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Subject: Consultation paper – connection pricing further reform

Dear Authority team

1. This is Vector's submission on the Electricity Authority's ("Authority") further reform of distribution connection pricing issues paper.¹ Appendix A sets out our responses to the Authority's questions.
2. This submission has no confidential material, and we are happy for it to be published on the Authority's website.

Summary of key submission themes

3. The Authority should not rush full reform. It has time to build evidence, test options and engage properly before it locks in enduring rules.
4. The case for broad allocation reform remains weak. The Authority has not shown that current charges deter efficient connections or that distributors set prices above efficient levels.
5. Connection prices should send clear cost signals. Customers should face the costs they cause. Risks should sit with the party best placed to manage them.
6. The neutral point and balance point remain concerning. The neutral point can set upfront charges below upfront incremental capital cost because it relies on future lines revenue to complete cost recovery. The balance point may support stability and investment confidence, but it is not, by itself, an efficiency benchmark.
7. Vector supports targeted costing reforms that improve transparency, stability and predictability, where the benefits exceed the cost of regulation.
8. The Authority should be careful with allocation reforms that cap charges, set charges at zero, create negative charges, or shift connection costs to existing customers.

¹ Electricity Authority, Further reform of distribution connection pricing, https://www.ea.govt.nz/documents/10488/Further_Reform_of_Distribution_Connection_Pricing_-_Issues_Paper.pdf

9. Contestability should be central to full reform. Pricing rules should not make distributor connections look cheaper only because costs are recovered later through lines charges.
10. The Authority should coordinate closely with MBIE, the Commerce Commission and the Energy Competition Task Force. It should avoid overlap and inconsistent obligations.
11. Before full reform, the Authority should use workshops, expert forums and practical testing to work through real connection scenarios.

Efficiency, cost allocation and contestability should anchor the reform

12. Connection pricing matters. It affects electrification, housing, business investment and customer confidence. It also affects existing customers. They will fund any costs that connection applicants do not pay. The Authority should therefore approach full reform carefully. It should focus on long-term consumer benefit, not simply on lowering up-front charges.
13. Efficiency should anchor the reform. Connection prices should signal the costs caused by a connection. They should help customers make efficient choices about size, location, timing, design and security of supply. They should also allocate risk to the party best placed to manage it. This matters where cost is incurred up front, but recovery may occur over time.
14. Competition also matters. Connection works are not always natural monopoly services. In some cases, customers can use third-party providers. Pricing rules should support that choice. They should not make a distributor connection look cheaper only because the distributor can recover costs later through lines charges. That would weaken contestability and reduce pressure to deliver work efficiently.
15. We remain concerned that parts of the Authority's framework mix efficiency and equity. The neutral point can set upfront connection charges below the upfront incremental capital cost caused by the connection, because it relies on future lines revenue to complete cost recovery. That can transfer financing and recovery risk to existing customers and weaken contestability. The balance point may support stability and investment confidence, but it is not, by itself, an efficiency benchmark for the level of connection charges. The Authority should be clear where it is relying on equity, predictability or efficiency rationales.
16. The allocation options raise issues. Many would reinforce or require upfront connection charges below the upfront incremental capital cost caused by the connection. That may still recover expected costs over time, but it transfers financing and recovery risk to existing customers and weakens upfront cost signals. Financial security can reduce that risk but may not remove it.
17. This creates a real tension. The Authority appears to give significant weight to intergenerational equity. That is not the same as efficiency. If equity drives the reform, the Authority may struggle to preserve efficient connection charges, good risk allocation and effective contestability.

18. Some of the Authority's own options show this tension. A standard allocation formula could leave some customers with no connection price signal at the margin. Negative connection charges would pay customers even though their connection imposes network costs. These outcomes are concerning.
19. The Authority has better options. It could acknowledge the efficiency cost of prioritising intergenerational equity. It could then allow distributors to move connection charges towards incremental cost in a transparent and predictable way. It could explore tariff options to address equity through lines charges. For example, existing customers who paid lower connection charges could remain in separate tariff classes. New customers could then pay efficient connection charges, while tariffs address the Authority's equity concerns.
20. The Authority recognises contestability as a relevant issue, but it should integrate contestability more directly into the assessment of each allocation option. Competition for connection services can improve cost efficiency, service quality and customer choice. It may also reduce the need for more invasive options, such as construction risk allocation and equivalence obligations. The Authority should progress a contestability framework alongside pricing reform. It should not lock in rules for problems that competition could solve, or make worse by weakening competition.
21. This does not mean no reform is needed. Vector supports proportionate reforms that improve transparency, customer understanding, stability and predictability. Many costing options could help customers make better choices. They could also improve the conditions for competition. The Authority should assess those options by asking whether the benefits exceed the cost. It should not proceed with construction risk allocation or equivalence obligations unless it shows a clear problem and a proportionate response.

Full reform should follow evidence, engagement and coordination

22. The Authority has time to get full reform right. It should not rush. This is a large and complicated reform programme, and the impacts of enduring rules will be felt through the 2030s. Recent reforms, including the balance point framework, are still bedding in. Some requirements have not yet generated useful evidence. The Authority should pause, let those reforms embed, and use the evidence they produce before it locks in enduring rules. It should also test whether the problem is material, whether pricing regulation is the right tool, and whether lower-cost options would work.
23. Before full reform, the Authority should run a deeper engagement process than it has done to date in its regulation of connection pricing. Industry is dealing with many parallel reforms, so the Authority may not yet be getting the detailed input it needs from all affected parties. Vector is willing to engage constructively and bring its subject matter experts into direct discussions, workshops and whiteboarding sessions to work through the detail. The Authority should use that engagement to test real examples, including large connections, vested assets, flexible connections, real estate developments, secondary networks and high-volume standard connections. It should test the full process, not just the Code drafting.

24. The Authority should also coordinate with related workstreams. MBIE, the Commerce Commission and the Energy Competition Task Force are considering issues that overlap with connection pricing, contestability, performance, investment incentives, information disclosure and network connections. Full reform should not duplicate, pre-empt or cut across that work. It should fit within a coherent regulatory framework.
25. Vector would support a staged reform package that first improves transparency, common terminology, customer-facing information and practical guidance. The Authority should then use evidence from fast-track implementation, charge reconciliations, disputes, customer feedback and targeted information requests to decide whether more prescriptive enduring rules are justified.
26. Vector's core submission is simple. The Authority should prioritise transparency, contestability, evidence and proportionate standardisation. It should preserve efficient cost recovery and efficient risk allocation. It should protect existing customers from costs and risks they did not cause. It should only move to prescriptive enduring rules where the evidence shows a material problem and a clear net benefit.

Yours sincerely
For and on behalf of Vector Limited

Richard Sharp
GM Economic Regulation and Pricing

Appendix A Format for submissions

Further reform of distribution connection pricing – issues paper

Please email your submission to distribution.pricing@ea.govt.nz by 5pm, Monday 24 August 2026.

Name	
Organisation	Vector Limited

Questions	
Q1. Do you agree with the background and context summary above? Why, why not?	Vector broadly agrees with the high-level background and context, including that connection pricing matters for electrification, housing, economic development and customer confidence. We also agree that pricing arrangements should be transparent, predictable, cost-reflective and capable of supporting efficient investment decisions. However, Vector does not consider that the background summary establishes a sufficient economic case for broad further intervention in connection pricing methodologies. The paper identifies a broad range of potential issues, including transparency, risk allocation, cost itemisation, margins, works optimisation, over-specification and consistency. However, the evidence base appears largely anecdotal or qualitative, and the paper does not yet show the materiality of these issues or the extent of any consumer harm. A connection charge can be high because the efficient cost of providing the connection is high. Civil works, network constraints, technical standards, customer-specific requirements, consenting, contractor availability and risk can all affect connection costs. Treating variation or high charges as prima facie evidence of a pricing problem risks confusing the level of cost with the efficiency of the pricing methodology. Vector supports targeted reform where there is evidence of a material problem and the proposed intervention is likely to improve long-term consumer outcomes. The Authority should therefore be clear about the specific problem it is seeking to solve, the behaviour it wants to change, and why connection pricing regulation is the least-cost way to address that problem. Reform should preserve flexibility for distributors to reflect efficient costs and risks, support contestability where it is practicable, and avoid shifting connection-specific risks or costs inefficiently onto existing customers.

Questions

Q2. Is there additional background, evidence or context relevant to the issues covered in this paper?

Yes. The Authority should consider four further points.

First, the current evidence base remains thin. The paper relies heavily on concerns raised by some access seekers and on differences between distributor practices. That does not show that distributors set inefficient prices or deter efficient connections. Before adding new rules, the Authority should identify the problem, test its scale, and show how each option would improve long-term consumer outcomes.

Second, the Authority should separate pricing issues from cost and process issues. A high connection charge may reflect the real cost of civil works, network constraints, consenting, traffic management, customer-specific design, or construction risk. Changing the pricing rule will not remove those costs. It may only move them from the connecting customer to existing customers.

Third, the Authority should consider how its reforms affect competition for connection services. If connection charges fall below the efficient cost of providing the connection, distributors may recover more cost through future lines charges. Independent providers cannot fund works in that way. That can make contestability harder, not easier.

Fourth, the Authority should give recent reforms time to work. New requirements have only recently taken effect, and further requirements are still being implemented. The Authority should use the information from those reforms before it imposes more prescriptive rules. It should also coordinate its work with other regulators and work programmes, so distributors do not face overlapping or inconsistent obligations.

Questions

Q3. How should the Authority prioritise across possible options identified in this paper?

The Authority should prioritise options that are most likely to improve efficiency and customer outcomes at least cost.

We suggest four tests.

First, the Authority should ask whether it has evidence of a material problem. A difference in practice between distributors is not enough. Nor is a high connection charge. The Authority should show that the current rule causes inefficient connections, deters efficient connections, or weakens competition.

Second, the Authority should ask whether the option addresses the cause of the problem. Pricing rules should not try to solve issues caused by technical standards, consenting, construction risk, customer design choices, or wider connection processes. If the problem sits elsewhere, the remedy should sit there too.

Third, the Authority should prioritise options that improve transparency, predictability and customer choice while preserving cost-reflective prices. Better information can help customers understand, compare and challenge connection costs. It can also support contestability. By contrast, options that cap upfront charges, or require more recovery through future lines charges, can reduce efficient upfront price signals and weaken competition for connection works unless carefully justified.

Fourth, the Authority should weigh the cost and complexity of each option. New rules can impose system, process and compliance costs. Customers ultimately pay those costs. The Authority should only impose more prescriptive requirements where the expected benefit clearly exceeds that cost.

On that basis, the Authority should give higher priority to targeted transparency, clear principles, practical guidance and better evidence. It should give lower priority to broad rules that constrain efficient cost recovery, socialise connection risk, or prescribe a single pricing outcome before the evidence justifies that step.

Questions

Q4. Which options should have the highest or lowest priority, and why?

The Authority should give highest priority to options that improve information, transparency and customer choice without weakening efficient price signals.

We support practical work on cost transparency. Better quote information can help customers understand the main cost drivers, test whether a scope is efficient, and compare options where contestability is available. This can improve confidence and support better negotiation. It should build on existing disclosures and reconciliation requirements, not create a separate reporting regime.

We also support a clear, standard high-level process for connection pricing. A common structure can make methodologies easier to understand. It should not force all distributors into the same pricing outcome. Networks face different costs, risks, growth patterns and operating models.

The Authority should also prioritise work that supports contestability. Competition can place useful pressure on cost and service. The Authority should focus on reforms that make costs clearer and customer choice easier. It should avoid pricing rules that make distributor-funded connections look cheaper only because some costs move into future lines charges. That would make it harder for independent providers to compete.

The Authority should give lowest priority to options that cap, band or otherwise limit cost recovery before it has strong evidence of a problem. Those options can shift connection costs and risks to existing customers. They can also weaken incentives for applicants to choose efficient connection size, location and timing.

We also see low priority for broad construction risk restrictions, equivalence obligations and blanket assurance requirements. These options would add cost and complexity. They may also address symptoms rather than causes. The Authority should only pursue them if evidence shows a material problem that lower-cost tools cannot solve.

Questions

Q5. Do you consider costing methodologies should be a priority for further reform, and do you have any evidence or analysis to support your view?

Costing methodologies can be a useful area for targeted reform. They should not be the main priority unless the Authority first shows a material problem.

Good costing matters. It helps customers see the efficient cost of their connection. It also helps customers compare options and make better decisions about size, location, timing and design. Clearer costing can also support competition for connection works where contestability is practical.

However, the Authority has not shown that current costing methodologies are causing inefficient connection outcomes. The evidence does not show that distributors systematically overstate costs, deter efficient connections, or set charges above efficient cost. The Authority should not assume that a high charge means poor costing. High costs may reflect real construction, capacity, consenting, design or risk costs.

The Authority should therefore focus first on practical measures that improve transparency and consistency. This could include clearer cost categories, better explanation of major cost drivers, and guidance on how distributors estimate incremental costs. These measures can improve customer confidence without forcing a single costing model on all networks.

The Authority should be cautious about more prescriptive costing rules. Detailed rules can add cost and complexity. They can also reduce the flexibility distributors need to reflect real network conditions. The Authority should only impose those rules where evidence shows that lighter-touch transparency or guidance will not solve the problem.

Q6. What are your views on the merits of the identified costing methodology options?

Vector's views differ across the costing options.

A1 – mandatory capacity costing. We support this in principle where capacity costs are material. Capacity costs can be real costs. Customers should face those costs where their connection uses scarce network capacity. This helps customers choose efficient size, location and timing. It can also help customers understand the value of flexible connections, reduced security, or less firm access to capacity. Capacity costing may deter inefficient connections where the applicant values the connection below the cost. It can also promote more consistent treatment across distributors. However, the benefit will be weaker if allocation rules then prevent distributors from recovering those efficient costs from the customer who causes them.

A2 – construction risk allocation. We do not support broad limits on cost pass-through. Risk should sit with the party best able to manage it. Some cost changes reflect customer scope changes, ground conditions, consenting, traffic management or other matters outside the distributor's control. Connection works are also often delivered through broader contractor arrangements that already support efficient cost control. If the Authority forces fixed prices too far, contractors and distributors will add larger contingencies. That can raise costs for all customers. Quote restrictions may improve the financial outcome for a particular applicant, but they do not change whether the underlying connection was efficient. If actual costs exceed quoted costs, forcing other customers to fund the difference only shifts cost and risk. It does not improve allocative efficiency.

