacity augmentation; and	
b. For connections to enable efficient investment in new electricity consumption, including electrifying transport and process heat in industry.	Proposed amendment aims to reduce the extent to which inefficiently high charges deter new connection and connection upgrades
32. The Electricity Authority is expected to work collaboratively with other agencies across the wider regulatory regime, acknowledging the scope of each agency's remit.	Proposal has particularly close interaction with the Commerce Commission's regulation of electricity lines services. The Authority has collaborated at the policy development phase and anticipate collaborating through implementation, including via the Commerce Act s54V mechanism for price-quality path reconsiderations and the Electricity Industry Act s11 mechanism for Code exemptions.

The Authority has applied Code amendment principles

The Authority's Consultation Charter states that to provide greater predictability about decision-making on Code amendments the Authority applies certain Code amendment principles.

9.36. Table 9.5 below sets out our consideration of the Code amendment principles.

New Zealand Government. <u>Government Policy Statement on Electricity - October 2024.pdf</u> (<u>beehive.govt.nz</u>). Accessed 11 October 2024.

Table 9.5 Consideration of Code amendment principles

Principle	Comment
Clear case for regulation: The Authority will only consider amending the Code when there is a clear case to do so	Problem definition is set out in this paper.
Costs and benefits are summarised	The costs and benefits of this proposal are summarised above.
Preference for small-scale 'trial and error' options	Not applicable – only applies where analysis demonstrates a clear benefit to a Code amendment proposal, but there is no clear best option in terms of a solution
Preference for greater competition	Not applicable - the proposed amendments do not directly impact competition in the electricity industry because they deal with network pricing for end consumers.
Preference for market solutions	Not applicable – only applies where analysis demonstrates a clear benefit to a Code amendment proposal, but there is no clear best option in terms of a solution
Preference for flexibility to allow innovations	Not applicable – only applies where analysis demonstrates a clear benefit to a Code amendment proposal, but there is no clear best option in terms of a solution
Preference for non-prescriptive options	Not applicable – only applies where analysis demonstrates a clear benefit to a Code amendment proposal, but there is no clear best option in terms of a solution

Q6. Are there other alternative means of achieving the objective you think the Authority should consider? If so, please describe.

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Part B – Distributor supply obligations

10. Case for intervention

- 10.1. This section details the rationale for clarifying distributor obligations to supply connections and outlines the relationship between connection pricing and supply obligations.
- 10.2. Electricity distribution is an essential service with strong monopoly characteristics. In particular:
 - (a) electricity is the most universal and cost-effective source of energy, and most households and businesses demand a standard of supply (volume and availability) that would be prohibitively expensive to achieve without a network connection
 - (b) all households and almost all businesses consume a volume of electricity that is too small to cost effectively be supplied by bypassing distribution networks and connecting directly to the transmission grid
 - (c) most households and businesses do not have an economically viable choice of competing distribution networks
 - (d) as such, electricity distribution services from a single supplier that does not face competition is typically an essential input for the cost-effective supply of electricity
 - (e) establishing a connection is an essential step in the process of obtaining access to electricity distribution services.
- 10.3. For all these reasons, the supply of electricity distribution services is regulated to promote the long-term interest of electricity consumers.

Obligations, pricing and standards intersect

- 10.4. In regulating access to electricity distribution services, it is necessary to consider the interests of three constituencies:
 - (a) connection applicants are seeking a new or upgraded connection to the distribution network, are prospective customers of the distributor and have interests in price and quality:
 - i. price up-front cost and ongoing monthly lines charges. In other words, the total cost of access and the way cost-recovery is structured (as between upfront and ongoing charges)
 - ii. quality timeliness and efficiency of application and delivery processes, and the physical attributes of the connection – including its capacity and firmness⁷¹
 - (b) existing customers use and pay for distribution services and their interests in price and quality span:
 - i. price the level and structure (eg, mix of fixed, peak and off-peak components) of monthly lines charges

We use the term 'firmness' to refer to whether capacity is always available (firm) or sometimes constrained (flexi).

