vector electricity

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Vector

Submission on the Electricity Authority's distribution connection pricing: proposed code amendment

creating a new energy future

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Executive summary

1. This is Vector's submission on the Electricity Authority's (Authority) Connection Pricing consultation.
2. We note that Vector requested information under the Official Information Act from the Authority to inform our submission. We have not yet received all information requested which we consider was necessary to inform our submission. Vector therefore reserves the right to add to this submission once it has received and considered the information requested.
3. This submission has no confidential information and we are happy for it to be published on the Authority's website.
4. We have also submitted an expert report from Axiom Economics and, along with Orion, a report from HoustonKemp.
5. We greatly appreciated the Authority meeting with us to discuss and clarify aspects of the proposal.
6. Vector remains deeply concerned by aspects of the Authority's proposed changes to connection pricing for electricity distribution businesses (EDBs).
7. We are concerned that:

- The Authority may be acting outside its jurisdiction and encroaching into the Commerce Commission's (Commission) remit, thereby undermining certainty in economic regulation which governs EDBs.
- There are significant shortcomings in the Authority's problem definition, and little if any effort has been made to support the problem definition with empirical evidence.
- We agree with the Authority that connection pricing should be efficient (i.e. paid by the causer of the cost) which aligns with other high-growth infrastructure providers (e.g. Watercare and Auckland Transport) and our understanding of Government intent that "growth paying for growth".[1] However, the Authority has not provided empirical evidence that would confirm whether existing connection prices, charged as upfront payments, are either efficient or inefficient, nor attempted to explain how electricity distribution is somehow different from other infrastructure, including transmission where connections are not subject to any similar reconciliation requirements or limitation on upfront connection charges.
- Some of the core proposals are not supported by sound economic or pricing theory.
- There has been insufficient consideration of the interests of existing consumers compared to that of connecting parties, such as the serious risk of cross-subsidies through the practical inability to tailor individual tariffs to new connecting parties, or

[1] See recent statements made by Minister for RMA Reform Chris Bishop in the House, available: https://www.parliament.nz/mi/pb/hansard-debates/rhr/combined/HansD_20241210_20241211

the underwriting of commercial enterprises by existing users where the future revenues of a new connecting party are highly uncertain.

- The Authority has provided an inadequate cost-benefit-analysis to support its proposals and we are not aware of any outreach to consumers, other than EV charge point operators and developers.
- Some of the data used to support proposals is erroneous e.g. disclosure data used to calculate current reliance limits;
- The Authority has moved at pace which is reflected in shortcomings with the problem definition, some ill-considered solutions (e.g. the reliance limit), along with a lack of evidence provided and insufficient engagement given the major impact of these proposals; and
- The Authority's retention of consultants for this workstream who have recently completed work in the same area for a specific segment of industry participants[2] is also a concern. While we acknowledge it can be challenging to find consultants in New Zealand who are completely unconflicted, we believe an obligation nevertheless exists upon the Authority to retain consultants that do not have pre-determined positions on fundamental aspects of the Authority's proposals – or at the very least, to disclose the potential conflict and explain how it has been managed.

Summary of key points

Topic	Vector submission
The impact of the proposals on Vector and our customers will be significant	Vector has significant concerns about the Authority's proposals, most pressingly, its proposal to implement a reliance limit part-way through the default price-quality path 2025-2030 (DPP4). Arbitrarily limiting Vector's capital contributions to 82% of growth expenditure will have a significant and disproportionate impact on Vector and our customers. The Authority's own consultation document attempts to estimate the price increase for all Auckland consumers as a result of its proposals. We appreciate assurances from the Commission and the Authority that they will work through the financeability impacts of the current proposals. However, we still have significant concerns given – • It would require approvals potentially from two separate regulators (i.e. through the exemption process and/or the Commission s54V process);

[2] *Distribution network access for public EV chargers – Overview and options,* Concept Consulting, April 2023. Prepared for Drive Electric. Available online: https://driveelectric.org.nz/wp-content/uploads/2024/12/Concept-Consulting-brief-for-Drive-Electric-on-distribution-network-access-2-12-1.pdf