A3 – equivalence obligation. We do not support this option. Different prices for different work types do not prove discrimination or inefficiency. Shared network works and connection works can differ in scale, timing, complexity, risk and customer-specific requirements. Shared network works may be larger, more predictable and lower risk than connection-specific jobs. An equivalence rule could distort procurement by encouraging distributors to bundle work types or seek equivalent prices where costs genuinely differ. That could reduce cost reflectivity rather than improve it. If the Authority proceeds with an obligation, distributors should be able to satisfy it by showing competitive procurement and by showing they have not imposed conditions that artificially load costs onto connection works. Competition issues should be addressed through the wider contestability work.

A4 – cost transparency. We support this option in principle. Clearer cost information can help customers understand quotes, test scope, compare options and negotiate more effectively. It can also support contestability by giving customers a clearer

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basis for comparison. The main efficiency benefit depends on whether competition or contestability is realistically available. Where there is no practical competitive alternative, transparency may still improve confidence and bargaining, but it may not materially improve efficiency. The Authority should therefore keep requirements practical, proportionate and built on existing information obligations.

A5 – costing requirements. We support guidance or principles where they improve consistency and customer understanding. We do not support detailed rules that replace engineering and commercial judgement. Any requirements should focus on estimating the efficient incremental cost of the connection. They should also fit with existing arrangements for capacity charges and pioneer schemes.

A6 – input assurance. We support targeted assurance only where evidence shows a real compliance risk. Blanket assurance would add cost and may not improve outcomes. The Authority should start with transparency, guidance and targeted review before it considers more formal assurance.

A7 – in-kind contribution costing. Any obligation should be limited to information that distributors can reasonably obtain through vesting and asset acceptance processes. We do not support broad reporting obligations that treat distributors as having full visibility of costs they do not incur or control. Where a customer or developer procures works directly, that party and its contractors hold the relevant cost information. Any data requirement must reflect that reality. Otherwise, the Authority risks collecting incomplete or misleading information.

Overall, the Authority should prioritise options that improve cost reflectivity, transparency and customer choice. It should avoid options that suppress efficient costs, shift risk to existing customers, or add compliance burden without clear evidence of benefit.

Questions

Q7. Are there any other costing methodology options you think the Authority should consider?

Vector does not propose further prescriptive costing options at this stage. The Authority should first test whether a clear costing problem exists.

If the Authority does further work, it should start with a simple diagnostic framework. That framework should separate four issues: pricing methodology, connection process, technical design, and external input costs. These issues need different solutions. Pricing rules should not be used to solve every connection issue.

The Authority should also focus on common definitions as it has done to some extent with connection cost reconciliations. Consistent cost categories help customers understand quotes and help the Authority compare information across distributors.

Any benchmarking should reflect different delivery models. Where customers or developers procure works directly, the relevant cost information may sit with them or their contractors. The Authority should not rely only on distributor data if it wants to compare total connection costs.

The Authority should work with suppliers to also develop guidance on how distributors should explain key cost drivers. That guidance should help customers understand the practical choices they can make. For example, customers may be able to change location, capacity, timing, design or security of supply. Better information can support better decisions without suppressing efficient costs.

Overall, the next step should be evidence, guidance and common language. The Authority should only consider more detailed costing rules if that work shows a material problem that targeted measures cannot fix.

Questions

Q8. Do you consider allocation methodologies should be a priority for further reform, and do you have any evidence or analysis to support your view?

Allocation methodologies should not be a priority for broad reform unless the Authority first shows a clear problem.

Allocation rules decide how much of the efficient cost of a connection the connecting customer pays up front, and how much customers pay later through lines charges. This matters. If the Authority lowers up-front charges it shifts cost and risk to existing customers.

That shift can reduce efficiency. Customers should face the cost consequences of their connection decisions where those costs are caused by the connection. This helps them choose efficient size, location, timing and design. If prices fall below efficient cost, customers may ask for connections that cost more than the value they create. It can also make contestability harder, because independent providers cannot recover connection costs through future regulated lines charges.

The Authority has not shown that current allocation approaches are causing material inefficient outcomes. It has shown that approaches differ and that some customers prefer lower up-front charges. That is not enough. The Authority should show that current allocation methods deter efficient connections, cause inefficient connections, or harm competition.

We recognise that allocation settings can affect DPP5 forecasts and financing. That is a reason to proceed carefully, not quickly. The Authority should avoid locking in enduring rules before recent reforms have produced useful evidence.

The better priority is to improve transparency, monitor outcomes, and develop clear principles. The Authority should only move to caps, bands, floors or standard formulae where it can show that those tools solve a material problem and improve long-term consumer outcomes.

Q9. How well do the identified allocation methodology options meet the allocation objectives discussed in this paper?

The options meet the Authority's objectives to different degrees. Several options may improve transparency and predictability. However, some would weaken efficient price signals or shift risk to existing customers.

B1 – standard process. We support a common high-level process. It can make methodologies easier to understand. It should not force a single pricing outcome. Distributors need flexibility to reflect their own costs, risks and network conditions.

B2 – standard allocation formula. A formula may improve clarity. Where charges remain above zero, one positive feature is that charges can move with incremental cost. That can preserve some incentive for customers to choose lower-cost connection sizes, locations or designs. However, the proposed approach applies a fixed rebate to incremental cost. That can set connection charges below efficient cost. In some cases, it may set charges at zero. If charges are zero, customers lose incentives to right-size their connection requests. The formula also shifts cost recovery risk to existing customers where it prices below the upfront cost caused by the connection.

B3 – allocation floor. A floor is better than allowing charges to fall below the Authority's own lower bound. It can reduce the risk of the most obvious cross-subsidies. However, the neutral point still allows connection charges to sit below the upfront cost caused by the connection because it takes account of future lines revenue. It therefore limits, but does not remove, the risk of inefficient cost shifting. If the Authority adopts a floor, it should consider applying it at the individual connection level. If it applies only on average across a customer group, some connections could still be priced below the floor.

B4 – change limit. An evolving ceiling is preferable to a hard cap. A gradual change limit may support stability and predictability. However, the limit must not lock in inefficient prices for too long. A very slow convergence path would place too much weight on stability and not enough on cost-reflective pricing. The Authority should allow distributors to move more quickly towards cost-reflective pricing where that is efficient and where customers have reasonable notice.

B5 – allocation cap. We do not support a cap. A cap would stop distributors from recovering efficient connection costs up front, even where the connecting customer causes those costs. It would force more cost into future lines charges. That would increase cross-subsidies from existing customers to new customers. We do not accept that distributor financing is necessarily more efficient simply because a distributor may have a lower average cost of capital. Subsidised financing can distort investment decisions by disconnecting the customer's funding cost from the risk of its project. A cap may also weaken

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competition for connection works because independent providers cannot recover costs through regulated lines charges.

B6 – allocation band. A band depends on its design. A wide band could preserve flexibility and allow distributors to reflect different network circumstances. A narrow band could operate like a cap. The higher the required allocation to future lines charges, the more distributors must price connections below incremental cost. The Authority should not use a band to force distributors toward a preferred level of up-front contribution without evidence that this improves efficiency.

B7 – negative charges. We do not support negative connection charges as a general pricing tool. If a customer causes connection costs, paying that customer to connect is unlikely to promote efficient outcomes. Any payment would be funded by other customers and would amount to a cross-subsidy unless the Authority can show a clear efficiency benefit. The fact that negative charges are being considered highlights the weakness in the framework. The Authority should explain clearly when such payments would improve efficiency before it considers this option further.

B8 – network cost contribution for large connections. We do not support generic limits for large connections. Large customers often need bespoke arrangements. They can also negotiate commercial terms that reflect cost, risk, timing and financing. The Authority should not constrain those arrangements unless it identifies a material problem.

B9 – prudent discounts. Prudent discounts may have a role in limited cases, such as where they avoid inefficient bypass or enable an efficient connection. They should remain flexible. They should also include safeguards where costs or risks would otherwise move to existing customers.

Overall, the options that improve clarity and transparency are more likely to meet the Authority's objectives. The options that cap charges, force a single allocation outcome, or move connection risk to existing customers are less likely to promote long-term consumer benefit.

Questions

Q10. Are there any other allocation methodology options you think the Authority should consider?

Vector does not propose a further prescriptive allocation option at this stage. The Authority should first decide what problem it is trying to solve.

If the Authority wants more consistency, it should consider principles rather than a single formula. A distributor should be able to show that its methodology is transparent, subsidy-free, reasonably stable and cost-reflective without using one mandated calculation.

The Authority should also consider options that preserve efficient cost signals. One option is to allow more cost-reflective up-front charges while using future tariff design to address any equity concern between new and existing customers. This would better preserve incentives for customers to choose efficient connection size, location and timing. It would also reduce the risk that connection costs move to existing customers.

Any option should also protect contestability. Rules that make distributor-provided connections appear cheaper because they recover costs through future lines charges can disadvantage independent providers. The Authority should assess this effect before it adopts any allocation rule.

Finally, the Authority should build materiality thresholds into any enduring framework. Small differences in allocation approach do not justify complex regulation. The Authority should focus on outcomes that materially affect customers, competition or long-term efficiency.

Questions

Q11. Are you aware of any issues relating to network development funding? Please provide examples, evidence or analysis where possible.

Yes. Network development funding raises real issues, but the Authority should not treat them only as connection pricing issues.

Electrification will require some distributors to invest ahead of confirmed demand. That investment can be large and lumpy. It can also carry uptake risk. If demand arrives more slowly than expected, existing customers may carry costs for longer. If distributors wait until demand is certain, customers may face delay, higher costs, or missed electrification opportunities.

Financeability also matters. Some EDBs may face practical limits on how much capital they can raise, and on how quickly they can raise it. Those limits may reflect balance sheet capacity, credit metrics, ownership settings, debt market conditions, or the scale of the investment programme. A funding model that assumes distributors can always finance development costs up front may not be realistic.

Consumer funding can therefore be a viable option for some development costs. That may include funding through connection charges, targeted contributions, pioneer-style mechanisms, or other arrangements that recover costs from the customers who cause or benefit from the investment. These tools can reduce financeability pressure and help investment proceed sooner. They can also protect existing customers where the benefits are uncertain or concentrated among future users.

The key question is who should bear each cost and risk. In some cases, a connection applicant may cause the need for new capacity and should pay the efficient cost it causes. In other cases, investment may support many future customers or wider network needs. Then a broader funding approach may be more efficient.

The Authority should not assume that lowering up-front connection charges solves this problem. It may only move cost and risk to existing customers. That can weaken efficient price signals. It can also create unfair outcomes if future users benefit from assets that earlier customers or existing customers funded.

Vector supports work to better understand network development funding. The Authority should focus on evidence, financeability, risk allocation, customer impacts and coordination with other regulatory work. It should avoid prescriptive connection pricing rules until it has identified the specific funding problem and the least-cost way to solve it.

Questions

Q12. What options, if any, should the Authority consider for promoting efficient pricing for network development?

The Authority should not move straight to prescriptive rules for network development pricing. It should first identify the funding problem and the risks that need to be managed.

Efficient pricing should reflect who causes costs, who benefits from the investment, and who can manage the risk. Where a connection or group of connections drives the need for new capacity, the relevant customers should expect to fund an efficient share of those costs. Where investment supports wider network needs or many future customers, broader recovery may be appropriate.

The Authority should preserve a range of funding tools. These may include connection charges, targeted contributions, pioneer-style mechanisms, staged cost recovery, financial security, or wider network funding where benefits are broad. Different projects will need different tools. A single pricing rule may not work well across all cases.

Financeability should form part of the assessment. Some EDBs may not be able to fund all development investment up front without creating pressure on their balance sheets or credit metrics. Customer funding can be an efficient and practical way to bring forward investment where the beneficiaries are identifiable and the risks should not sit with existing customers.

The Authority should also design any approach to support contestability. Funding rules should not make distributor delivery appear cheaper simply because a distributor can recover some costs through future lines charges. That would distort competition for connection works.

Vector would support high-level principles, practical guidance and worked examples. These should help parties choose the right funding model for each investment. The Authority should avoid caps or formulas that suppress efficient costs, shift risks to existing customers, or limit flexible funding arrangements needed to support electrification.

Q13. Are you aware of any issues relating to network modification charges? Please provide examples, evidence or analysis where possible.

We are not aware of any substantive issues relating to network modification charges.

Questions	
Q14. What options, if any, should the Authority consider for promoting efficient pricing for network modifications?	The Authority should not introduce detailed rules for network modification charges unless it identifies a material problem. If the Authority does further work, it should start with high-level principles. The party that causes or benefits from the modification should generally pay the efficient incremental cost. If the distributor chooses to upgrade or improve the network beyond what the requester needs, the requester should not pay for that betterment. The Authority should also focus on transparency. Customers should understand the main cost drivers and the basis for any material charge. Any approach should preserve flexibility. Distributors need to reflect the facts of each modification, including safety, asset condition, timing, access, design, and whether other customers benefit. The Authority should use targeted information gathering or guidance before it considers prescriptive rules.
Q15. Are you aware of any issues relating to connection downgrade or disconnection charges? Please provide examples, evidence or analysis where possible.	We are not aware of any issues relating to connection downgrades or disconnection charges.

Questions

Q16. What options, if any, should the Authority consider for promoting efficient pricing for connection downgrades or disconnections?

The Authority should not introduce detailed rules for downgrade or disconnection charges unless it identifies a material problem.

Distributors should be able to recover the efficient costs caused by a customer-requested downgrade, disconnection or reconnection. These costs may include site work, administration, system changes, network reconfiguration and any safety-related work.

The Authority should also preserve tools that protect existing customers. A downgrade or disconnection may leave connection-specific costs unrecovered. That risk will increase if more connection costs are recovered over time through lines charges rather than up front. In those cases, it may be efficient for the customer causing the downgrade or disconnection to meet those costs.

Any framework should also discourage inefficient behaviour. For example, customers should not be able to avoid charges by repeatedly disconnecting and reconnecting, or by reducing capacity in a way that shifts avoidable cost to others.