- ii. quality attributes such as power quality, reliability, customer service, and firmness of access
- (c) suppliers of distribution services have interests in outcomes including:
 - having a reasonable expectation of being able to recover costs incurred in delivering services, including the cost of capital deployed to finance assets whose costs are recovered over time. The cost of capital includes the cost of providing a return on equity.
 - ii. reasonable risk exposure, including to the risk of being penalised for not being able to meet unduly onerous obligations
 - iii. having asset management goals that are relevant to connection activity, including in relation to worker and public safety, power quality and stability, and the reliability and upkeep cost of assets they manage (including vested assets).
- 10.5. Connection pricing and obligations to connect both touch on these interests.
 - (a) A key outcome of connection pricing is to allocate costs between access seekers and existing customers. This includes whether new connections fully cover their incremental cost over time and whether their contribution to shared network costs is similar to existing customers.
 - (b) A key feature of connection pricing is cost reflectivity ie, whether the cost of establishing a connection varies as a function of factors such as remoteness, size and firmness. Cost reflectivity influences connection activity and allocation outcomes.
 - (c) Connection pricing also influences the allocation of stranding risk eg, if sunk costs are recovered over time there is a greater risk that cost recovery will transfer to existing users before costs are fully recovered.⁷²
 - (d) Connection pricing influences the share of costs a distributor recovers through lines charges over time. For non-exempt distributors, cost recovery through lines charges is also controlled through price-quality regulation
 - (e) poorly defined connection obligations could:
 - i. Encourage inefficient connections if combined with pricing that is not costreflective. This would increase costs for existing customers.
 - ii. Worsen expectations of being able to recover costs if combined with connection pricing requirements that unduly restrict up-front cost recovery. This would in turn deter investment in supplying distribution services.
 - iii. Heighten risk exposure if combined with overly severe cost recovery and revenue assurance restrictions.
- 10.6. Figure 10.1 illustrates a cascade of linked measures that collectively promote efficient network services.

If a customer exits (or otherwise stops paying) then distributors can (within limits) recover any shortfall in revenue from their wider customer base.

Figure 10.1 – A cascade of linked measures promotes efficient network services



10.7. To explain:

- (a) Revenue control restrains the expenditure a distributor can recover through its lines charges and the allowable return on investment.
- (b) This may prompt a distributor to increase connection charges to shift the financing burden to access seekers. Regulating connection pricing then restrains this option.
- (c) This may prompt a distributor to refuse to connect customers to eliminate the financing burden for new connections. An obligation to connect removes this option.
- (d) This may prompt a distributor to respond slowly to connection requests, or to set standards that make it unattractive for connections to proceed. Oversight of relevant access standards can address this risk.
- (e) Once the regulatory framework is complete, the remaining risk is non-compliance. Contractual dispute resolution mechanisms, Code enforcement and revenue path enforcement therefore provide the final part of the regulatory cascade.

10.8. Note that:

- (a) This is not to suggest all distributors will always look for opportunities to avoid financing investment. The reverse can also be true for some distributors at some points in the economic cycle. However, some distributors will at times consider that investment financeability is a challenge.
- (b) The starting point of the cascade a desire to limit investment is also relevant for distributors that are exempt from revenue path caps, for example, where a distributor's ownership or size limits its access to capital.
- (c) Whether revenue paths provide sufficient returns to support investment is a matter for the Commerce Commission (and the owners of distribution businesses ie, to the extent that scale, access to capital markets or balance sheet management are factors that contribute to financeability challenges).

Current settings are inadequate

- 10.9. Access arrangements for injecting connections provide that a distributor "...must allow [a] distributed generator to connect... on regulated terms". 73 Context for this obligation includes:
 - (a) The obligation follows from a regulated connection application and approval process. Among other things, this includes an ability for distributors to set and

Refer Part 6 Schedule 6.1, clause 9 of Part 1 of Schedule 6.1, clause 9G of Part 1A of Schedule 6.1 and clause 24(2) of Part 2 of Schedule 6.1.

- require compliance with connection and operation standards that safeguard the integrity of the distribution network, and a default connection contract that applies if the applicant and distributor do not agree to alternative commercial terms.
- (b) Distributors may also publish a congestion management policy that sets out how injection may be curtailed or interrupted to ensure connection and operation standards are met.
- (c) Distributed generation pricing principles generally result in directly attributable incremental costs being recovered up front. But distributors may need to recover broader incremental costs through lines charges across injecting and non-injecting connections.

10.10. This obligation:

- (a) is not clearly expressed or bounded
- (b) does not extend to non-injecting connections.

10.11. This presents risks of:

- (a) dispute between applicants and distributors as to how far the obligation to connect an injecting connection extends. For example, whether it includes obligations to:
 - i. reinforce the upstream network or otherwise manage congestion so it provides non-zero limits on injection (or even fully firm capacity)
 - ii. preserve firmness of capacity through time
 - iii. modify (or transfer ownership of) existing network assets to facilitate a lower-cost connection solution to be completed by the applicant (or their contractor)
 - iv. ensure the distributor's connection and operation standards, or other technical or commercial arrangements, do not prevent the applicant from being able to build (or contract someone to build) their connection
- (b) distributors refusing to connect non-injecting connections for example, to manage financial or workforce pressures.
- 10.12. This lack of clear obligations risks becoming more problematic over time as:
 - (a) the penetration of distributed generation increases, leading to greater need for injection-driven upstream investment or congestion management
 - (b) connection pricing for non-injecting connections is reformed, placing restrictions on the portion of incremental costs that may be recovered through up-front charges
 - (c) network access arrangements for non-injecting connections are introduced.
- 10.13. In addition, there is evidence that existing standards are not consistently well maintained across the sector. The Authority recently funded a review of distributor connection and operation standards and network connection standards, focused on distributed energy resources (DER). The review found:⁷⁴