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	• It is not good regulatory practice to implement such wide-ranging reforms in such truncated timeframes; and • It undermines confidence in the level of certainty that can be placed on current and future regulatory decision of the Commerce Commission (and ultimately Part 4 including the input methodologies and DPP / CPP decisions) We strongly recommend that the Authority pauses to allow a better definition of the problem to be determined and a more robust consultative approach to developing solutions(including whether any perceived problems surrounding EDB incentives can be better and more proportionately addressed at source i.e. through regulatory change by the Commission) If the Authority decides to progress its proposals we encourage it to delay implementation of any proposals that impact the Commission's recently allowed DPP revenues and allowances until the next Commission reset, (for completeness, for the reasons discussed in the submission, we consider the reliance limits should be entirely abandoned). We also consider the timeframe for full reform is overly rushed. We don't consider the Authority could justify implementing full reform until the impact of the fast-track measures (if these are implemented) can properly be assessed.
Jurisdiction	We are concerned that the Authority's proposals appear to encroach on the jurisdiction of the Commission. The Authority's proposal to implement 'reliance limits' can have the effect of increasing the investment required by EDBs in their asset base and therefore radically changing both the capex and the allowable revenues determined by the Commission. We consider it is important for the Authority to explain how these proposed reforms fall within matters that are properly regulated by the Code rather than by the Commission via DPP4, Information Disclosure regulation, IRIS incentive regimes and the Input Methodologies.
Problem definition	The Authority has not established any significant problem that would be best addressed by the proposed reforms. The Authority is concerned that electrification is being suppressed due to connection charges that are inefficiently high, however, it has not provided any empirical evidence to suggest this is the case. While the level and trend in capital contributions

	is clear and unambiguous, the Authority has done no analysis to determine whether current levels are too low, too high, or about right, from an efficiency perspective. A key concern driving the Authority's proposals appears to be the potential incentive for EDBs to obtain benefits under the Commission incentive scheme under Part 4 of the Commerce Act (i.e. through the incremental rolling incentive scheme - IRIS). We consider that: • This is unlikely given the practical realities of connecting a large number of customers per year would preclude EDBs gaming the incentive framework in the way suggested by the Authority (and its consultant report from CEPA). • The available evidence suggests this is not the case. The trend in DPP2 (2015-2020) and DPP3 (2020-2025) has been for EDBs to be penalised under IRIS suggesting EDBs have not been using capital contributions to obtain benefits under the incentive regime. Vector's capital contributions policy has been a key plank in managing and successfully delivering significant growth in Auckland. We connect around 15,000 new connections annually and have delivered 80,337 new connections over the past 10 years. Our capital contributions policy has kept our Regulated Asset Base (RAB) and all customer bills lower than they otherwise would have been, a point not recognised by the Authority. Accordingly, we consider this has promoted the benefit of our consumers.
Reliance limit	One of our fundamental concerns in the fast-track proposals is the reliance limit. This will result in harm to existing consumers by arbitrarily limiting the amount an EDB can recover through capital contributions. For the vast majority of connections (such as mass market) it will not be practical to recover any residual of the connection costs not paid for through capital contribution via a bespoke ongoing tariff or charge. By definition, any connection costs an EDB is unable to recover up front will enter their RAB, increasing ongoing lines charges. This will require existing consumers to pay that residual amount which will effectively be a cross-subsidy. The Authority has not dwelled on the impact of the reliance limit increasing ongoing lines charges. This proposal (due to both the financial impacts and uncertainty) will have a dampening effect on necessary network growth and reinforcement investment to support the energy transition and, accordingly, is likely to harm the long-term benefit of consumers