If the Authority considers further work is needed, it should start with principles or guidance. Those principles should allow distributors to recover direct costs, manage stranding risk, and reflect whether assets or capacity can be reused. The Authority should use monitoring or targeted information gathering before it considers any prescription.

Q17. Are you aware of any issues relating to continuance pricing? Please provide examples, evidence or analysis where possible.

We are not aware of any issues with continuance pricing.

Q18. Should continuance pricing methodologies be a priority for further reform? Please provide reasons for your view.

Continuance pricing should not be a priority for further reform at this stage.

The Authority should first settle the wider framework for withdrawal or continuation of supply. That framework should define when supply may continue, when it may be withdrawn, what protections apply, and who is responsible for alternative arrangements. Pricing rules cannot sensibly be designed before those settings are clear.

Vector supports a staged approach. The Authority should settle the substantive supply framework first. It should then consider whether any pricing issue remains. If evidence shows a material problem, principles or guidance may be appropriate. Prescriptive pricing rules should remain a low priority.

Questions	
Q19. What options, if any, should the Authority consider for promoting efficient continuance pricing?	See response to Q18.
Q20. Are you aware of any issues relating to secondary network access? Please provide examples, evidence or analysis where possible.	Yes. Secondary network access raises a level playing field issue. A connection applicant should receive broadly equivalent protections whether it connects to a primary network or a secondary network. The customer's experience should not depend on the legal form of the network owner. If the rules aim to improve transparency, predictability and efficient pricing for connections, those outcomes should apply to embedded and non-embedded networks alike. Different treatment can distort outcomes. A customer connecting within a secondary network may face the same practical issues as any other applicant. These may include unclear cost information, limited choice, construction risk, timing uncertainty, or charges that are hard to compare. If secondary networks sit outside the framework, customers may receive weaker protections even where the underlying access issue is the same. Uneven rules can also affect competition between network models. A primary distributor should not face more onerous connection pricing obligations than a secondary network providing a similar access service. That would not create a neutral framework. It could encourage regulatory arbitrage and weaken confidence in the overall regime. Vector supports a proportionate approach. The Authority should focus on the scale and nature of access activity, not only on whether the network is labelled primary or secondary. Small networks with little connection activity may need lighter obligations. But where a secondary network provides material connection access, customers should receive comparable transparency, process and pricing protections.
Q21. Should secondary network access be a priority for further reform? Please provide reasons for your view.	The Authority should treat secondary network access as an important issue. A connection applicant should receive the same core protections whether it connects to a primary network or a secondary network. The rules should not depend on whether the network is embedded. Vector supports a level playing field. Where secondary networks provide material connection access, they should face equivalent transparency, process and pricing obligations. Where a secondary network has very limited connection activity, lighter obligations may be appropriate.

Questions	
Q22. What options or approach, if any, should the Authority consider for addressing secondary network access issues?	See response to Q20 and Q21.
Q23. Are you aware of any issues relating to financial security requirements? Please provide examples, evidence or analysis where possible.	We are not aware of evidence that financial security requirements create a material or systemic problem. Financial security can play an important role. It protects existing customers from costs that a new connection may create but not ultimately fund. That risk can arise where the connection is large, bespoke, remote, or has limited alternative use. It can also arise where the customer's future demand is uncertain. The Authority should not assume that stranding risk is negligible. The size of the risk depends on the connection and the distributor. A project that looks modest at a national level may still create a material exposure for a local network and its customers. This issue becomes more important if more connection costs are recovered over time through lines charges rather than up front. Deferred recovery increases the amount at risk if the customer reduces demand, disconnects, or fails. Financial security can help place that risk with the party that creates it, rather than with existing customers. That does not mean every financial security requirement will be appropriate. Requirements should be proportionate to the risk. They should also reflect the amount at stake, the customer's credit risk, the life of the assets, and whether the assets can be reused. Before considering reform, the Authority should gather evidence on whether access seekers face material problems with financial security. It should assess the frequency, scale and cause of any concern. It should not restrict financial security tools unless it can show that current practice is causing inefficient outcomes.
Q24. Should financial security requirements be a priority for further reform? Please provide reasons for your view.	Financial security should not be a priority for prescriptive reform unless the Authority first shows that current requirements are causing material inefficient outcomes. The paper identifies a plausible policy issue, particularly if more connection costs are recovered over time through lines charges, but it does not yet establish that current practice is causing systemic harm.

Questions

Q25. What options or approach, if any, should the Authority consider for financial security requirements?

The Authority should begin with evidence-gathering and principles, not prescription. Any approach should preserve distributor flexibility to require proportionate security where stranding or recovery risk is material, while discouraging requirements that are excessive, discriminatory or poorly linked to risk.

Q26. Do you have views on any other measures the Authority should put in place to address connection pricing methodology issues (including Appendix D issues relating to contestability, in-kind contributions, large connections, and real estate developments)?

Yes. The Authority should address these issues in a way that supports efficiency, competition and customer protection. It should not use Appendix D to add broad new rules before it has defined the problem and tested the evidence.

Contestability. Vector supports customer choice and workable competition for connection works. Contestability can place useful pressure on cost and service. But pricing rules must not distort that competition. If a distributor can recover part of a connection cost through future lines charges, while an independent provider must recover its costs up front, the distributor may appear cheaper but it may not be more efficient. That would weaken contestability. The Authority should therefore ensure any pricing framework places distributors and third-party providers on a neutral footing.

The Authority should also coordinate this work with the wider competition and connections work programmes. Contestability raises issues that go beyond pricing. These include technical standards, contractor approval, safety, asset acceptance, liability, and ongoing asset management. The Authority should not create a separate connection pricing regime that pre-empts or cuts across that wider work.

In-kind contributions and vested assets. The Authority should recognise who holds the relevant information. Where a customer or developer procures works directly and vests assets into a network, the distributor may not control the price paid for those works. The customer, developer or contractor may hold the cost information. Any information requirement should reflect that reality. Distributor-only reporting would risk incomplete data and poor comparisons.

The Authority should also preserve efficient risk allocation. If a customer chooses to procure works directly, that customer should manage the procurement risk it controls. The distributor should retain the ability to apply reasonable technical, safety and asset acceptance requirements before assets are connected or vested.

Large connections. The Authority should preserve flexibility for large connections. Large customers often have bespoke needs. They can involve material investment, uncertain demand, specific site risks, and negotiated commercial terms. A generic cap or formula could produce poor outcomes. It could also shift risk from sophisticated connection applicants to existing customers.

Large connection arrangements should be able to reflect cost, risk, financing, security, timing and asset use. Where a customer asks the network to incur material cost up front, the distributor should be able to recover efficient costs or require appropriate

Questions

financial security. This protects existing customers from being left with unrecovered costs if the customer reduces demand, disconnects or fails.

Real estate developments. Real estate developments raise first-mover and beneficiary issues. A developer may fund assets that later support other customers. That can justify targeted mechanisms, such as pioneer-style arrangements, where they are practical and proportionate.

Overall, the Authority should focus on targeted measures that solve identified problems. It should preserve efficient cost recovery, protect existing customers, support contestability on neutral terms, and avoid rules that move costs or risks to customers who did not cause them.

Questions

Q27. What measures, if any, should the Authority consider to ensure connection pricing methodology requirements are effective in practice?

The Authority should focus first on ensuring requirements result in efficient connection prices. Reform should preserve flexibility for distributors to reflect efficient costs and risks, support contestability where it is practicable, and avoid shifting connection-specific risks or costs inefficiently onto existing customers. Also, reforms should be workable in practice.

Connection pricing is operationally complex. It involves engineering judgement, customer choices, procurement, network planning, billing systems, contracting, and regulatory reporting. A rule that looks simple in principle can be difficult to apply across real connection scenarios.

The Authority should therefore test any proposed requirements with suppliers before it finalises them. That testing should use real examples, including large connections, staged developments, vested assets, flexible connections, and high-volume low-cost connections. The Authority should test the full end-to-end process, not only the wording of the Code.

Implementation timeframes must be realistic. Distributors may need to change systems, pricing models, customer material, contract templates, governance processes and assurance processes. The Authority should not impose deadlines that force rushed implementation or manual workarounds. Those costs are ultimately borne by customers.

The Authority should also avoid duplicate assurance and reporting. It should use existing information where possible. Any new certification, audit or disclosure requirement should be targeted at a clear compliance risk and proportionate to the benefit.

Finally, the Authority should preserve flexibility. Requirements should specify the outcome sought, not prescribe every calculation or commercial term. This will help distributors apply the rules to different networks, different customers and different connection models while still meeting the Authority's objectives.

Questions

Q28. How should the Authority monitor, review or update connection pricing methodology requirements to ensure they remain fit for purpose over time?

The Authority should monitor requirements against the problem they were designed to solve. It should not treat variation between distributors as a problem by itself.

Before any new requirement starts, the Authority should define the baseline. It should identify the issue, the evidence of its scale, the outcome it expects, and the measure it will use to judge success. Without that baseline, later review will not show whether the reform worked.

The Authority should rely on existing information first. This includes published methodologies, connection quotes, reconciliation information, information disclosures, complaints, disputes and targeted information requests. It should only add new reporting where there is a clear evidence gap and the benefit justifies the cost.

Reviews should focus on outcomes. Relevant measures may include quote transparency, quote-to-final-cost movements, connection timeframes, complaints, disputes, customer understanding, contestability, and whether costs or risks have shifted to existing customers. The Authority should also monitor whether the rules affect investment incentives or distributor financeability.

The Authority should give new requirements enough time to operate before changing them. Frequent changes create uncertainty and implementation cost. That is especially important where distributors need to change systems, contracts and customer processes.

The Authority should also review the effect of requirements on competition for connection works. Rules should not make distributor-provided connections appear cheaper only because costs are recovered through future lines charges. If monitoring shows that effect, the Authority should address it quickly.

Any update should be proportionate to the evidence. Guidance may be enough where the issue is interpretation. Targeted amendments may be needed where a rule creates unintended incentives. Broad new regulation should only follow clear evidence of material harm.

Finally, the Authority should coordinate reviews with the Commerce Commission and other work programmes. This will reduce duplication, avoid inconsistent obligations, and help ensure connection pricing rules remain aligned with the wider economic regulatory framework.



HOUSTONKEMP
Economists

Review of the Electricity Authority's proposed further reform of distribution connection pricing

A report for Vector

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Executive summary

This report has been prepared for Vector to review the Electricity Authority's (the Authority's) issues paper, which considers further changes to the regulatory arrangements for electricity distribution connection pricing.

The Authority's issues paper describes options for reforming distributors' pricing methodologies for connection services. The issues paper identifies two core areas for potential reform:

- 'costing methodologies' – the means by which distributors calculate the incremental cost of a connection for the purpose of informing connection charges; and
- 'allocation methodologies' – the approach taken to determine how much of the incremental cost of a connection should be recovered in connection charges.

This report reviews the reform options and examines the economic framework that gives rise to them through the lens of the Authority's statutory objective, which focuses on the promotion of economic efficiency and competition.

Economic framework for the reforms

A central challenge for our assessment of the reform options is that the Authority's conceptual framework for reform gives primary consideration to equity between different generations of connection applicants, instead of economic efficiency. Pricing connection services at levels below their incremental cost is not economically efficient. The Authority's reliance on the balance point seeks to lock connection pricing into a less efficient structure so as to promote intergenerational equity.

We understand the Authority's view that a shortfall in the recovery of incremental cost can be recovered over time from connection applicants. However, this leads to an inefficient risk transfer from connection applicants to existing customers. Risk management instruments such as bank guarantees offer a means to mitigate the negative effects of these risk transfers, but may not entirely avoid them, and come at an additional cost.

Further, the Authority's reform agenda should give much greater consideration to, and be more open to, the benefits that competition for connection services could bring for the economic efficiency of connection charges. Greater competition for connection services could alleviate some of the concerns that have given rise to some of the Authority's options.

In our opinion, the Authority should progress its thinking on a contestability framework for competition and/or support for contestable delivery models alongside its reform options. This will ensure that it:

- does not lock in reform options in response to problems that could be addressed or significantly improved by increased competition; and
- does not inadvertently harm competition through the implementation of reform options without considering options for mitigation of these harms.

Economic principles for option assessment

We assess the costing methodology and allocation methodology reform options raised in the issues paper against five economic assessment criteria consistent with the Authority's statutory objectives and best-practice for regulatory reform. These criteria, set out in section 3 of this report, are whether the proposed option would:

- result in prices that reflect costs;
- internalise risk to send appropriate incentives;

- address the cause of the identified problem, rather than simply influencing outcomes;
- be 'right-sized' so that any regulatory burden is proportionate to the problem; and
- build customer confidence by improving the stability and predictability of pricing approaches.

Costing methodology reform options

With some exceptions, notably the 'construction risk allocation' and 'equivalence obligation' options, the Authority's costing methodology reform options seek to promote consumer confidence by improving the transparency, stability and predictability of connections pricing. In our opinion, options with this focus:

- could give rise to benefits by improving consumer choice and, importantly, improving the conditions for competition for connection services; and
- should be assessed on the basis of whether the benefits that they provide exceed the regulatory burden that they will impose on distributors.

The 'construction risk allocation option' proposes to restrict distributors' ability to pass through increases in connection costs relative to quoted charges. In our opinion, this option is unlikely to promote economic efficiency because:

- distributors already face incentives through the Commerce Commission's regulatory regime to manage contractor costs for connection works efficiently, so this option is unlikely to promote productive efficiency; and
- restrictions on the ability of distributors to pass through cost increases are not capable of addressing allocative inefficiency and would only redistribute financial outcomes between access seekers and other customers.

The 'equivalence obligation' option proposes to introduce an obligation that third party contractors may not price discriminate between connection works and shared network works. In our opinion, this option is unlikely to promote economic efficiency or competition, because:

- the problem it seeks to address is not well established – there are many reasons why it may be efficient and pro-competitive for contractors to charge different prices to different customers; and
- the standard of evidence required to fulfil the obligation of equivalence is unclear, which risks driving inefficient distortions to distributors' procurement of works.