Flectricity Engineers' Association of New Zealand (2025), Review of distributor connection technical standards – findings and recommendations for Aotearoa New Zealand. Technical-Connections-Review-Report-September-2025.pdf

- ...strong intent by distributors to support DER but identified significant variability in structure, terminology, and technical content [of connection information], which creates friction for installers and consumers and limits opportunities for automation and efficiency.
- 10.14. The review recommends "... industry-led coordination, supported by light-touch regulatory oversight, to deliver a streamlined, standardised approach that improves outcomes for all stakeholders". One of the areas of interest for the Authority as standards evolve is to ensure they do not unduly thwart network access for all users, not just DER.
- 10.15. As such, the Authority considers it is desirable to complement its reforms to connection pricing and network access arrangements with reform to establish:
 - (a) an explicit obligation to supply and maintain connections
 - (b) mechanisms for greater oversight of the suite of access standards that could undermine these obligations.
- 10.16. These interventions have the potential to support the long-term benefit of electricity consumers by:
 - (a) promoting efficient connection growth ie, growth in the number of connections that at least cover their own incremental cost and, typically, also contribute to spreading shared costs, which benefits consumers overall
 - (b) promoting efficient use of, and investment in, network capacity including by balancing congestion management with capacity expansion
 - (c) promoting efficient continuance of supply ie, continuing supply where economic.
- 10.17. These interventions also support the Authority's additional objective, by protecting the interests of small consumers in their direct dealings with distributors. Specifically, their dealings relating to establishing connections, upgrading connections and withdrawing supply.

Q7. Do you have any comments on the Authority's rationale for clarifying distributor obligations to connect and supply?

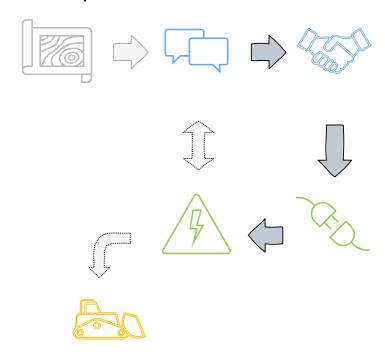
11. Preferred direction – distributors' supply obligations

- 11.1. The Authority's preferred direction is to develop Code amendment proposals for consultation that:
 - (a) create an explicit obligation on distributors to provide connection offers
 - (b) specify a suite of five access standards distributors must publish (including a continuance of supply policy)
 - (c) guide the content of the access standards through some mix of principles, requirements, and mandatory considerations
 - (d) prohibit decommissioning a connection, other than in accordance with a distributor's continuance of supply policy.

Connection process and input chain

- 11.2. In thinking about obligations and access standards, it is useful to consider:
 - (a) process the high-level steps involved in obtaining a connection, and retaining access over time
 - (b) input chain the set of inputs that go into providing a new or upgraded connection.
- 11.3. These frameworks help to unpack areas of interest and identify where obligations, and guidance or regulation would be most useful. Figure 11.1 illustrates the connection process.

Figure 11.1 – Connection process

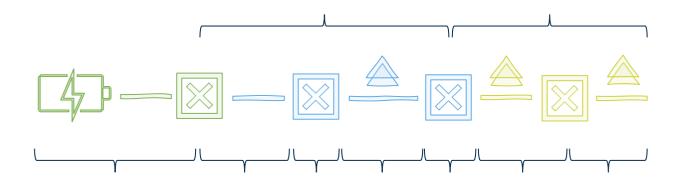


- 11.4. All of the steps are important, however for purposes of clarifying service obligations the key steps are explained further:
 - (a) connection offer an offer encapsulates the outcome of negotiations and provides the terms on which a connection can proceed. This includes the

distributor making alternative offers that may trade off location, capacity (at all times or over peak times only), other conditions (such as voltage support, power quality management, dynamic curtailment) and cost to inform the access seeker of viable alternatives, prior to the final negotiation and agreement. The connection activity itself is governed by the contractual terms set out in the agreed offer. A connection offer may relate to a new connection, or a change (upgrade or alternation) to an existing connection

- (b) withdrawal an obligation to connect is incomplete if it is not complemented by continuance of supply obligations. As such, the process through which supply can be withdrawn is the other key area of interest.
- 11.5. Figure 11.2 illustrates the inputs relevant to providing a connection service.