	along with the broader "NZ Inc." policy goals of greater electrification to achieve net zero. Furthermore, arbitrary reliance limits undermine the Authority's assertion that connection prices should be efficient (i.e. if, prices are efficient then what role does a reliance limit play). We do not consider the approach to implementing the reliance limit is good regulatory practice. The proposed limit for the fast-track phase is 82% for Vector and is merely the historical ratio of capital contributions to connection-related capex. If the aim is efficient prices, how could 82% of the connection cost be efficient, except purely by coincidence? There no evidence provided to confirm whether it is or is not. If the aim is efficient pricing, a price's ratio to connection capex is irrelevant. We are not aware that the Authority is drawing on any regulatory precedent (overseas or otherwise) in imposing the reliance limit. It is doing so simply to halt a trend it has not proven is either positive, neutral or negative for consumers. Despite this, the Authority is pursuing this major change (with a major impact on Vector and our customers) at pace. For completeness, as described above and at we are also concerned the proposal encroaches on the Commission's clear jurisdiction to regulate prices/revenue and so the Authority is not empowered to implement this proposal. We strongly recommend the proposed reliance limits be abandoned.
Reconciliation methodology	At fast-track, the proposed reconciliation methodology is essentially a disclosure obligation. We support the intent in providing greater transparency to connection applicants to ensure an equal footing between parties in negotiating efficient connection contracts. We also support the methodology requiring connecting parties to make a contribution to common costs. In our view this is crucial to managing both customer equity and efficiency. However, we are concerned about the potential for the reconciliation methodology to default to becoming the mandatory pricing approach at full reform. We consider the benefit of flexibility in pricing to meet customer and network needs has been significantly underweighted by the Authority. In addition, if the reconciliation methodology is adopted at full reform as currently drafted, we are concerned it will benefit new connecting customers at the expense of existing customers. This is because:

	- It exposes existing customers to the risk that the new customer disconnects before they have paid the incremental cost, leaving those costs to be recovered from the existing customer base. - This risk is particularly acute in the context of connection applicants providing new services where there is uncertainty around optimal locations, commercial models, technology and customer preference and demand. - The recent announcement that Solar Zero, owned by multi-national investor BlackRock (also an investor in the charge point operator Jolt), is in liquidation demonstrates this is a live issue in New Zealand. In our view, this would undermine the Authority's additional and clear statutory objective to protect the interests of domestic consumers and small business. We strongly support retaining flexibility in pricing to allow distributors to meet network and customer needs. However, if the reconciliation methodology is required at full reform the Authority must take steps to ensure existing customers are not exposed to the risk new customers exit before their full costs are recouped. We also recommend if the reconciliation is the basis of full reform that it does not apply to high-volume, low-cost connections. This will enable distributors to have individual tariffs to recover incremental costs not recovered upfront and to eliminate existing customers underwriting that incremental cost recovery by requiring a security guarantee from connecting parties (as in Australia).
Impact on competition for contestable connections	If the Authority adopts the proposed reconciliation methodology in full reform, we are also concerned that it may have the effect of lessening or undermining competition in downstream markets for contestable connections. This has potential implications under section 36 of the Commerce Act, and harming consumer benefit more broadly. Because the Authority's approach bundles the connection and distribution service together, it results in pricing connection services at less than incremental cost. This will effectively eliminate the potential for competition in connection services. This is contrary to the Authority's statutory objective. We are also concerned about the potential legal risk to distributors if they are, effectively, required by the Code to undercut third parties who could compete in connection services. The Authority has suggested distributors make a payment to the applicant or their contractor to mitigate competition impacts.

	However, we are not clear how this would or could work in practice (and note competition impacts could occur in a broader range of circumstances than suggested by the Authority in the consultation paper). The Australian approach does support competition in contestable connections.
Incomplete references to overseas jurisdiction	The Authority has suggested it has drawn on precedent from overseas jurisdictions, particularly the UK and Australia. We consider it has missed key nuances from Australia in terms of the cost-revenue test (as it is termed in Australia). In particular: The consultation paper summarises the Australian approach as, "*connectors pay incremental cost net of incremental revenue.*"[3] However, this is only the case in the NEM and only applied to connection services offered by a particular distributor that are classified as standard control services. As explained in HoustonKemp's report and this submission there is significant diversity in Australian connection pricing approaches in the National Electricity Market (NEM) and, for contestable connection services, the incremental cost is recovered upfront in its entirety (e.g. In NSW most connection services are contestable and therefore paid upfront in their entirety by the connecting party).