Allocation methodology reform options

The Authority's allocation methodology reform options highlight the tensions between:

- the Authority's overarching reform, with the balance point principle being motivated primarily by intergenerational equity – and with the efficiency basis of this reform being weak; and
- the Authority's options that seek to reinforce or mandate connection pricing levels below the incremental cost of connection.

Evidence of this tension can be seen in some the Authority's 'allocation methodology' reform options where:

- the 'standard allocation formula' option would result in a substantial number of customers in each customer group receiving no price signal at the margin for their connection charge; and
- the 'negative charges' option (as well as the competitive neutrality payment proposed by the Authority at Appendix D) would result in customers whose connection imposes costs in the network receiving a payment for this activity.

The Authority could address these tensions by acknowledging that there are efficiency harms associated with its objective of intergenerational equity and providing flexibility for distributors to shift connection charges towards incremental cost in a transparent, stable and predictable manner.

The Authority is not confined to consider the reform options raised in its issues paper, which are limited by its view about how intergenerational equity should be achieved. In particular, the Authority consistently assumes that all connection applicants within a consumer group will pay the same lines charges, such that regulating connections pricing is the only means by which intergenerational equity can be achieved.

We set out in this report an alternative means by which the same objective could be achieved but with improved outcomes for economic efficiency. This involves explicitly allowing distributors to 'grandfather' existing customers who have paid lower connection charges into separate tariff classes so that new customers who pay efficient connection charges pay higher lines charges consistent with the Authority's concept of intergenerational equity.

1. Introduction

This report has been prepared for Vector and undertakes an economic review of the issues paper published by the New Zealand Electricity Authority Te Mana Hiko (the Authority) on 13 July 2026, which considers further changes to the regulatory arrangements for electricity distribution connection pricing by amending the Electricity Industry Participation Code (the Code).¹

1.1 Context for this report

This consultation is part of the Authority's multi-stage distribution connection reform pricing project. Key steps along the way in that process have occurred:

- in July 2023, when the Authority released an issues paper on a range of distribution pricing topics, one of which reflected upon the growing share of connection expenditure funded through capital contributions;²
- between October 2024 and July 2025, over which the Authority published a consultation paper setting out more detail about the conceptual case for its distribution connection pricing reform and setting out a number of fast-track measures,³ and decided to progress four of these measures;⁴ and
- between November 2025 and July 2026, over which the Authority published a consultation paper on an interim proposal to contain what it described as 'inefficiently high up-front connection charges'⁵ and subsequently decided to introduce a time-limited framework for a balance point principle whereby customer contributions should be subsidy-free and similar (or lower) to the contribution made by existing connections.⁶

The new issues paper describes options for reform distributors' pricing methodologies for connection services, specifically by reference to what the Authority delineates as:⁷

- 'costing methodologies' – the means by which distributors calculate the incremental cost of a connection for the purpose of informing connection charges; and
- 'allocation methodologies' – the approach taken to determine how much of the incremental cost of a connection should be recovered in connection charges.

The Authority's statements over time indicate that it is pursuing reform of distribution connection pricing because it seeks to:

- standardise pricing methodologies in light of the diverse approaches to connection pricing across New Zealand's 29 distribution networks; and
- limit the extent to which distributors can shift cost recovery to connection charges over time due to concerns that have been raised about increasing reliance on connection charges to fund capital expenditure.

¹ Electricity Authority, *Further reform of distribution connection pricing*, Issues paper, 13 July 2026 (hereafter, 'Issues paper').

² Electricity Authority, *Targeted reform of distribution pricing*, Issues paper, 5 July 2023.

³ Electricity Authority, *Distribution connection pricing proposed code amendment*, Consultation paper, 25 October 2025.

⁴ Electricity Authority, *Distribution connection pricing code amendment*, Decision paper, 18 July 2025.

⁵ Electricity Authority, *Reducing barriers for new connections: up-front charges and distributor obligations*, Consultation paper, 17 November 2025.

⁶ Electricity Authority, *Reducing barriers for new connections: up-front charges, distributor obligations and WACC*, Decision paper, 1 July 2026.

⁷ Issues paper, para 2.21.

These concerns have been raised against a backdrop in which New Zealand's journey towards net zero by 2050 is expected to result in widespread electrification across many sectors of the economy. Some of this electrification is likely give rise to increased needs for new or amended electricity connections.

1.2 Structure of this report

The remainder of this report is structured as follows:

- in section 2 we discuss the economic basis and framework that underpins the Authority's reform of distribution connection pricing, the purpose of which is to inform our analysis of the reform options on which the Authority is consulting;
- in section 3 we present five economic principles that we apply in our assessment of the Authority's reform options;
- in section 4 we assess the costing methodology options presented in the Authority's issues paper; and
- in section 5 we assess the allocation methodology options presented in the Authority's issues paper.

2. Economic framework for the reforms

In previous reports submitted to the Authority, we explained our concerns with the economic framework for reform, which is based upon the twin concepts of the 'neutral point' and the 'balance point'.

In this section we provide a summary of these concerns, highlighting the key economic challenges associated with its proposed changes to electricity distribution pricing. We also highlight the role of competition in addressing some of the problems that appear to be motivating the Authority's reform options.

The purpose of presenting this material is to provide relevant context for our assessment of the various options that the Authority contemplates in its issues paper and for alternatives to those options that we recommend for the Authority's consideration.

2.1 The Authority's statutory objective

The Authority's statutory framework is set out in the Electricity Industry Act 2010, with its main objective described in section 15(1), ie:⁸

... to promote competition in, reliable supply by, and the efficient operation of, the electricity industry for the long-term benefit of consumers.

The key economic elements of the Authority's statutory objective are economic efficiency and competition.

Economic efficiency is commonly understood to have three dimensions, comprising:⁹

- allocative efficiency – whereby resources are allocated to their highest value use;
- productive efficiency – whereby goods and services are produced at the least possible cost; and
- dynamic efficiency – whereby innovation and investment take place in response to changing customer preferences and technologies.

Competition is a dynamic process of rivalry, whereby firms seek to maximise their profits by offering price-product-service packages to customers that are more attractive than their rivals, whilst minimising their costs. Competition is a means through which economic efficiency is enhanced and overall welfare increased. For example, competition allows firms with lower costs or higher quality to displace firms with higher costs or lower quality, leading to better outcomes for consumers over the long run.

For greater detail about the economic dimensions of efficiency and competition, we invite readers to review one of our earlier reports.¹⁰

2.2 The case for reform

In our opinion, there are a number of limitations to the Authority's economic case for fundamental reform of the connection pricing arrangements that would have the effect of compelling changes in the level of connection prices over time. We explain below that the justification for reform lacks evidence – either in principle or practice – of problems with the existing frameworks by which connection prices are set by distributors.

The weaknesses with the economic case for reform also affect the justification for specific options, considered by the Authority, that draw from the same arguments. However, the Authority also considers

⁸ *Electricity Industry Act 2010*, s 15(1).

⁹ Australian government, National competition policy review (The Hilmer report), August 1993, pp 3-4.

¹⁰ HoustonKemp, *Review of the Electricity Authority's proposed distribution pricing code amendment*, 20 December 2024, pp 3-6.

options that are less affected by these weaknesses and so in sections 4 and 5 below we consider each of the options on their individual merits against the Authority's statutory objective.

The Authority's case for reform draws on anecdotal observations from submitters. These observations include that:¹¹

- the degree of variation in distributors' connection processes and practices across the country may raise barriers for customers in engaging effectively; and
- limited contestability can make negotiation of quotes challenging.

It follows that there may be some basis for rationalisation of connection prices and pricing and for improving the contestability of connection services. However, the arguments and evidence put forward by the Authority do not establish that distributors:

- face strong incentives to set connection charges at levels that are too high, relative to costs; or
- set connection charges systematically at levels that prevent efficient connections.

For example, the Authority frequently cites 'market power' as being relevant to a potential intervention to limit connection prices. However, the ability of non-exempt distributors to exert market power is constrained, since they are subject to price-quality regulation by the Commerce Commission (the Commission). The regulatory regime applied by the Commission closely connects distributors' allowed revenues with their efficient costs and provides for only a normal rate of return, subject to various incentive mechanisms to promote cost efficiency.

It follows that there is no direct incentive for distributors to increase connections charges. Changes to reliance on customer contributions do not result in persistently higher profits but rather a shift in the incidence of charges between customers – an outcome in which distributors have no direct financial interest.

Further, distributors face some positive economic incentives to connect customers where it is efficient to do so. Ensuring that customers who value services at more than incremental cost can connect to the network diversifies distributors' customer bases and spreads the long-term financial risk associated with operating and maintaining network assets.

The Authority has not presented clear evidence of inefficient outcomes, arising from connections that are inefficiently made or deterred. The Authority's view is that it is difficult to collate such evidence and that this represents an unreasonably high hurdle for the justification of its reform.¹² Nonetheless, in light of the conceptual weaknesses in the problem statement set out by the Authority, anecdotal evidence is a very limited basis for options that could give rise to fundamental changes in connection pricing.

In our opinion, given that the Authority's proposed connection pricing reforms are not addressing a well-established problem, the reform options may fail to promote economic efficiency and competition in the electricity industry. We explain the basis for these opinions in more detail in sections 4 and 5 below.

2.3 The neutral point

The Authority has defined the neutral point as being a connection charge at which the upfront and ongoing revenue from a new connection covers the incremental cost (both upfront and ongoing) of the connecting party with no contribution to shared and sunk costs.¹³

¹¹ See for example: Electricity Authority, *Reducing barriers for new connections: up-front charges and distributor obligations*, Consultation paper, 17 November 2025, paras 5.34-5.38.

¹² Electricity Authority, *Distribution connection pricing code amendment*, Decision paper, 18 July 2025, para 5.34.

¹³ Electricity Authority, *Reducing barriers for new connections: up-front charges and distributor obligations*, Consultation paper, 17 November 2025, para 5.6(a).

Put another way, the neutral point is a conceptual lower bound at which the combination of the connection charge and expected future lines charges would cover the incremental cost of an applicant's connection and ongoing use. The Authority often refers to the neutral point loosely as 'incremental cost', but when applied to the calculation of connection charges, it is more accurate to refer to it as '*net incremental cost*'¹⁴ since it is calculated *net* of the present value of future lines charges and is therefore a charge that is lower than the incremental cost of providing the connection, ie:¹⁵

$$\begin{aligned} \text{Neutral point connection charge} \\ &= \text{Incremental cost of connection} + \text{Incremental cost of future use} \\ &\quad - \text{Lines revenue from future use} \end{aligned}$$

We have explained that connection charges that are lower than the incremental cost of the connection, as is the case when the connection charge is set to the neutral point, will:¹⁶

- raise barriers for competition for connection services, since distributors may only price connection services below incremental cost by cross-subsidising these services from revenue earned on lines charges, an efficient competitors for the provision of connection services may be unable to match these prices; and
- shift connection applicants' business risks onto the existing customer base if the recovery of upfront costs incurred by the distributor is not protected by means of financial guarantees or appropriate termination fees.

Both concerns go directly to issues that are pertinent to the efficiency and competition limbs of the Authority's statutory objective. That is, cross-subsidising connection services from lines charges may assist with achieving similar outcomes between generations of access seekers (see the balance point principle below) but it represents a source of allocative inefficiency that has the potential to distort competition for connection services and give rise to inefficient connections proceeding.

The shift in risk between connection applicants and existing customers may be mitigated through distributors' use of appropriate risk instruments, such as requiring bank guarantees from access seekers. However, the use of such instruments:

- is an imperfect tool for managing risk, because such bank guarantees are unlikely to be available for a term that is consistent with the period over which risk is being shifted by connection prices that are lower than incremental cost; and
- comes at an economic cost due to the transaction and credit costs associated with asking a third party to guarantee risks that could otherwise be internalised by access seekers.

As a general proposition, we observe that there may be a distinction between 'efficient connection pricing' for an individual customer and the concept of 'efficient connection pricing' as a methodology applied to an entire customer group or all customers. Economics does not offer a definite prescription as to any singularly efficient connection pricing methodology.

In principle, it would be efficient to connect any customer with a willingness-to-pay that exceeds incremental cost. For an individual applicant, there may be a range of efficient connection prices – being prices between incremental cost and the applicants' willingness-to-pay. However, this observation does not assist in identifying an efficient connection pricing methodology. Since the distributor must still recover its common

¹⁴ Consistent with this comment, CEPA also refers to the neutral point as 'net incremental cost'.

¹⁵ The connection charge at the neutral point must be less than incremental cost because we would always expect lines revenue to exceed the incremental cost of providing lines charges, since it should also provide a return on and of sunk costs.

¹⁶ See: HoustonKemp, *Review of the Electricity Authority's proposed distribution pricing code amendment*, 20 December 2024, pp 17-21; and HoustonKemp, *Review of the Electricity Authority's proposed distribution connection pricing framework*, 3 February 2026, pp 13-15 and 22-24.

costs, it follows that any methodology is likely to deter at least some applicants who might have been prepared to cover their incremental costs.¹⁷

Further, the concept of 'incremental cost' can be difficult to pin down in this context. Although the dedicated costs required to connect an applicant are usually apparent and may readily be attributed to its connection, this may not always be straightforward for additional capacity added to the shared network. An investment that is required to support a new connection may also support subsequent connections – giving rise to the 'first mover disadvantage' and 'last straw' problems sometimes cited by the Authority.

2.4 The balance point

The Authority has defined the balance point for a distributor as being a connection charge at which the contribution to network costs for new connections is commensurate with the contribution made by similar existing customers.¹⁸ In its 2025 decision paper, the Authority described the balance point as a 'useful way of thinking about pricing that is non-discriminatory as between cohorts'.¹⁹

We have explained that the balance point lacks an efficiency rationale and is primarily a tool for containing connection charges so as to manage equity as between different generations of connection applicants – which we refer to as 'intergenerational equity'.²⁰ We outlined that the balance point is therefore not an upper bound for efficient connection charges.²¹

The Authority received advice from CEPA that there are two arguments for the balance point based in economic efficiency. CEPA highlighted that the use of the balance point as an anchor would stabilise reliance on connection charges over time and thereby:²²

- prevent a distributor from using price discrimination to extract the value of investments made by newly connecting parties, which would undermine incentives to make these otherwise efficient investments; and
- address potential distortions to the incentives of access seekers to connect that arise from changing connection charges over time, giving rise to 'position in queue' dynamics.