Figure 11.2 – Connection input chain



- 11.6. Consumer-owned assets⁷⁵ are included in the chain because distributors exercise some control over these. For example, distributors:
 - (a) can set standards for consumer-owned assets connected to their networks, including end-user devices (such as inverters), and supply equipment (such as meters, ripple relays and service lines)
 - (b) set the demarcation between consumer-owned and network-owned assets for example, at the meter, the property boundary, or the network end of the service line
 - (c) may price differently depending on factors such as the peak capacity, reactive power injection/consumption, or flexibility of consumer-owned equipment
 - (d) control whether a connection may be energised, which may involve gaining assurance that consumer-owned equipment is properly specified, installed and configured.
- 11.7. If a site is remote from the existing network, then construction of a network extension may be required.⁷⁶ In contrast to consumer-owned assets, a network

For the purposes here, consumer-owned assets include secondary networks – ie, the key distinction is assets for which ownership does not transfer to the distributor.

Alternatively, a site may, for example, be near an existing low voltage line but needs a higher voltage portion of the network to be extended to enable a large capacity connection. In the Code, this is referred to as an 'extension-like upgrade' and is priced in the same way as an extension.

- extension is owned and operated by the distributor ie, it will become part of the distribution network.
- 11.8. Network extensions can include service lines, as well as new dedicated assets (such as transformers or feeders) or new network assets that will become available for future connections (ie, future shared assets).
- 11.9. Notable features of network extensions are:
 - (a) The distributor does not have to build the extension but does set requirements for its design and construction. This can include controlling the equipment (eg, poles, conductor, cabling, transformers, etc) that can be used and who can carry out the work.
 - (b) Distributors also control access to existing network sites and assets including at the points where an extension will connect into the existing network.
 - (c) As such, distributors control whether (or to what extent) extension work is contestable.⁷⁷
 - (d) Certain powers, such as constructing and maintaining electrical works within public road corridors, are only available to a distributor (or generator) that the Energy Minister has gazetted as an electricity operator. This means a distributor will often have to be involved in a network extension, even if a third party can carry out the works.
 - (e) Extension costs can vary significantly by connection from negligible for some urban developments, to substantial for some remote or large connections.
 - (f) Other than service lines, extension assets typically become part of the distributor's communal network ie, they can be used to supply other connections in future. However, distributors may agree to provide exclusive access to a transformer or a line that would have capacity to supply other connections.
- 11.10. Distributors control whether a connection can be energised (or 'livened' or 'commissioned'). This is a point of control for enforcing any requirements relating to consumer-owned or extension equipment.
- 11.11. All connections consume upstream network capacity, and distributors inherently control how shared capacity in their networks is managed including whether they allocate capacity costs, how they manage congestion or add capacity, and how they plan for and deliver network development over time.
- 11.12. Distributors also manage their network's access to the transmission system, including contracting with Transpower (or another transmission supplier) for new grid connections or connection upgrades.
- 11.13. For large distribution connections, a distributor may need to liaise with the grid owner to arrange a connection capacity upgrade.
- 11.14. Distributors are also the conduit for funding upstream (interconnection) grid capacity upgrades, and ensuring the distribution network continues to meet Transpower's System Operator requirements.

Noting that even if a distributor has permissive settings, it cannot ensure alternative suppliers will be available, especially in remote locations away from main centres.

Obligation to offer

- 11.15. From the above, the Authority considers an important point of control is to establish a clear obligation on distributors to provide a connection offer, consistent with their access standards and connection pricing methodology.
- 11.16. The preceding steps are either regulated separately or implied by the obligation to provide an offer. In particular:
 - (a) the Authority requires distributors to provide information to support search and discovery, including requirements for distributors to publish or disclose:⁷⁸
 - i. connection pipeline (queue) information (for large connections)
 - ii. information on areas with export congestion (current or anticipated)
 - iii. capacity information for distribution feeders and large transformers
 - (b) the Commerce Commission also requires distributors to disclose information to support search and discovery, including:⁷⁹
 - i. network pricing methodologies⁸⁰
 - ii. capital contribution policies81
 - iii. network geographic information (zone substation locations).82
 - iv. zone substation constraint information83
 - (c) the Authority has recently extended long-standing connection process rules for distributed generators (Part 6 of the Code) to cover larger load connections. These rules include timeframes to connect⁸⁴
 - (d) Part 6 requirements are complemented by connection application and connection upgrade application requirements set out in the default distributor agreement (DDA).⁸⁵ The DDA includes:
 - i. default terms for contracts between distributors and traders, including retailers acting on behalf of connection applicants
 - ii. obligations for distributors to provide access to network connection standards (covering 'safety and technical requirements') with which traders must in turn require their customers to comply
 - iii. a requirement that energisation (and de-energisation) must only be carried out by a 'warranted person'
 - iv. process requirements for creating new connections, increasing (or decreasing) capacity of a connection, and disconnecting a connection.

⁷⁸ Refer proposed Part 6 clause 6.3. <u>Network connections project (stage one) Code drafting.</u>

Refer information disclosure determination.
https://www.comcom.govt.nz/assets/pdf file/0015/321171/Electricity-Distribution-Information-Disclosure-Determination-2012-Consolidated-6-July-2023.pdf

⁸⁰ Clause 2.4.1.