8. We have also responded to the Authority's consultation questions in Appendix A to this submission.

Managing the impact of the proposals

9. Vector has significant concerns about the Authority's proposals, most pressingly, its proposal to implement a reliance limit part-way through the default price-quality path 2025-2030 (DPP4). Limiting Vector's capital contributions to 82% of growth expenditure (and only 82% of what the Commission has just last month endorsed in setting Vector's DPP4 price path through to 2030) will have a significant and disproportionate impact on regulatory certainty, Vector and our customers.

10. We do not consider the Authority has jurisdiction to impose the reliance limit as proposed nor do we consider the proposals will promote the long-term benefit of consumers. This is further discussed on page 15 and pages 22-24] There is a real risk the reliance limit will undermine necessary investment to support electrification. The proposals are likely to benefit new connections at the expense of existing customers.

[3] Electricity Authority, *Distribution connection pricing proposed code amendment: consultation paper* (October 2024), page 31

The Authority has also failed to show whether prices at, below or above an EDB's current reliance limit would be efficient or inefficient.

11. Along with concern about jurisdiction and the merits of the proposals, the proposed timing of the proposals is not reasonable given the major impact and burden it will impose.

12. The Commerce Act Part 4 regulatory framework is purposely designed to promote certainty for EDBs (and their investors) over their revenue and expenditure requirements for a five-year price-path. This certainty is a fundamental aspect of Part 4 of the Commerce Act regulatory design:

    - EDB revenue and expenditure requires approval by the Commission which limits investor returns. The trade-off is investors have certainty around expenditure and revenue over the price-path;

    - This is particularly crucial in the current operating environment where EDBs have major upcoming capex programmes with long lead times.

13. The Commission has considered and allowed for Vector's current contributions policy by determining Vector's DPP4 price-path including factoring that 100% of Vector's growth capex would be funded through capital contributions. This kept Vector's RAB (and revenue requirement of existing customers) much lower than it otherwise would have been.

14. If the 82% reliance limit is implemented, the Authority's analysis is Vector would require a 15% increase in capex over the last four years of DPP4. This would require an additional $28.25 million of maximum allowable revenue resulting in an increase in customer bills.[4] We estimate this will require increase in net capex of ~$140m over DPP4 (RY27 to RY30. However, over time this impact could become more significant (for example if our customer demand increases) and with a lower interest rate environment (and therefore lower WACC) the limit could stress financeability metrics over which the Authority has no visibility.

15. The Authority is concerned that the current connection prices risk supressing electrification and hence demand for connections. We do not think this has been established by the Authority. However, if this is correct, EDBs will need to model the impacts and reforecast based on a greater growth in connections than is currently assumed, with presumably some counteracting suppression of demand due to higher ongoing lines charges for all consumers. This will require the recasting of asset management plans and reassessment of price paths by the Commission. We note that application of the expenditure caps applied by the Commission in setting the 1 April 2025 starting prices will also need to be reassessed. This is due to the caps being based on historic spend. Historic spend would have been under existing connection pricing approaches. Historic spend would need to be adjusted applying the Authority's connection pricing proposals to arrive at meaningful caps.

[4] Electricity Authority, Distribution connection pricing proposed code amendment: consultation paper (October 2024) at 10.29

Financeability risk

16. The Authority's consultation paper states "*it has considered the risk that changes to capital contributions could increase the financeability challenges distributors have highlighted*" but "*We expect these matters can be worked through and resolved, as the legislation anticipates under s54V of the Commerce Act"* as well as though the exemption process.[5]

17. We appreciate assurances from the Commission and the Authority that they will work through the financeability impacts of the current proposals including resetting capital allowances, allowable revenues and price paths. However, this will require multiple approvals and extensive rework of only recently completed large processes, applications and approvals from potentially two separate regulators (i.e. through the exemption process and/or the Commission s54V process) in an entirely novel situation that neither EDB nor the regulators have experience working through. Accordingly, EDBs, their investors and consumers will face significant uncertainty around how the implementation of this regulation and interplay between two separate independent energy regulators will play out.

18. This clearly raises financeability risk as EDBs such as Vector do not have certainty over their revenue or expenditure allowances heading into the next DPP period and at a critical juncture for electrification of the New Zealand economy.