These observations are re-emphasised by CEPA in its most recent report relied upon by the Authority as it continues its reform program.²³

At their highest, CEPA's observations provide some degree of support for the stability and predictability of connection charges. We agree that access seekers do not benefit from:

- connection charges that increase or decrease substantially, unpredictably and regularly in the short term, since this may raise barriers to planning for investments in which connection costs are material; and
- re-balancing of cost recovery that result in lower connection charges and higher lines charges, which may lead to delays in investments by access seekers.

¹⁷ That is, these are consumers who have a willingness-to-pay that exceeds their incremental cost by a smaller amount than the burden of common costs allocated to them.

¹⁸ Electricity Authority, *Reducing barriers for new connections: up-front charges and distributor obligations*, Consultation paper, 17 November 2025, para 5.6(b).

¹⁹ Electricity Authority, *Distribution connection pricing code amendment*, Decision paper, 18 July 2025, para 9.44(c).

²⁰ See: HoustonKemp, *Review of the Electricity Authority's proposed distribution pricing code amendment*, 20 December 2024, pp 24-25.

²¹ This is acknowledged by the Authority, which is prepared to forgo enforcement of the balance point where a distributor's charges are low relative to peer networks, a consideration that is not grounded in economic efficiency: Electricity Authority, *Balance point principle guidance*, Draft for comment, 9 July 2026, para 3.38.

²² CEPA, *Distribution connection pricing – assessment of submissions*, 2 July 2025, paras 153-154.

²³ CEPA, *Reducing barriers for new connections: CEPA response to submissions on consultation paper*, 29 June 2026.

Whether there is a direct or material connection between undesirable outcomes for access seekers and economic efficiency is not clear from the material that we have seen. That said:

- it is unclear that the changes in connection charges that give rise to these undesirable outcomes for access seekers have occurred to date, but this may yet occur under the Authority's reform depending on how it is implemented; and
- it is clear that these observations are only concerned with the stability and predictability of connection pricing and offer no justification for that stable and predictable level to be at or around the balance point in the future.

The Authority has not cited evidence of distributors increasing connection charges substantially, unpredictably and regularly in the short term that would make planning of connection investments difficult, or of distributors rebalancing cost recovery substantially to lower connection charges and increase lines charges.

A key concern underlying the Authority's reform agenda appears to be Vector's shift over time towards a greater reliance on connection charges to fund connection capital expenditure. Although there has been clear evidence of a shift that has given rise to higher connection charges for many of Vector's customers, it does not mean that these changes have occurred either unpredictably or frequently such that they have frustrated the planning of access seekers' investments. We explain in section 2.1 above that distributors do not generally face incentives to engage in behaviour that frustrates access seekers' investment planning.

In any case, to the extent that CEPA's observations provide an efficiency basis for stable and predictable connection charges, that support does not extend to the particular outcome of those charges being stable and predictable at the balance point. That is, benefits arising from stable and predictable connection charges could be achieved at other levels of connection charges, including present levels that may be above or below the balance point.

Indeed, consideration of a reform option that is expected to result in an immediate and substantial lessening of connection charges could cause harm to efficiency, at least over the short term, if it results in access seekers further delaying investments. The Authority has also acknowledged a number of potential efficiency concerns associated with implementation of the balance point principle.²⁴

This has implications for how the Authority should consider deploying the balance point as part of its reform agenda, which we discuss further at section 5 below.

2.5 The role of competition

Competition for connections services is an important means by which efficient outcomes may be achieved. In New Zealand, the contestability of connection services is underdeveloped, relative to some Australian jurisdictions (such as New South Wales) in which connections to distribution networks are subject to a high degree of contestability.

In our opinion, the Authority's reform agenda should give much greater consideration to the benefits that competition for connection services could bring for the economic efficiency of connection charges. For example, greater competition for connection services could alleviate some of the concerns that have given rise to some of the Authority's options such as 'construction risk allocation' and 'equivalence obligation' that we discuss in section 4 below.

Consistent with this view, the Authority notes that issues to do with connections contestability are a collaboration priority for the Energy Competition Task Force.²⁵ This has been reinforced by a recent letter

²⁴ Electricity Authority, *Balance point principle guidance*, Draft for comment, 9 July 2026, para 3.37.

²⁵ Issues paper, fn 24.

from the Commission, highlighting that consumers should have a choice of provider for connection works so that they can compare cost, timeliness and service between providers.²⁶

However, the Authority's issues paper downplays the role of competition for connection services, stating that it:²⁷

...is not a complete solution, may not be readily achievable and may never be achievable in some locations.

We highlight in our summary of conceptual concerns with the neutral point that setting connection prices below incremental cost may raise barriers for competition for connection services, since prices at this level cannot be matched by third party service providers.

The Authority contests this view, effectively stating that competitive neutrality can be provided for by payments from distributors to connection applicants or their service providers.²⁸ However, the Authority appears to consider that it does not need to progress these elements alongside its reform, stating that:²⁹

Future work could consider whether additional guidance or methodology requirements are needed to support contestable delivery models, while preserving flexibility about the most appropriate regulatory approach.

In our opinion, the Authority should progress its thinking on a contestability framework for competition and/or support for contestable delivery models alongside its reform options. This will ensure that it:

- does not lock in reform options in response to problems that could be at least partially be addressed by increased competition; and
- does not implement reform options that inadvertently harm competition without also progressing options for the mitigation of these harms.

The need for closer thinking about the implications of the Authority's reform options on contestability is also highlighted by the Commission's recent letter to distributors. This letter cites the prospect that distributors "may well have substantial market power" and that "the effect of their behaviour in respect of connections could be a breach of competition law under section 36 of the Commerce Act, whether intentional or not".³⁰ In light of these concerns, it would not be prudent to progress reforms that require connections pricing at levels below incremental cost without considering tools to support contestable delivery models in the same process.

²⁶ Commerce Commission, *Letter to electricity networks – competition in connection works*, 13 August 2026, p 1.

²⁷ Issues paper, para 3.12(a).

²⁸ Issues paper, paras D.8-D.10.

²⁹ Issues paper, para D.11.

³⁰ Commerce Commission, *Letter to electricity networks – competition in connection works*, 13 August 2026, p 2.

3. Economic principles for option assessment

In this section, we identify five assessment criteria against which we assess the costing methodology and allocation methodology reform options raised in the Authority's issues paper. These criteria are whether the proposed option would:

- result in prices that reflect costs;
- internalise risk to send appropriate incentives;
- address the cause of the identified problem, rather than simply influencing outcomes;
- be 'right-sized' so that any regulatory burden is proportionate to the problem; and
- build customer confidence by improving the stability and predictability of pricing approaches.

The purpose of these assessment criteria is to build upon the Authority's stated reform objectives from the issues paper³¹ by aligning these objectives with economic principles to ensure a robust and comprehensive assessment of the proposed reform options. In the remainder of this section, we introduce the assessment criteria and describe the alignment of these principles with the Authority's statutory objective and additional best-practice considerations for the development of sound regulatory reform.

3.1 Prices reflect cost

It is economically efficient for a customer to consume a good or service when the economic value the customer derives from its use exceeds the economic cost of its production.³² By economic cost, we mean the marginal cost, or more generally the additional cost of producing the quantity that the customer consumes.

Economic efficiency improves when the price of a good or service more closely reflects the resource cost of its provision. When prices reflect costs, customers make consumption decisions that produce efficient outcomes. By contrast:

- when prices are above cost, they inefficiently deter the consumption of customers who value the good or service at more than cost but less than its price; and
- when prices are below cost, they inefficiently induce the consumption of customers who value the good or service at less than cost.

In the economic regulation of prices, cost reflectivity ensures that service providers can recover their total efficient costs without giving rise to cross-subsidies between customers or between services. More broadly, cost reflectivity is an important condition for the three dimensions of economic efficiency set out in section 2.1 above.³³

We assess each reform option by reference to the extent to which it gives rise to prices that reflect cost. This is important in establishing whether each option aligns with the Authority's statutory objective, which includes the promotion of economic efficiency.

³¹ Issues paper, paras 3.18 and 3.37.

³² This statement assumes there are no externalities, which may give rise to a distinction between a privately efficient level of consumption and a socially efficient level of consumption.

³³ With the existence of fixed costs, there may be reasons why the measure of cost reflected in prices should exceed marginal cost, consistent with the promotion of dynamic efficiency.

3.2 Risks are internalised

Economic regulators focus on the allocation of risks because it directly affects incentives, and incentives drive efficient conduct under conditions of asymmetric information. A regulated entity cannot be monitored perfectly, so the regulator relies on incentive properties of the regulatory framework itself to induce efficient investment, operating and risk-management decisions.

If risk is allocated to a party that has no ability to influence the probability or magnitude of an adverse outcome, that party can only respond by charging a risk premium (or seeking compensation after the fact), which raises costs without improving the efficiency of outcomes. Efficient risk allocation, by contrast, ties the consequences of risk to the party whose decisions affect risk, so that the cost of bearing the risk and the benefit of managing it fall on the same party. In economics, this is referred to as 'internalising' risks.

In the context of connection pricing, the Authority's issues paper includes options that seek to change the allocation of risk, for example in relation to:

- cost recovery, ie, the risks that a distributor may not be able to recover the costs that it incurs to connect a customer;
- quotation, ie, the risks associated with a contractor delivering connection works at costs that exceed their initial quotation; and
- financing, ie, the risk associated with raising capital to fund a project that requires an electricity connection.

Risk internalisation promotes economic efficiency. The internalisation of risk to the party that is best placed to manage those risks by influencing the probability or magnitude of an adverse outcome is analogous to price reflecting costs.

We assess each reform option by reference to whether it gives rise to the internalisation of risks. This is important in establishing whether that option aligns with the Authority's statutory objective, including the promotion of economic efficiency.

3.3 Treating the cause of the problem

In our opinion, a principle of good economic regulation is that reforms are designed to address the underlying cause of the problem, rather than seeking to promote a particular outcome.

When a regulator ties an intervention to an outcome, rather than a decision that produces an outcome, the regulated party's incentive is to satisfy the measured outcome by whatever means is least cost or least risk, which may not give rise to the desired result. This in turn can give rise to further interventions that seek to manage this incentive.

A classic example of a regulation that did not treat the cause was Mexico City's *Hoy No Circula* program. This program sought to reduce pollution and congestion in Mexico City by banning many drivers from using their cars on one weekday per week based on the last digit of their vehicle's licence plate. The intent of the program was to force usage of private transport to drop, thereby achieving the desired outcome of reducing pollution and congestion. Despite being vigorously enforced by police, the ban led to the opposite of the desired outcome, since many drivers were willing to acquire an additional vehicle to circumvent the restrictions.³⁴

Significant elements of the Authority's reform program appear to be designed on the premise that some distributors rely too much on customer contributions for connections capital expenditure and/or that this reliance has been increasing over time. Reform options that focus on the achievement of these outcomes, rather than seeking to address potential barriers to cost reflectivity and risk allocation that give rise to

³⁴ David, L., *The effect of driving restrictions on air quality in Mexico City*, Journal of Political Economy, 116(1), 2008, pp 38-81.

inefficient outcomes, can lead to undesirable incentive and risk properties. These in turn give rise to complex and excessive levels of intervention. We discuss these in more detail in sections 4 and 5 below.

We assess each option by reference to whether it is addressing the underlying problem that it seeks to solve. Where this is not the case, we highlight alternative means (or options) by which the problem could be addressed.

3.4 Right sizing reform

In our opinion, a principle of good economic regulation is for the scale and complexity of reform to be commensurate with the magnitude of the identified problem. We refer to this concept as 'right sizing reform'.

Regulatory intervention of any kind imposes administrative costs and further regulatory burden on the regulatory authority, regulated entity and its customers. Right sizing reform ensures that the intensity of the additional regulatory burden, complexity and cost is justified by the severity of the identified problem to be addressed.

By way of example, market failures that drive poor outcomes across a large number of consumers may necessitate more significant interventions or fundamental changes to the regulatory framework. Conversely, challenges within the regulatory framework that are specific to a narrow range of customers or processes may be more appropriately addressed through targeted reform or options that are more incremental than transformative.

We assess each option by reference to whether it is 'right-sized' for the identified problem, since right sizing reform options reduces unnecessary costs and complexities in circumstances where this additional regulatory burden is not warranted.

3.5 Customer confidence

We acknowledge that the Authority has stated, in the preceding regulatory process leading to the development of these reform options, its intention to standardise connection pricing methodologies applied across 29 distribution networks in New Zealand.

We understand that the purpose of such standardisation is to build the confidence of access seekers in the transparency, stability and predictability of connection pricing approaches, which in turn may facilitate better and more efficient outcomes.³⁵

Broadly, we agree with the Authority that there may be benefits to increased standardisation of connection pricing methodologies in New Zealand, so long as this standardisation still provides sufficient flexibility for distributors to adopt and maintain economically efficient prices and price structures. By way of example, it is desirable that distributors are able to:

- set connection prices that reflect incremental costs;
- set higher connection prices in areas of the country or parts of their networks in which facilitating connections imposes persistently higher costs than elsewhere; and
- change their connection pricing levels or structures over time in response to changing circumstances or emerging challenges.

Further, the need for the regulatory framework to remain flexible and dynamic in the context of changing circumstances for the fast-moving electricity sector in the midst of the energy transition should be balanced against the potential efficiency benefits of standardisation.

³⁵ Although we note that stability and predictability are not necessarily consistent with economically efficient outcomes, and market circumstances are likely to influence the extent to which there may be trade-offs between these objectives.

We assess each option by reference to whether it contributes towards building the confidence of access seekers by improving the transparency, stability and predictability of connection pricing approaches.

4. Costing methodology reform

In this section we assess each of the seven costing methodology reform options (A1-A7) considered in the issues paper against the five assessment criteria outlined in section 3.

Costing methodologies determine how distributors estimate the incremental cost of a connection. These estimates of incremental cost are then used in the application of allocation methodologies which determine what portion of this incremental cost is recovered through connection charges.

Most of these options seek to improve the quality, consistency or transparency of incremental cost estimates which promote efficient price signals through greater reflectivity. Further, these properties tend to support the process of competition for connection charges by giving access seekers a clear basis to compare and negotiate connection charges.