⁸¹ Clause 2.4.6(1). Note that capital contributions are a form of connection charge.

⁸² Clause 2.5.2A

Schedule 12b: Report on forecast capacity,
https://www.comcom.govt.nz/assets/excel_doc/0023/363371/Electricity-Distribution-Information-Disclosure-Requirements-Templates-Schedules-11a-13-consolidated-27-November-2024.xlsx

⁸⁴ Network connections project (stage one)

Appendix A of Schedule 12A.4. <u>Part 12A—Distributor agreements, arrangements, and other provisions | Electricity Authority</u>

- 11.17. As part of clarifying distributor obligations to make a connection offer, it may be desirable to:
 - (a) better align and integrate requirements in Part 6 and the DDA
 - (b) require the distributor to make alternative offers that may trade off location, capacity (at all times or over peak times only), other conditions (such as voltage support, power quality management, dynamic curtailment) and cost to inform the access seeker of viable alternatives to their initial application
 - (c) remove the provision in the DDA for a distributor to decline a connection⁸⁶
 - (d) align requirements in Part 6 and Part 12A with a new expressly stated obligation to offer.
- 11.18. The steps following acceptance of an offer are covered by the terms of the offer, which must in turn comply with (unless both parties agree otherwise):
 - (a) provisions in the DDA such as the two-day timeframe for energising a new connection and various obligations that, for example, relate to planned and unplanned outages, service line maintenance, access to customer premises, load management, pricing, de-energisation
 - (b) regulated terms for distributed generation in Part 6 of the Code⁸⁷ covering matters including metering, access to premises, interruptions, temporary disconnections, power quality, disconnection, construction timeframes.
- 11.19. The two essential complements to an obligation to offer are:
 - (a) an ability for distributors to set cost-reflective connection charges. This
 ensures existing users are not required to subsidise new connections (or
 connection upgrades), which could in turn support uneconomic connection
 activity
 - (b) a requirement for distributors to have access standards that do not inefficiently undermine access.
- 11.20. The Authority has a programme of connection pricing reform that encourages efficient, cost-reflective connection pricing. This includes:
 - (a) Enhancement cost allocation rules that require distributors to allocate customer-selected enhancement costs to the selecting applicant.
 - (b) Capacity costing rules that establish a basis for allocating upstream network capacity costs to connection applicants. This includes provisions to treat upgrades as 'extension-like', to use bespoke rates in high-cost locations, and to use targeted cost recovery schemes for network development investments.
 - (c) Pioneer scheme requirements that provide a framework for first-movers to be partially refunded by later connection applicants.
 - (d) Charge reconciliation requirements that help identify and deter connections charges below the neutral point (ie, subsidised connections).
 - (e) Further reform, which may promote or require pricing between the neutral and balance points.
 - (f) Targeted reform, as proposed in this paper, that may restrain pricing above the balance point in the interim.

Clause S6.3 of Schedule 6 of the DDA. Schedule 12A.4 Appendix A 15 May 2025.pdf

lf both parties have not entered into a connection contract.

Access standards

- 11.21. Access standards and policies are an essential tool for enabling efficient network management and connection activity. However, there can be a tension between competing objectives and a potential for distributors to favour certain objectives to the detriment of enabling efficient access. At an extreme, access standards could be used to frustrate access and circumvent an obligation to supply.
- 11.22. As such, the Authority considers it would be beneficial for the Code to clearly identify a set of access standards that each distributor must publish and to establish some combination of mandatory principles, considerations and requirements.
- 11.23. Table 11.1 lists each access standard and its relevance to an obligation to connect. While 'access standards' is referred to for convenience, for some areas a policy is more appropriate and for others a methodology is more appropriate.

Table 11.1 - Suite of access standards

Standard	Relevance
Network connection standards	Sets technical requirements for consumer equipment and network extensions. May influence whether third parties can carry out works or access distributor equipment.
	Should be used to set an efficient balance between competing asset management objectives.
	Unduly onerous requirements can limit access directly, or by limiting contestability. Similarly, excessive variation between distributors can impede efficient access.
Congestion management policy	Provides the framework within which connection firmness and the need for upstream capacity investment are determined.
	Should be used to promote an efficient balance between capacity investment and congestion management, which in turn supports efficient access.
Connection pricing methodology	Sets out how costs are allocated to a new connection, and how cost recovery is structured.
	Should be used to promote efficient connections by providing cost-reflective, subsidy-free and non-discriminatory pricing.
Revenue protection policy	Sets out when and how a distributor will seek financial security to protect existing users from economic stranding risk associated with new connections.
	Should promote efficient allocation of stranding risk, without unduly deterring connections.
Continuance of supply policy	Sets out the process through which a distributor may withdraw supply.
	Process must comply with statutory obligations and should balance the interests of the affected users and other users who may bear the cost of maintaining subsidised connections.