Indicative timing

19. The Authority's indicative timing is for fast-track elements to be implemented by 1 April 2026 and full reform by 1 April 2027. If the Authority implements its proposed fast track Code amendments, then our expectation is that the Authority will, under s 54V of the Commerce Act, ask the Commission to reconsider DPP4. If the Authority then implements its indicative full reform then Vector's expectation is that the Authority will, once again, need under s 54V of the Commerce Act ask the Commission to re-open DPP4 (particularly if the reliance limits remain or are reduced).

20. Re-opening the price-path to manage the impact of the reliance limit and increased costs associated with system change and changing process requirements for new connections (or any of the other proposals) would be a major and costly undertaking. This will be at significant cost to EDBs and the Commission, with an unprecedented need to twice reopen a single price-path due to the actions of another regulator. At the end of the day, these costs are borne by consumers. Other EDBs may be in the same position which would compound the Commission's task.

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[5] Ibid at 7.99

21. We do not consider it good regulatory practice to implement such wide-ranging reforms in such truncated timeframes. It may not leave the Authority or stakeholders sufficient time to consider feedback from submitters or work through the potential impacts on different parties. Rushing such major changes risks unintended negative customer outcomes. It will also likely lead to a string of amendments and rework which comes at a cost ultimately borne by consumers.

22. We strongly recommend that the Authority slows down to allow a better definition of the problem to be determined and a more robust consultative approach to developing solutions. If the Authority decides to progress its fast-track proposals we encourage the Authority to at least delay implementing the reliance limit until the next DPP.

23. In addition, the current timeframe for full reform will not provide sufficient time for the Authority and stakeholders to assess the impact of the fast-track proposal (i.e. it appears premature to contemplate full reform ahead of assessing whether the fast-track proposals achieve the Authority's desired outcomes.)

Vector's capital contributions policy has delivered significant Auckland growth while benefiting our consumers by minimising lines charges

24. We consider our 100% upfront capital contributions policy is in the best interests of our customers. Auckland has experienced significant growth in the past decade. Our capital contributions policy has been a key pillar in allowing us to fund necessary investment to support this growth. It has not loaded growth costs not caused by existing customers onto those customers, nor forced existing customers to both fund and underwrite the commercial business models of, for example, large (and at times speculative) property developers.

25. Without our capital contributions policy and assuming connection levels stay the same, our RAB growth and lines charges would have been significantly higher including:

- An increase in net capex of ~$140m over DPP4 (RY27 to RY30); and
- An extra $23m of revenues associated with financing and depreciation costs to be covered by all consumers over DPP4 (RY27 to RY30)[6]

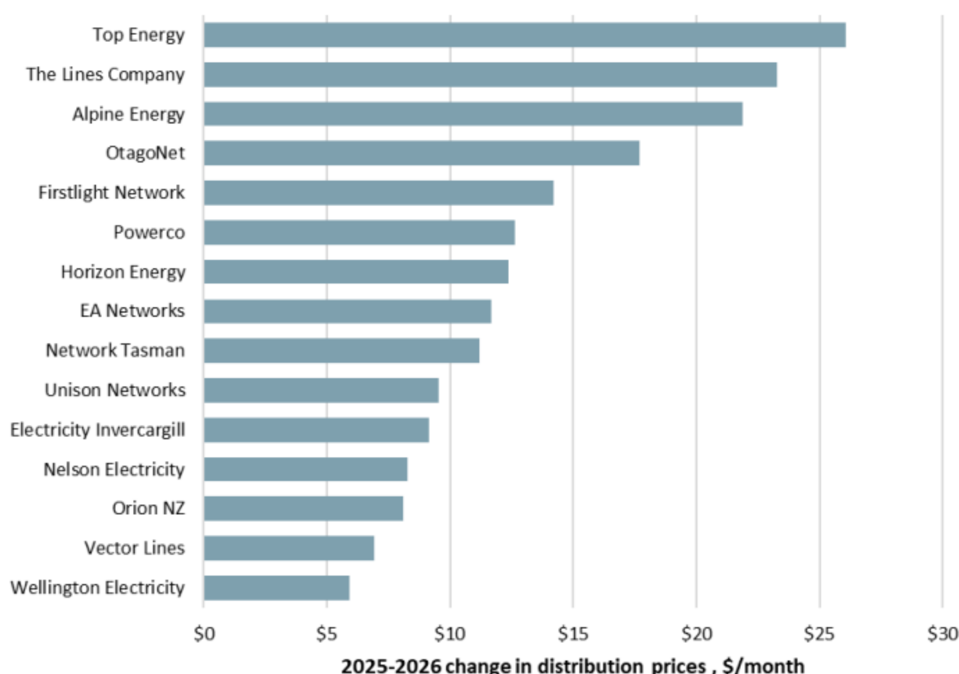
26. This is illustrated by the Commission's recent decision on DPP4. DPP4 will see increased consumer bills across all EDBs driven by higher interest rates (resulting from a higher WACC) and increased capex to support electrification.