In addition, to varying degrees implementing these options would impose a regulatory burden on distributors and the Authority. For each option, these costs need to be weighed against the benefits that the option is likely to deliver.

The 'construction risk allocation' and 'equivalence obligation' options do not share the same focus on transparency, stability and predictability. In our opinion, these options are unlikely to promote economic efficiency, because among other matters:

- restrictions on the ability of distributors to pass through cost increases are not capable of addressing allocative inefficiency and would only redistribute financial outcomes between access seekers and other customers; and
- the standard of evidence required to fulfil the obligation of equivalence is unclear, which risks driving inefficient distortions to distributors' procurement of works.

Table 4.1 below provides a high level overview of our assessment of each of the Authority's costing methodology options. The detailed basis for each of these assessments is set out in the remainder of this section.

Table 4.1: Summary of assessment of costing methodology reform options

Option	Overall assessment	Comments
A1. Mandatory capacity costing	Support in principle	Improves cost reflectivity and standardises approaches across distributors. This improves the economic efficiency of connection charges to the extent that estimates of incremental cost are reflected in connection charges.
A2. Construction risk allocation	Do not support	Distributors already face incentives to manage contractor costs efficiently through the Commission's incentives scheme. Restricting cost pass-through changes financial outcomes for individual access seekers but does not address inefficient connection decisions.
A3. Equivalence obligation	Do not support	The Authority has not established that differences in pricing between shared network and connection works reflect anything other than legitimate cost and risk differences. The practical application and standard of evidence of this obligation are also unclear.
A4. Cost transparency	Support in principle	Clearer cost information supports more effective competition for connection services and improves price signals for access seekers. Efficiency benefits depend on the prospect of competition existing, and on the regulatory burden being proportionate to these benefits.
A5. Costing requirements	Mixed assessment	Could support economic efficiency and competition by providing a well-understood, consistent basis for costing requirements and promoting cost reflectivity. Could also support the implementation of other options. However, it is unclear how this would interact with the existing fast-track measures that already address avoided costs – raising right-sizing concerns.
A6. Input assurance	Mixed assessment	Greater assurance could increase customer confidence in the cost-reflectivity of connection charges, providing similar benefits to the 'cost transparency' option. However, these qualitative benefits are uncertain and are likely to come at a greater resourcing cost than the 'cost transparency' option alone.
A7. In-kind contribution costing	Neutral	This option is a requirement for allocation methodology reform and has no further intrinsic benefit.

4.1 Option A1 – mandatory capacity costing

The Authority's 'mandatory capacity costing' option proposes to require distributors to include network capacity costs in their estimates of incremental costs.³⁶

In its preliminary analysis, the Authority highlights that:³⁷

Signalling deeper connection costs plays an important role in showing the value of establishing a flexible connection (eg, with reduced security or less firm access to capacity).

Augmenting estimates of incremental cost to include the extent to which shared network costs are affected by a connection will, in principle, improve the economic efficiency of connection charges – to the extent that these estimates of incremental costs are reflected in connection charges. More efficient connection charges will deter inefficient entry, ie, access seekers who value connecting to the network at less than the resource cost of their connection.

Although we expect that the mandatory inclusion of capacity costs into estimates of incremental costs may improve the efficiency of connection pricing, the extent to which it is likely to do so may be constrained by the Authority's proposed implementation of the balance point principle. We discuss in more detail in section 5 below that the Authority's proposal to place an upper bound on the recovery of incremental costs from customers means that these costs, and sometimes even changes thereto, may not be signalled to customers.

Notwithstanding this concern, our assessment of this reform option for the cost-reflectivity of price signals is positive. The requirement for estimates of incremental cost to conform to a consistent cost standard appears

³⁶ Issues paper, table 3.1.

³⁷ Issues paper, para 3.21.

to promote the stability and predictability of connection charges by standardising approaches across distributors in a way that is likely to improve the efficiency of pricing outcomes.

4.2 Option A2 – construction risk allocation

The Authority's 'construction risk allocation' option proposes to restrict the ability for distributors to pass through increases in connection costs relative to quoted charges.³⁸ We understand that this option may be a response to submissions that distributors commonly pass on increases relative to quoted charges.³⁹

In our opinion, restrictions on the ability for distributors to reflect changes in costs in their charges to access seekers, relative to those quoted by contractors, is unlikely to promote economic efficiency in the electricity industry because:

- distributors already have incentives, conferred on them through the Commission's regulatory regime, to incur costs efficiently and these incentives extend at least partially to connections capital expenditure, so productive efficiency is unlikely to be improved by this option; and
- potential restrictions on quoting may change financial outcomes for particular access seekers but will not have any effect on inefficient connection outcomes and are therefore not capable of addressing allocative inefficiency.

There are already incentives for productive efficiencies

It appears that the concern underlying the 'construction risk allocation' option is a view that distributors may not face sufficiently strong incentives to manage contractor costs on behalf of customers, with the result that outcomes are not always least cost and lead to outturn cost surprises for access seekers.

Although all non-exempt distributors face positive incentives to pursue efficiencies on capital expenditure due to the Commission's incremental rolling incentive scheme (IRIS), this scheme applies to capital expenditure net of capital contributions. That is, there is no incentive scheme applying to expenditure that is incurred by distributors but paid for by access seekers by means of a capital contribution. However, there remain good reasons to expect that distributors will still incur efficient costs for their connection works.

First, in our experience of working with regulated businesses, capital works are delivered by means of competitively procured agreements with selected contractors, which determine standard rates and set relevant incentive arrangements. We understand that these arrangements apply both to works that are subject to the Commission's IRIS and to those that are not.

It follows that distributors already face economic incentives, provided by means of the Commission's regulatory regime, to manage contractor costs so as to achieve least cost outcomes and maximise IRIS payments. Although costs funded by capital contributions are not subject to these incentives, the efficiency of these costs would be expected to reflect the efficiency of other works that are subject to these incentives.

Second, under the Authority's proposed balance point principle, distributors will be unable to recover all incremental connection costs directly in charges to customers and will instead recover some positive proportion of these costs in lines charges.⁴⁰ This follows from the reference formula for implementing the balance point, which would require that:

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

In this formula:

³⁸ Issues paper, table 3.1.

³⁹ Issues paper, para 3.8(a).

⁴⁰ Although the Authority notes the possibility that the balance point principle could allow connection charges to completely reflect incremental cost, this is a point of principle only. Our understanding of the likely implementation of the balance point principle is that typical connection charges will be materially below the incremental cost of connection.

- CC are connection charges
- IC is the incremental cost
- α_{CG} is the parameter defining a distributors' allocation policy for a given consumer group
- $\overline{IC}_{CG}$ is the average incremental cost for the given consumer group

It follows that some part of incremental connection costs incurred will not be funded by customer contributions and will be included in the Commission's IRIS mechanism. Thus, there remains some direct incentive for non-exempt distributors to procure their connection tasks at least cost so as to maximise their IRIS payments.

Restrictions will not change inefficient outcomes

This option also appears to evince a concern with the quoting conduct of contractors and the consequences that arise when the costs incurred exceed these quotes. This concern implies that an increase in costs relative to a quote reflects a failing of the quoting process itself. However, this increase could equally reflect a change in the scope of works between the issuing of the quote and completion, rather than any shortcoming in the original quote. In this case, the additional cost reflects a change in the service being provided, rather than the purported problem this option intends to address.

Notwithstanding this scenario, the Authority's concern appears instead to relate to occasional or systematic underquoting, either of which could, in principle, involve examples in which connection applicants pay contributions that are more than they expected when they made their investment decisions.

However, we do not believe that the in-principle existence of allocative efficiency of this type gives rise to a good basis for the 'construction risk allocation' option.

First, the in-principle prospect for allocative inefficiency does not establish that this is a substantial concern in practice. There is an important distinction between a connection applicant being charged a cost that exceeds their expectations, as opposed to a cost that so far exceeds these expectations that it would have caused them not to proceed with their investments. This latter standard is required to demonstrate an actual example of allocative inefficiency.

Second, even if such examples could be established, the Authority's proposal does not provide a mechanism to address the identified inefficiency. That is, charging applicants the quoted amount, rather than the true costs of their connection:

- would make these applicants better off (ie, as well off as they would have been had the quote correctly estimated costs) through a payment that is effectively funded by other electricity customers; but
- would not prevent or change the inefficient outcome, being the connection of an applicant whose willingness to pay does not exceed the resource cost of providing the service.

Given these outcomes, we do not see a basis in economic efficiency for the 'construction risk allocation' option.

There are also practical difficulties associated with the implementation of this option. For example, not all increases in cost relative to the originally quoted price are entirely beyond the control or influence of connection applicants. In our opinion, where such increases are driven by the actions or choices of a connection applicant, such as customer-initiated changes in the scope of works, the increase in costs should be reflected in the connection charge. This ensures the applicant faces an efficient price signal to right-size their connection request rather than being able to shift the burden onto existing customers. However, it is unclear whether this option would seek to distinguish between cost increases due to underquoting and those that reflect an applicant's own choices, and if so, how this would be done in practice. Any implementation of this option would require further guidance from the Authority on how these practical difficulties are to be addressed.

4.3 Option A3 – equivalence obligation

The Authority's 'equivalence obligation' option proposes to create an obligation that third party contractors may not price discriminate as between works for connection tasks and shared network tasks.⁴¹ The premise underpinning this proposal is that distributors are able to secure lower rates for shared network works and that connection works receive higher rates that are passed onto connection applicants.⁴²

In our opinion, this option is unlikely to promote economic efficiency or competition in the electricity industry, because:

- it seeks to address a purported problem for which the evidence is very limited – there are many reasons why it may be efficient and pro-competitive for contractors to charge different prices to different customers; and
- it is unclear how this option would in practice take effect on the pricing of contractors, and what standard of evidence might be required to discharge the obligation of demonstrating equivalence.

4.3.1 Differential pricing between shared network and connections works is expected

The Authority describes a theory of harm whereby distributors are able to exert a form of buyer power to require contractors to provide lower rates for shared network works and higher rates for connections works – with the outcome that connection applicants pay capital contributions that exceed efficient levels.

The theory of harm described by the Authority can only emerge within a very specific situation wherein distributors not only seek lower rates for shared network costs, but do so by agreeing to pay higher rates for connections costs. Although the Authority does not describe a mechanism by which buyer power could be exerted, these actions presumably benefit distributors who receive capital contributions for connections works, since they do not bear all the costs for these works.

It is rational to expect that distributors may be trying to seek low rates for shared network costs. We describe in section 4.2 above that this is consistent with the incentives that they face under the Commission's IRIS to achieve productivity improvements. Although distributors benefit financially from reductions in costs, these will ultimately be shared with consumers through the application of incentive regulation.

Although we are unsure of the extent to which there are differences in pricing between shared network and connections works, there are sound reasons to expect that such differences would be likely to arise. For example, the nature of shared network costs may involve lower costs and risks, arising from:

- larger and more predictable projects, providing greater scale and a more stable income stream for contractors, thereby making this work less risky and more financially attractive than connection projects;
- greater flexibility over timing so as to be able to plan and sequence works effectively, whereas connections works more typically are driven by an external project schedule; and
- reduced complexity arising from the need to understand customer-specific circumstances on connection projects.

The Authority acknowledges that differences in costs between works may be a justifiable basis for differences in pricing.⁴³

4.3.2 Standard of evidence to demonstrate equivalence

Under the 'equivalence obligation', an observed difference in pricing between shared network and connections works might be considered inefficient and/or attributed to anti-competitive practices, unless

⁴¹ Issues paper, table 3.1.

⁴² Issues paper, para 3.8(d).

⁴³ Issues paper, table 3.1.

distributors are able to show otherwise by reference to evidence. In our opinion, to the extent that this type of obligation is introduced, then it should be sufficient to meet this obligation by showing evidence that the distributor:

- has procured both shared network and connection works competitively – such that these works would be expected to be acquired at least cost; and
- has not imposed any conditions in its procurement process that would induce or invite participants to offer lower charges for shared system works by increasing charges for connection works in a way that would not reflect differences in costs or competitive market conditions.

It would not be a desirable outcome for economic efficiency or competition in the electricity industry to impose restrictions on distributors that could give rise to procurement practices that diverge from these simple criteria. For example, if distributors are required to ensure equivalence between shared network costs and connection costs, then a rational response is to procure these costs in the same process and to request equivalent prices for each type of work, rather than seeking the lowest possible offers for each type of works. This may distort allocative efficiency by giving rise to prices that do not reflect cost.

Alternatively, if the Authority envisages that this equivalence would be established by demonstrating that differences in prices are attributable to differences in their underlying costs (ie, those incurred by contractors) then this would appear not to be a proportionate response to the level of concern identified by the Authority to date – and may not be achievable if distributors are unable to collect this information from contractors.

4.4 Option A4 – cost transparency

The Authority's 'cost transparency' option proposes to set standards or guidelines that would ensure transparency of cost information be provided in connection quotes.⁴⁴ This proposal appears to be in response to submissions that some distributors' quotes provide limited costing information, for example, in the inclusion of itemised costs.⁴⁵

In our opinion, this proposal could support improved economic efficiency through enhancing the prospects for more effective competition. In particular, we expect that increased transparency of connection costs could provide for:

- clearer price signals, by improving the ability for connection applicants to understand the underlying costs of their connection request, to compare quotes between different areas or different distributors and to negotiate effectively and to seek competitive provision of connection services where feasible; and
- improved stability and predictability of outcomes for connection applicants by providing an enhanced ability to understand and respond to connection quotes provided by distribution businesses.

The key consideration with assessing whether improved transparency contemplated by this option increases economic efficiency depends upon whether the regulatory burden placed on distributors is proportionate to the prospective benefits.

In our opinion, the most substantive benefit provided for by this option relates to enhancing the prospects for more effective competition for connection services. Increased transparency of quotes could provide an enhanced basis for comparison of charges on the part of the customer and generate competitive pressure – leading to improvements in all dimensions of economic efficiency over time.

In contrast, where there is no competition for connection services, or no prospect for increased competition, the prospects for improvements in economic efficiency appear to be more limited. Access seekers may be able to use the information to inform negotiations and improve their bargaining power, but an increase in bargaining power does not necessarily lead to improvements in economic efficiency. Lower connection

⁴⁴ Issues paper, table 3.1.