- 11.24. The Authority has existing workstreams relevant to some of these areas:
 - (a) Connection pricing reform is introducing mandatory methodologies that will improve efficiency and consistency of connection pricing. The reforms are designed around improving cost reflectivity, mitigating position-in-queue issues, removing subsidies and ensuring non-discriminatory pricing. The reform is complementary to introducing an obligation to offer.
 - (b) A 'streamlining connection' work programme in conjunction with Electricity Networks Aotearoa (ENA) and the Electricity Engineers' Association (EEA) is improving the quality and consistency of network standards. This complements the Authority's broader work programme on network access arrangements.
 - (c) Pricing principles for distributed generation and other injecting connections, such as batteries, are being reviewed. This work includes exploring options for expanding the ability for distributors to use pricing as part of the toolkit for managing network congestion.
 - (d) A long-running programme of pricing reform is ongoing to promote more costreflective network tariffs, which similarly aim to increase the use of pricing as part of the toolkit for managing network congestion.
 - (e) The 'flexi connection' component of connection pricing reform similarly encourages distributors to expand their congestion management toolkit.
- 11.25. The Authority could add to these initiatives as part of addressing the obligation to connect. This could include:
 - (a) Providing more guidance or requirements for the content or objectives of congestion management policies. This would build on and consolidate several related workstreams
 - (b) Addressing revenue protection as part of connection pricing reform.
 - (c) Introducing a new requirement for continuance of supply policies. The Authority could establish principles or provide more prescriptive requirements on features of the withdrawal process.

Prohibition on withdrawing supply

- 11.26. The final component of the preferred direction is to establish a clear prohibition on withdrawing supply, other than in accordance with the distributor's continuance of supply policy.
- 11.27. This protection is an essential complement to the obligation to offer, providing access seekers with confidence that, having obtained access, there are suitable protections in place against supply being withdrawn.
- 11.28. A continuance of supply policy may:
 - (a) set out steps a distributor must take to engage with affected customers before withdrawing supply
 - (b) provide principles on when withdrawal can be considered, for example:
 - i. where a cross-subsidy of operating costs is significant and cannot practically be addressed through consumer group design (ie, by setting higher tariffs for the high-cost connections)

- ii. prior to significant reinvestment in a high-cost connection, where affected customers have rejected an option of contributing to renewal costs directly
- iii. not within, say, 30 years of establishing the connection, unless the original connection applicant explicitly opted for a reduced-life connection (or the new connection is to an existing uneconomic line)⁸⁸
- iv. only with sufficient advance notice (to landowners and current customers) and opportunities to secure self-supply or avert withdrawal.
- 11.29. Continuance of supply policies would not override the statutory protections in place for connections that were in place on 1 April 1993.

Jurisdiction to regulate obligation to connect and supply

- 11.30. The Authority has a broad power under section 32 of the Act to introduce rules in the Code where this is necessary and desirable to promote the Authority's objectives, including rules to regulate access to electricity distribution services to promote efficiency in the long-term interest of consumers.
- 11.31. Potential regulation of the connection process necessarily involves consideration of distributors acceptance of connection offers. As noted above, an obligation to accept connection offers is a critical component of the connection process and closely linked to the implementation of pricing methodologies and access standards.
- 11.32. It is notable that the Code already includes enduring and longstanding requirements that impose obligations on distributors to connect distributed generation in Part 6 of the Code where it complies with a distributor's connection and operation standards (clause 3(2) of Schedule 6.1). 89
- 11.33. Some submissions challenged the Authority's jurisdiction to use the Code when it initially proposed introducing obligations on distributors to connect access seekers, 90 referring to amendments made to legislation in the mid-1990s which removed obligations to connect and retained protection of continuance of supply arrangements that existed at that time. 91
- 11.34. The Authority does not agree its powers under section 32 of the Act are constrained by these historic amendments in the way suggested, noting the different context the legislation referred to was addressing, and the significant changes that have occurred in the legislative, regulatory and industry environment since that time.

Noting that adding new connections to an uneconomic line may either improve the economics of that line or add to the potential end-of-life disruption. In either case, having a clear documented policy assists access seekers to understand their exposure (and may inform matters such as revenue life assumptions).

This was previously contained in the Electricity Governance (Connection of Distributed Generation)
Regulations 2007 (clause 18(2) of Schedule 1) and carried over to the Code by the Electricity Industry
Act 2010. An obligation is also contained in clause 9E(6) of Part 1A of Schedule 6.1, clause 18(2) of Part
2 of Schedule 6.1 and/or clause 6.4(2) of Part 6.