27. Consumers on Vector's network face one of the lowest increase in bills from DPP3 to DPP4 due to Vector's capital contributions policy.

[6] Based on the following assumptions: 82% scaling of contributions from RY27 to RY30, DPP4 final capex inflator set, 2024 AMP.

28. The table below shows the Commission's estimate of the average increase in the monthly distribution component of a household's electricity bill from DPP3 to DPP4.[7] Vector is near the bottom of the bill increase table.

Figure 4.5 Estimated average increase in monthly distribution component of a household's electricity bill from DPP3 to DPP4



29. As the Authority itself recognises, moving away from this approach will lead to immediate customer bill increases.

30. We have considered the Authority's view that the additional connections driven by its proposals will ultimately lead to lower bills due to more customers overall. However, the Authority has provided no evidence or analysis as to why it believes this to be the case, how many more connections would occur (or are not occurring now) and to what extent those bills would be lower. For the most part, demand for connections is highly inelastic so we expect most connections would go ahead whether the contribution rate was 82% or 100%. We do note that the Authority has confirmed that for Vector that its proposals will increase bills for consumers.

Auckland's exponential growth means the operating environment is materially different to other parts of New Zealand

31. It is important to note that exponential growth, and materially higher costs, in Auckland means Vector's operating environment is significantly different from most other EDBs. Vector's capital contributions policy is consistent with (and in fact modelled upon) that

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[7] Commerce Commission, *Default price-quality paths for electricity distribution businesses from 1 April 2025 – Final decision: Reasons Paper* (November 2024), figure 4.5

of other high-growth infrastructure providers in Auckland, including Watercare and Auckland Transport.

Potential for cross-subsidisation

32. We understand the Authority's intent is for connecting customers pay their own incremental costs along with a contribution to common costs. We support this intent.

33. However, we have significant concerns that the reliance limit and the indicated net incremental cost approach at full reform will result in existing customers subsidising connecting parties. This is because of the practical realities of connecting a significant numbers of connecting parties in a dynamic operating environment where –

    - The Authority's proposals will result in customers paying some costs up front and some through time; but

    - It is not possible to undertake a net incremental cost calculation for every single customer or individualise tariffs for every customer.

    Accordingly, mass market customers will ultimately end up washing up unrecovered or unallocated costs.