⁴⁵ Issues paper, para 3.8(f).

charges for an individual access seeker will only give rise to greater economic efficiency if this causes the access seeker to connect where this otherwise would not have been possible. However, for the reasons that we set out in section 2.2 above, the prospect for this type of efficiency gain appears to be limited, since distributors already have incentives to connect access seekers who are willing to contribute to the shared costs of the network.

4.5 Option A5 – costing requirements

The Authority's 'costing requirements' option proposes to set requirements for how incremental costs are quantified, such as requiring the deduction of benefits (such as avoided costs) that may be triggered by a connection.⁴⁶

In our opinion, this option could support improved economic efficiency and promote competition by:

- providing a basis for costing requirements across distributors that is well-understood by connection applications, thereby lowering transactions costs; and
- promoting cost reflectivity of connection charges as between distributors and competition for connections or for connection works.

We also note that increased standardisation of costing requirements could support the implementation of other options, if they proceed, such as 'mandatory capacity costing', 'cost transparency' and 'input assurance', as well as providing a foundation that could support increased contestability of connection charges.

However, the Authority's focus on benefits and avoided costs leaves a lack of clarity about how this option would work alongside existing aspects of the 'fast-track' arrangements that the Authority has already introduced, ie, posted capacity charges and pioneer schemes. These schemes already offer a framework within which benefits that connection works provide within the shared network may be reflected in charges. For example:

- posted capacity charges ensure that distributors apply a standardised approach for determining the costs that connections impose on capacity of the shared network and, in principle, these metrics should be calculated by reference to scenarios that account for avoided costs such as the deferment of replacement expenditure; and
- pioneer schemes provide a mechanism for allowing significant capital contributions made by access seekers to network capacity to be recognised and partially rebated should additional access seekers connect and use this capacity.

These considerations are also relevant to the overall regulatory burden that might be imposed by the implementation of this option and whether it is proportionate to the scale of benefits.

An intermediate step that the Authority could explore is to consult on a guidance document for standardisation of costing requirements. Alongside identifying aspects of connection pricing that could be standardised, this consultation could seek input on various means by which standardisation might be achieved and the benefits and costs associated with these approaches.

4.6 Option A6 – input assurance

The Authority's 'input assurance' option proposes to strengthen assurance of the assumptions and methodology that distributors use to determine connection charges.⁴⁷ We assume that this proposal is connected to concerns raised by submitters, cited by the Authority, about the lack of transparency about

⁴⁶ Issues paper, table 3.1.

⁴⁷ Issues paper, table 3.1.

connection charges and the potential for these charges to reflect excessive costs and/or unjustified margins.⁴⁸

In our opinion, greater assurance could potentially provide benefits similar in nature to those that we discuss in our consideration of the Authority's 'cost transparency' option at section 4.4 above. In particular, input assurance could increase customer confidence in the cost-reflectivity of connection charges, thereby strengthening the stability and predictability of customer outcomes.

However, these qualitative benefits would likely come at a cost and are uncertain in nature. The provision of input assurance is likely to require more resources to implement than cost transparency alone. Although the Authority has not prescribed a particular form of assurance, we assume that any type of assurance would necessarily involve at least some degree of third-party review and/or confirmation of assumptions and methodologies that distributors use to determine connection charges. It is unclear to us whether this would be proportionate to the benefits that would be achieved from this type of review – and many of these benefits might be achieved at lower cost simply by requiring greater cost transparency.

4.7 Option A7 – in-kind contribution costing

The Authority's 'in-kind contribution costing' option proposes to require distributors to collect information from contractors on vested asset costs.⁴⁹ The Authority suggests that collecting information on vested assets costs is likely to be necessary in order to implement most of the allocation methodology reform options explored in the issues paper.

Given that the collection of this information is an important input for the allocation methodology reform, we do not assess this option on the basis of its contribution to economic efficiency and competition. Whether this option should proceed depends upon whether and how the allocation methodology reform is progressed. However, we explain how we believe the information sought by the Authority can be collected at least cost.

The term 'vested assets' refers to works that were carried out or funded by customers and for which the distributor has agreed to take ownership. This reveals some complexities around the implementation of this option since:

- the Authority has framed it as an obligation on distributors; yet
- customers are the parties that have taken action to order and pay for the works; and
- only third party contractors that undertake the works are likely to know the underlying costs of the works – although we assume that the Authority has more interest in the payments made by customers for the works, which may vary from their underlying costs.

A practical approach to implement this option would be to require the disclosure of the cost of vested assets be included in the distributor's vested asset policy as a condition of accepting the vested asset. This would ensure a clear chain of responsibility to collect the relevant information, starting with access seekers collecting relevant information about the costs.

⁴⁸ Issues paper, paras 3.8(b), (c) and (f).

⁴⁹ Issues paper, table 3.1.

5. Allocation methodology reform

In this section we assess each of the nine allocation methodology reform options (B1-B9) considered in the issues paper against the five assessment criteria outlined in section 3

Each of the nine options reflects an attempt to operationalise the balance point principle in different, and in some cases complementary, ways. We discuss in section 2.4 that the balance point principle is not firmly grounded in a theory of economic efficiency. As a consequence, implementing this principle by any of the methods proposed involves a tension between economic efficiency and the Authority's apparent further objective to promote intergenerational equity.

The focus of our assessment of these options is how the balance point principle can be implemented to achieve the best outcomes for economic efficiency, rather than whether the underlying principles themselves are efficiency enhancing. Through this lens, we consider the trade-offs associated with each of different methods of implementing these reforms, including between cost reflectivity, stability and predictability and the allocation of risk between new and existing customers

Regardless of which allocation methodology options the Authority decides to adopt, it should consider the risk of instability if the reforms to connection charge pricing result in a substantial change to arrangements as between the interim framework and the Authority's intended long term reform. The prospect of significant changes to connection charges upon implementation risks creating perverse intertemporal incentives, whereby connection applicants inefficiently delay or bring forward their connection requests to secure a more favourable connection charge.

To mitigate this risk and promote access seeker confidence, the Authority should consider carefully how the interim framework and long term reform are designed, and ensure that any reforms are carefully phased to avoid substantial changes in approach that affect the transparency, stability and predictability of connection charges.

Further, the Authority is not confined to consider the reform options raised in its issues paper, which are limited by its view about how intergenerational equity should be achieved. An alternative means exists by which the same objective could be achieved but with improved outcomes for economic efficiency. This involves explicitly allowing distributors to 'grandfather' existing customers who have paid lower connection charges into separate tariff classes so that new customers who pay efficient connection charges pay higher lines charges consistent with the Authority's concept of intergenerational equity.

Table 5.1 below provides a high level overview of our assessment of each of the Authority's allocation methodology options. The detailed basis for each of these assessments is set out in the remainder of this section.

Table 5.1: Summary of assessment of allocation methodology options

Option	Overall assessment	Comments
B1. Standard process	Support in principle	Standardisation would improve transparency and predictability. However, it is important these positive properties do not come at the expense of economic efficiency.
B2. Standard allocation formula	Mixed assessment	Provides clarity on implementing the balance point principle. However, the fixed rebate may set connection charges to zero for many applicants, weakening right-sizing incentives and shifting risk to existing customers.
B3. Allocation floor (neutral point)	Mixed assessment	A floor at the neutral point is a positive reform that provides clarity about the Authority's implementation of this principle. However, the neutral point itself sits below incremental cost of connections, so the floor limits, but does not resolve the efficiency and risk-transfer problems.
B4. Change limit (balance point)	Mixed assessment	A 'soft' evolving ceiling is preferable to a hard cap. The proposed 43 year convergence period is too slow, since a faster rate of change can be accommodated without any negative effects on economic efficiency.
B5. Allocation cap	Do not support	The premise for the allocation cap appears to be to limit the extent to which distributors can fund the incremental cost of connection through connection charges. Despite the Authority's analysis, this is not economically efficient and will result in cross-subsidies to access seekers. Other options are preferable.
B6. Allocation band	Mixed assessment	Any assessment of this reform option depends on how it would be implemented, since the effect on efficiency depends upon parameter choices.
B7. Negative charges	Do not support	Negative charges for connections are not economically efficient and highlight the challenges with the Authority's economic framework. It is not efficient for access seekers to be <i>paid</i> by the distributor (with these payments funded by other customers) for actions that <i>cause</i> costs.
B8. Network cost contribution (large connections)	Do not support	There is no efficiency basis for this option, which would impose additional constraints on pricing for large connections that depart from those argued for by the Authority and which underpin the balance point principle.
B9. Prudent discount policy requirements (large connections)	Support in principle	Prudent discounts are unlikely to be relevant in most circumstances. However, to the extent that they are, we agree that prudent discount arrangements should not be subject to any non-zero minimum contribution to shared costs.

5.1 Option B1 – standard process

The Authority's 'standard process' option proposes to require distributors to structure offtake connection pricing methodologies using a consistent costing and allocating process structure.⁵⁰ This option seeks to address the wide variation in costing methodologies across distributors identified by the Authority and promote greater standardisation.⁵¹

Under the generic methodological structure advanced by the Authority, businesses would:

- assign connections to consumer groups;
- estimate the incremental cost of a connection; and
- allocate a portion of the incremental cost to connection charges.

We explain in section 3.5 above that standardisation of pricing approaches may enhance customer confidence by providing greater transparency, stability and predictability of pricing outcomes. However, it is important that these benefits do not come at the expense of economic efficiency.

⁵⁰ Issues paper, table 3.2.

⁵¹ Issues paper, para 3.5.

In section 5.2 below we review in more detail the specific option in the issues paper that establishes out how the standard process could be applied in practice, which the Authority refers to as the 'standard allocation formula'.

5.2 Option B2 – standard allocation formula

The Authority's 'standard allocation formula' option proposes to require that distributors adopt a standardised approach to allocation settings for offtake connections assigned to consumer groups.⁵² This option seeks to address the wide variation in costing methodologies across distributors identified by the Authority and promote greater standardisation by requiring the use of a common formula for determining connection charges.⁵³

In our opinion, adopting a standardised approach for determining connection charges has merit since it will provide clarity to stakeholders on how the balance point principle is intended to work in practice.

However, although the standardised formula has some positive efficiency properties, it also has some shortcomings. In part, these shortcomings reflect the efficiency challenges inherent in implementing the balance point principle, since these principles are not firmly grounded in economic efficiency, which we discuss at section 2.4 above.

Given these challenges, the Authority should consider whether there may be other approaches that are capable of delivering on the Authority's apparent objectives and that do so without compromising on economic efficiency. We discuss one potential option in this section.

5.2.1 A standardised approach would provide stakeholders clarity and predictability

Independent of the merits of the standard allocation formula itself, we consider that this option would achieve the Authority's objective of achieving greater consistency in allocation methodologies across distributors while also providing clarity to stakeholders and promoting access seeker confidence.

Since the balance point principle is now included in the Code, adopting a standardised approach to determining connection charges would provide necessary guidance to both distributors and access seekers as to how the principle would be implemented in practice.

For distributors, a standardised approach would make clear what type of connection charge pricing would be compliant with the principle and would reduce the scope for individual distributors to make different interpretations of the balance point principle. Clear guidance would reduce the cost of compliance for distributors and reduce the likelihood of inadvertent non-compliance, likely reducing the resources required for the Authority to enforce compliance. This guidance would promote access seeker confidence by offering greater predictability in how connection charges would be calculated.

We assess the merits of the standard allocation formula below.

5.2.2 Stability and one for one movement with incremental cost does not resolve all efficiency concerns

The standard allocation formula seeks to provide a common approach for determining connection charges, which ideally produces outcomes compliant with the following properties:⁵⁴

- subsidy-free – connections at least cover their incremental cost;
- cost reflective – connection charges vary with incremental cost; and

⁵² Issues paper, table 3.2.

⁵³ Issues paper, para 3.5.

⁵⁴ Issues paper, para B.10.

- stable – each annual cohort of connections make a consistent network cost contribution.

The standard allocation formula seeks to address these objectives by setting connections based on incremental cost less a fixed amount linked to incremental costs using the formula below (the definition of each term is set out at section 4.2 above:⁵⁵

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

Using this formula, α_{CG} can be set at a level such that most connections in a given consumer group would at minimum cover the incremental cost of their connection and use over time.⁵⁶ Keeping α_{CG} stable from year-to-year would satisfy the stability objective and produce an outcome consistent with the balance point.⁵⁷

Since connection charges vary on a one-for-one basis with incremental cost within each consumer group, applying this formula also satisfies the Authority's definition of cost reflectivity. This is a positive property for economic efficiency, as customers face the cost consequences of varying their connection choice, which provides them with incentives to select an efficient connection size and design for their needs.

However, this property only holds where connection charges are greater than zero. Since the standard allocation formula adopts a fixed rebate on incremental cost in determining connection charges, it may set connection charges at zero for a significant number of connection applicants, who would then face no positive incentive to 'right-size' their connection requests.

Further, implementing the standard allocation formula would set connection charges deterministically below incremental cost, socialising the connection costs of new applicants amongst existing customers. We discuss in section 2.3, that this has the effect of shifting business risks for applicants onto existing distribution customers.

5.2.3 Implementing the balance point principle by means of the standard allocation formula has inherent efficiency challenges

These shortcomings of the standard allocation formula reflect the challenge of reconciling the economic efficiency of connection charges with the needs of the balance point principle, which is not firmly grounded in economic efficiency considerations.

Full cost reflectivity, where connection charges are set equal to incremental cost, acts as an efficient signal and incentivises access seekers to right-size their connection by requiring them to bear the full incremental cost of their decision to connect. However, when using the 'standard allocation formula', this can only be achieved by setting $\alpha=0$, a setting likely to be inconsistent with the Authority's implementation of the balance point principle and which other options considered in the issues paper would prohibit.

Since fully cost reflective pricing is not likely to be achieved under most implementations of the standard allocation formula, this gives rise to several efficiency concerns that we discuss in section 2.4. Indeed, since the balance point principle is not an efficiency concept, any method of implementing the principle may potentially involve efficiency trade-offs. These trade-offs are evident when comparing the efficiency implications of the standard allocation formula with alternative allocation formulae.