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The continuance of supply obligation has been carried through to section 105 in the Electricity Industry Act 2010. It provides that certain people that were guaranteed electricity supply under historic arrangements should continue to receive this protection,

Next steps

11.35. The Authority will take into account submissions in response to this paper. We expect to develop a proposed Code amendment for consultation in 2026.

Q8. Do you have any comment on the Authority's preferred direction for clarifying distributors' supply obligations?

PART C – Connection pricing amendments

12. Minor Code amendments

- 12.1. On 4 September 2025, the Authority finalised the Electricity Industry Participation Code (Connection Pricing Requirements) Amendment 2025 and published an addendum explaining changes made to the draft Code amendment following technical consultation.⁹²
- 12.2. The Authority has since identified some changes to the Code that would improve clarity and more accurately reflect the policy intent of the decisions outlined in the Decision paper.⁹³ The proposed changes should be read in conjunction with the Electricity Industry Participation Code 2010.
- 12.3. Table 12.1 below sets out proposed changes to elements of the Code drafting and the rationale. Underlined terms are insertions, strikethroughs are deletions, and bolded terms are defined terms under Part 1 of the Code.
- 12.4. The Authority considers that these changes comply with section 32(1) of the Act as they are necessary or desirable to promote the efficient operation of the electricity industry by improving the clarity of the clauses of the Code that they amend relating to connection pricing (and the reason why those clauses complied with section 32(1)).

Table 12.1 Proposed amendments to the Electricity Industry Participation Code 2010

Element of Code	Description of modification
1.1 Interpretation connection applicant, for the purposes of Part 6B, means a person who—	Amended to make clear that this definition applies for the purposes of Part 6B only.
minimum scheme means the least-cost solution for any connection works provided by a distributor, including for security and firmness of capacity, in accordance with the distributor's connection and operation standards and network connection standards as defined in the distributor's distributor agreement or a different standard if agreed to in writing between the connection applicant and the distributor	Amended to make it clear that both the distributor's connection and operation standards and network connection standards as referred to through default distributor agreements apply in the design of a minimum scheme. The two types of standards serve complementary purposes.

⁹² Connection pricing requirements | Electricity Authority

https://www.ea.govt.nz/documents/7857/Distribution connection pricing Code amendment - Decision paper.pdf

Element of Code	Description of modification
pioneering connection works means an extension where— (a) the portion of the extension cost initially met by a connection applicant, excluding the cost of any connection enhancement, but including the costs incurred by the connection applicant under any other pioneer scheme covering any part of the distributor's network that the pioneering connection works directly connect to, is more than the amount of \$50,000 in December 2025 dollar terms, adjusted each year by the CPI movement, or a lesser amount specified by the distributor; and	Consequential amendments to reflect amendments to clause 6B.8(4)(a) discussed below.

Element of Code

Description of modification

6B.8 Determining connection charges, contributions and rebates for pioneer schemes

. . .

(4) The **pioneer scheme contribution** is to be determined as follows:

- (a) in determining the costs of the pioneering connection works or vested pioneering works—
 - (i) the **distributor** must use the actual costs if these are known to the **distributor**:
 - (ii) if the actual costs are not known to the distributor (for example, if the pioneering connection works or vested pioneering works were constructed or contracted by a person other than the distributor), the distributor may use its estimated costs of the works;
 - (iii) if the **distributor** is using information provided by the **consumer** who constructed or paid for any **vested pioneering works**, the **distributor** must be reasonably satisfied that the information is accurate;
 - (iv) the distributor must exclude the costs of any connection enhancement or equivalent costs in respect of vested pioneering works;
 - (v) the distributor must include the costs incurred by a pioneer under any other pioneer scheme covering any part of the distributor's network that the pioneering connection works or vested pioneering works directly connect to:

Amended to clarify that customerselected enhancements are excluded from pioneer schemes (new subclause (4)(a)(iv)). We do not consider it efficient for customerselected enhancement costs to be apportioned to other people.

Also amended to provide that contributions made by pioneers in respect of adjacent pioneering connection works under a pioneer scheme can be collected under a pioneer scheme (new subclause (4)(a)(v)).

This enables costs incurred by the first connecting party to works covered by a pioneer scheme to be apportioned to others (under a subsequent pioneer scheme) that benefit from them due to the fact that subsequent pioneering connection works rely on those works to connect to the distributor's network.

If this change is not made there is a first-mover disadvantage issue which is inconsistent with the rationale for pioneer schemes.

Element of Code

Description of modification

6B.8 Determining connection charges, contributions and rebates for pioneer schemes

. .