The Authority dismisses setting connection charges as a fixed percentage of incremental cost as less cost reflective than the standard allocation formula.⁵⁸ This assessment is predicated upon the narrow definition that cost reflectivity amounts to connection charges varying on a one-for-one basis with incremental cost.

⁵⁵ Issues paper, paras B.11-B.12.

⁵⁶ Issues paper, para B.13.

⁵⁷ Issues paper, para B.13.

⁵⁸ Issues paper, table B.1.

However, as outlined above, the standard allocation formula does not achieve full cost reflectivity, and it may set connection charges at zero for a significant number of connection applicants.

The fixed percentage approach would not satisfy the Authority's criterion of connection charges moving on a one-for-one basis with incremental cost, meaning connection applicants would not internalise the full marginal cost consequences of varying their connection choice. However, it would ensure that all connection applicants bear at least some proportion of the incremental cost of their decision to connect.

We consider that the Authority should adopt a broader view of cost reflectivity and consider the trade-offs associated with each of these approaches to implementing the balance point principle. In assessing the merit of these alternative approaches, the Authority would need to consider which of the following is less harmful to economic efficiency:

- one-for-one movement between connection charges and incremental cost for some connection applicants but the potential for connection charges to be set at zero for a significant number of applicants, as would be the case applying the standard allocation formula; or
- all connection applicants bearing some non-zero proportion of their incremental cost through connection charges, but without a one-for-one movement between connection charges and incremental cost, as would be the case applying the fixed percentage approach.

5.2.4 An alternative approach to implementing the balance point principles

Given the efficiency challenges associated with implementing the balancing point principles through connection charges, we believe alternative options may be worthy of the Authority's consideration.

In particular, although the Authority rejects the workability of 'cohort' pricing – when different generations of access seekers face different combinations of connections and lines charges such that the balance point principle is achieved – a more limited version of cohort pricing could be achieved that may have superior efficiency properties to the reference formula.

We explain in section 2.4 above that a key efficiency problem with the balance point principle is that access seekers would face connection charges that are below the incremental cost of connection. This is not cost reflective and, without further risk mitigation mechanisms, would shift access seekers' business risks onto existing electricity customers.

The reason that the balance point principle requires connection charges to be discounted below incremental cost is that the Authority assumes that existing customers and new customers in the same customer group pay the same lines charges. As a result, connection charges are the only lever by which the Authority can implement the balance point principle.

An alternative option that would implement the balance point principle for a given customer group, yet have connection prices that reflect the incremental cost of connection, is to:

- set connection charges equal to the incremental cost of connection;
- retain existing customers on their current lines tariff arrangement; and
- place new customers onto a new lines tariff arrangement that reflects the balance point principle, ie, lower lines tariffs.

This approach would, in practice, grandfather the arrangements for existing customers, while ensuring a more efficient charge structure for new customers that involves cost reflective charges without inefficient risk transfers between generations of customers.

5.3 Option B3 – allocation floor (neutral point)

The Authority's 'allocation floor' option proposes to require that the incremental revenue from new offtake connections and connection offtake upgrade is likely to at a minimum cover incremental cost.⁵⁹ This proposal seeks to act as an enduring principle for the first limb of the balance point principle and ensures offtake connections are not subsidised.

The Authority raises the prospect that this floor would be applied *ex ante* and could be applied either on average over a consumer group or to individual connections.

Connection charges lower than the neutral point give rise to severe concerns for economic efficiency and competition (to an even greater extent than charges that are below incremental cost). From a principled perspective there may be benefits to applying the allocation floor at the level of individual connections, since this would support a connection pricing regime in which no access seeker receives a cross-subsidy, as defined by the Authority.⁶⁰ If a customer group were on average at the allocation floor, this would imply that a substantial proportion of the customer group were paying connection charges that were lower than the neutral point.

5.4 Option B4 – change limit (balance point)

The Authority's 'change limit (balance point)' reform option proposes to limit the increase from year to year in the portion of shared costs allocated to new offtake connections. This proposal seeks to act as an enduring principle for the second limb of the balance point principle.

We explain in section 2 of this report that we have concerns that the balance point principle has no foundation in economic efficiency. We note that the Authority's consideration of the balance point, in its balance point principle guidance draft for comment, also highlights potential inefficiencies arising from constraining prices to the balance point.⁶¹

Accordingly, we consider an option that contemplates the balance point as a 'soft' ceiling that can evolve over time to be preferable to a hard ceiling that is not updated over time. Such an arrangement would promote both:

- access seeker confidence, by means of the transparency, stability and predictability that the Authority seeks with connection charges; and
- distributor flexibility to change connection pricing over time to move towards more a more cost reflective basis for pricing.

An important design criterion for this option is the selection of L , which is the maximum rate at which the proportion of incremental connection costs recovered through lines charges changes each year.

The Authority notes the prospect that L could be 2.3 per cent, which is an implementation of the concept that it should take 43 years to move from all connection costs being recovered through lines charges to no connection costs being recovered through lines charges. However, the Authority also suggests that there may be benefits in allowing distributors greater flexibility to alter their funding over time.⁶²

In our opinion, consistent with the views expressed at section 2 above, there are unlikely to be substantial efficiency harms associated with providing distributors some degree of flexibility in the selection of L . However, we agree with the Authority that if connection charges are expected to change rapidly, then in

⁵⁹ Issues paper, table 3.2.

⁶⁰ Noting the distinction between the Authority's view of what amounts to a cross-subsidy and the view that we set out in section 2.3 above.

⁶¹ Electricity Authority, *Balance point principle guidance*, Draft for comment, 9 July 2026, para 3.37.

⁶² Issues paper, table 3.2.

some circumstances could give rise to inefficient connection decision-making that does not reflect the underlying cost of connection.

From the perspective of preventing such inefficient outcomes, the Authority may consider a constraint on L based on rate of return. This choice reflects that:

- an access seeker who incurs investment costs that are wholly comprised of connection charges will not be able to decrease the present value of these costs artificially by bringing forward or delaying investment, if these costs are increasing at a rate that is less than its rate of return; and
- connection charges are likely to form a smaller proportion of investment costs for most access seekers so that this constraint is likely to be highly conservative, such that connection charges could (in many cases) change at a much greater rate without affecting decision-making.

The regulated rate of return is likely to be a poor proxy for the rate of return that an access seeker would face. However, in the context of the degree of imperfection in the comparison noted above, we consider that it represents a useful starting point for identifying a level for this constraint.

On the other hand, a choice of L at 2.3 per cent, based on a 43-year convergence, is a very long period over which to facilitate connection pricing at levels lower than incremental cost. The selection of such a long time period places a very high value on stability and predictability, over the economic efficiency properties of signalling connection costs to access seekers without inefficient risk transfers

5.5 Option B5 – allocation cap

The Authority's 'allocation cap' option proposes to set an upper limit on the portion of incremental cost that distributors can recover through offtake connection charges.⁶³ The Authority's presumption behind this proposal appears to be that it could result in an increase in the socialisation of connection charges in some cases, with an increased proportion of upfront connection charges being funded by lines charges (including from existing customers).

In our opinion, this change is likely to harm economic efficiency by increasing the degree of cross-subsidy for incremental costs and increasing the extent of the risk transfers from access seekers to the broader base of electricity customers. These harms may be mitigated, but not eliminated, by means of bank guarantees or other forms of credit assurance.

It is not clear what this option seeks to achieve. The Authority suggests that this option could be efficiency enhancing if:⁶⁴

- access to finance is a barrier for some connection applicants
- risk financed by a distributor is lower than risk financed by an applicant
- the cost of capital for lines services is less than the average cost of capital for connection applicants
- it improves distributor incentives to ensure costs are efficient

The effects cited by the Authority do not bolster economic efficiency and this analysis conflates the concepts of average cost and marginal cost.

Many distributors may have a lower average cost of capital than connection applicants. However, the fact that distributors may be able to raise funds at a lower cost than connection applicants:

⁶³ Issues paper, table 3.2.

⁶⁴ Issues paper, table 3.2.

- does not imply that it is productively efficient for distributors to fund connection capital expenditure on behalf of connection applicants – in efficient capital markets, this will have the effect of increasing distributors' risk and their cost of capital commensurate with the risk transfer;⁶⁵ and
- gives rise to allocative inefficiencies in the electricity industry and in the broader economy by offering funding to connection applicants at rates that are not commensurate with their underlying risk.

We have previously explained the economic harms raised cross-subsidisation of funding and we refer the Authority to this material.⁶⁶

5.6 Option B6 – allocation band

The Authority's 'allocation band' option proposes to set an upper and lower bound on the allocation parameter α , and require all distributors to shift into the band over time.⁶⁷ The Authority also envisages that the upper and lower bound could change over time.

Of the options that the Authority has identified for implementing the concept of the balance point, this option could in principle provide the greatest degree of flexibility to distributor pricing. However, as set out by the Authority, it could also be configured to keep reliance within a narrow range. It follows that any substantive assessment of the merits of this option turns on the parameters that would define its operation.

In our opinion, the lower bound on the allocation parameter is important to cost reflectivity and internalising risks. The higher that this lower bound is set, the greater the extent to which distributors are required to set connection charges below incremental cost.

5.7 Option B7 – negative charges

The Authority's 'negative charges' option proposes to introduce parameters governing the circumstances when distributors may set connections charges at levels less than zero.⁶⁸ This option appears to explore possibilities to incentivise efficient connections where the applicant would be unwilling to connect with a connection charge of zero or greater.

At face value, this option for negative charges on connections reinforces our concerns about economic efficiency when prices lie below incremental cost, per section 2.3 above. Through their connection to distribution networks, connection applicants impose upfront resource costs on distributors. It is economically efficient, and consistent with an appropriate allocation of risk, for connection applicants to pay a connection price to the distributor that covers this cost. An option that requires a distributor to pay a connection applicant for its connection decision (ie, the party who is causing costs by its connection) highlights the conceptual challenges with the fundamentals of the Authority's economic framework.

The fact that the Authority is contemplating negative charges for connections raises the question of whether the options for the implementation of the balance point principle are addressing the concern underlying the reform. We explain in section 5.2 above that, because the concern underlying the reform is not primarily a concern with efficiency but rather a concern with intergenerational equity, there may be alternative options that could be capable of addressing the equity concern without harming efficiency.

The Authority states that it might be efficient to incentivise new connections in some circumstances.⁶⁹ It would be helpful for the Authority to provide greater detail around these circumstances and the mechanisms

⁶⁵ Put simply, if it were economically efficient for the party with the lowest average cost of capital to fund connection investment, then the New Zealand government would fund connection investment (and indeed, all investment in New Zealand). This would also happen to raise significantly the riskiness of New Zealand government debt amongst its creditors and would not be productively or allocatively efficient.

⁶⁶ HoustonKemp, *Review of the Electricity Authority's proposed distribution pricing code amendment*, 20 December 2024, pp 18-21.

⁶⁷ Issues paper, table 3.2

⁶⁸ Issues paper, table 3.2

⁶⁹ Issues paper, table 3.2.

through which the incentives would promote economic efficiency and competition in the electricity industry. For the reasons that we set out in section 5.5 above, we do not consider that incentives to connection applicants that amount to a cross-subsidy would promote economic efficiency or competition in the electricity industry.

5.8 Option B8 – network cost contribution (large connections)

The Authority's 'network cost contribution (large connections)' option proposes to introduce parameters governing the allocation of shared costs to larger offtake connections.⁷⁰

Although the Authority acknowledges that individually negotiated connections are unlikely to have connection charges that can be informed by the balance point principle, it suggests that there may be value in setting an upper limit on the contribution that these customers make to shared costs to enhance predictability and guard against 'hold up'.⁷¹ This proposal appears to be in response to submissions that under the current arrangements customers are exposed to hold-up risk once they commit to a new connection.⁷²

The principled basis for this option is unclear. We explain in section 2.2 above that distributors do not face incentives to set the connection charges so high that they would exclude efficient connection applicants.

Further, the benefits of transparency, stability and predictability that derive from setting out clear parameters for implementation of the balance point principle do not extend to the scenarios contemplated by this option. Large connection applicants are sophisticated businesses with the means and capability to negotiate long term contracts with distributors to provide the stability and predictability of distribution charges they need to support their investments. There is limited evidence for the hold-up scenario to which this option is designed to respond.

Finally, this option appears to reflect a focus on determining the outcomes of connection charges, rather than identifying the extent of any substantive economic problems arising for large customers and designing an intervention that addresses the problems. For example, this option discards the use of the balance point principle because that principle applied to this scenario does not result in constraints for distributors' reliance on customer contributions. This raises the concern that the Authority does not regard the balance point principle as a durable constraint, but rather a tool to be invoked or set aside, depending on the outcome that it produces.

5.9 Option B9 – prudent discount policy requirements (large connections)

The Authority's "prudent discount policy requirements (large connections)" option proposes to set parameters for the use of prudent discounts for large offtake connections.⁷³ This proposal explores the possibility of introducing provisions for prudent discounts, as included in the transmission pricing methodology, as a tool for mitigating inefficient bypass risk.

The Authority highlights that prudent discounts may be needed to avoid deterring an efficient connection, and that a prudent discount could involve removing the requirement for an offtake connection to contribute to shared costs. Prudent discounts may arise in situations in which:

- a customer pays a regulated price that involves contributing to shared costs; but
- this contribution is too high such that the customer would make inefficient consumption or investment decisions, such as not connecting, closing its business or bypassing the network, unless the contribution is lower.

⁷⁰ Issues paper, table 3.2.

⁷¹ Issues paper, table 3.2.

⁷² Issues paper, para 3.8 (a)

⁷³ Issues paper, table 3.2.

We are unsure that prudent discounts are likely to arise in many circumstances in distribution pricing. Businesses that might need prudent discounts are likely to be able to negotiate bespoke connection and pricing arrangements with distributors, who face no incentives to frustrate or delay their entry.

To the extent that prudent discounts are a feature of distribution pricing, we agree with the Authority's assessment that they should sit outside the scope of any constraints that require a distributor to seek a minimum level of shared cost recovery from a connection applicant. To the extent that achieving this outcome requires connection charges that are lower than the incremental cost of connection, the arrangements for any prudent discount should incorporate financial tools (such as guarantees) to protect the distributor and its customers from inefficient risk transfers.



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