- (5) The rebate due to a pioneer must be determined in a way that shares any pioneer scheme contribution received by a distributor among all pioneers covered by the pioneer scheme proportionate to the extent to which each pioneer has met the costs of the pioneering connection works or the vested pioneering works and after deducting any fee to cover the reasonable costs of administering the scheme.
- (5A) If a **rebate** is unable to be paid to a **pioneer** because the **pioneer** cannot be located after a reasonable attempt has been made by the **distributor** do so:
 - (a) the distributor must take reasonable steps to repay the corresponding amount of pioneer scheme contributions already collected to those that paid it, in proportion to their contribution; and
 - (a) the distributor may retain any amount that cannot be repaid in accordance with paragraph (a); and
 - (b) pioneer scheme contributions that would have been paid to the missing pioneer under the pioneer scheme must no longer be collected.
- (6) A **distributor** must determine whether and in what circumstances the status of **first pioneer** or **subsequent pioneer** may transfer to a different person or persons (for example, where the status is to be apportioned between multiple people).

Amended to provide that if a pioneer cannot be located, pioneer scheme contributions that would have been paid to that pioneer must be returned and no longer collected.

Without this amendment any rebate that cannot be paid would become unclaimed money and payable to the Crown. We consider it more efficient for the money to be returned to those that paid it and for the obligation to collect corresponding contributions to cease.

Element of Code			Description of modification	
6B.11 Connection charge reconciliation requirements (4)			Amended to clarify that the discount rate only needs to be updated annually when the WACC estimate is released by the Commission – where	
(c)		ounting the estimates under paragraph (b) to present value using—	the WACC is adjusted using the inflation projection in the most recent	
	(i)	a duration from the beginning of the first full year of operation equal to the connection revenue life; and	Monetary Policy Statement.	
	(ii)	a discount rate, equal to the most recent available mid-point estimate of vanilla WACC (being the weighted average cost of capital) made by the Commerce Commission in accordance with the EDB ID determination made under Part 4 of the Commerce Act 1986 less an adjustment to remove inflation consistent with inflation projections for the year ahead from the most recent Monetary Policy Statement published by the Reserve Bank of New Zealand at the time of that midpoint estimate of vanilla WACC; and		
(d)	when open multion of particular open open open open open open open open	rethe incremental cost estimate includes an rating cost loading which is not zero, iplying the amount derived after the application aragraph (c) by the distributor's incremental as scaling factor calculated in accordance with clause (5).	Amended for clarity. There will always be an operating cost loading, but it could be zero. The incremental opex scaling factor should only be used when the operating cost loading is zero.	

Element of Code		Code	Description of modification
(5)	scali conn	tributor must calculate its incremental opex ng factor, and show this calculation in the ection charge reconciliation, in accordance the following formula: $OSF = 1 - \frac{ASO}{AEDR}$	Amended to clarify that transmission costs (as described in clause 3.1.2(1)(a) of the EDB IMs (as at 13 December 2023)), are excluded from the calculation of ASO.
where	Э		
OSF	OSF is the incremental opex scaling factor		
ASO	SO is the average selected opex, being the average value over the five most recent available disclosure years of the sum of a distributor's—		
	(a)	operational expenditure relating to service interruptions and emergencies as defined in the EDB ID determination; and	
	(b)	operational expenditure relating to vegetation management as defined in the EDB ID determination ; and	
	(c)	operational expenditure relating to routine and corrective maintenance and inspection as defined in the EDB ID determination ; and	
	(d)	any costs, other than an amount or charge payable to Transpower , described in clause 3.1.2(1)(a) of the EDB IMs	

Q9. Do you have any comments on the drafting of the proposed amendments?

Appendix A Format for submissions – Parts A and B

Please send us your feedback by 5pm, 4 February 2026

Submitter	

Overtions	Q.,
Questions	Comments
Background and context	
Q1. Do you agree with the assessment of the current situation and context for connection pricing described in section 4? Why, why not? What, if any, other significant factors should the Authority be considering?	
PART A – Connection charges	
Q2. Do you agree with the rationale for considering interim restraint on connection charges described in section 5? Why, why not?	
Q3. Have you observed or experienced signs of connection stress where current connection charging arrangements caused problems when seeking to connect to the network (eg, projects delayed or deterred as a result of price-related barriers)? If so, please describe.	
Q4. Do you agree with the Authority's evaluation of the options? Why, why not? Do you have any feedback on the expected impact if the status quo remains?	
Q5. Do you have any comments on the proposed Code amendment and approach to implementation?	

Q6. Are there other alternative means of achieving the objective you think the Authority should consider? If so, please describe.	
PART B – Distributor supply obli	gations
Q7. Do you have any comments on the Authority's rationale for clarifying distributor obligations to connect and supply?	
Q8. Do you have any comments on the Authority's preferred direction for clarifying distributors' supply obligations?	

Appendix A Format for submissions – Part C

Please send us your feedback by 5pm, 19 December 2025

Questions	Comments
PART C – Minor amendments to the Code (connection pricing requirements)	
Q1. Do you have any comments on the drafting of the proposed amendments?	

Appendix B Proposed Code amendment

Appendix C CEPA independent report