Customers do not support any cross-subsidisation

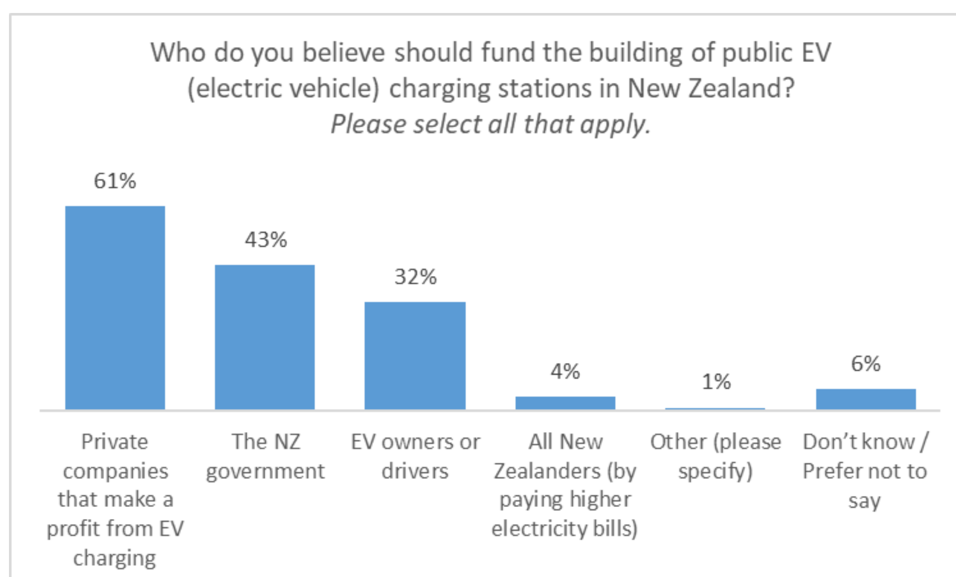
34. Our understanding is the Authority's proposals are driven by concerns from Charge Point Operators and a desire to see more of these connections.

35. We have undertaken customer research into who should pay for EV charging stations. We found:

- only 4% of New Zealanders aged 18+ believe New Zealanders should fund the building of public EV charging stations by paying higher electricity bills.

- 92% of New Zealanders aged 18+ consider a combination of private companies making a profit from EV charging, the NZ government and/or EV owners/drivers should fund these.

Figure one: customer survey results



NB: respondents could select more than one option so the results add up to more than 100%

36. We also note recent statements from Resource Management Act Reform Minister Chris Bishop that, "*the core principle of [housing and infrastructure development] is to make growth pay for growth*."[8]

37. We do not consider the proposals, which in practice are likely to result in existing customers subsidising new customers, support the long term benefit of consumers, nor current Government policy on how new infrastructure should be funded.

The Authority is straying into the Commerce Commission's jurisdiction and could well be acting ultra vires

38. Vector is concerned that the Authority is straying into matters that are within the exclusive jurisdictional remit of the Commission.

39. The Authority's consultation documents do not expressly address the limits of its jurisdiction to amend the Code in relation to prices under s 32 of the Electricity Industry Act 2010, or how the proposed consultation documents fall within those.

40. As we understand it, the Authority may amend the Code to regulate "pricing methodologies" for electricity distributors (s 32(4)(b)). However, it may not otherwise do or regulate anything that the Commerce Commission is authorised or required to regulate under Part 4 of the Commerce Act 1986 (s 32(2)(b)), including determining prices and/or revenues.

41. This point is captured by the Commission's letter to the Authority dated 11 November 2024, which provides the Commission's feedback under s 54V(1) of the Commerce Act.

42. The Commission notes that the proposed amendments to the Code "could have potentially significant impacts on price paths which apply to EDBs, both in terms of the proposed fast-track measures and the full reform", and "that for some customers in some areas this will result in increased prices, at least in the short term".

43. The Commission's letter importantly states that:

    We recognise the Electricity Industry Act 2010 specifies the following two exceptions to the prohibition under s 32(2)(b) of the Code purporting to do or regulate anything that we are authorised or required to do or regulate under Part 4:

    - *setting quality or information requirements for Transpower or 1 or more distributors, in relation to access to transmission or distribution networks; and*
    - *setting pricing methodologies for Transpower or 1 or more distributors.*

    We note that if one of the above exceptions does not apply, then s 32(2)(b) precludes any Code requirement that purports to do or regulate anything we are authorised or required to do or regulate under Part 4 – namely, regulating 'prices' (as defined in s 52C

[8] See the recent parliamentary debate on the Fast Track Approvals Bill 2024, available: https://www.parliament.nz/mi/pb/hansard-debates/rhr/combined/HansD_20241210_20241211

of the Commerce Act) or revenues from regulated services under Part 4. As you are aware, it is important therefore that any Code requirement can be characterised as a 'pricing methodology' (as defined in s 32(4) of the Electricity Industry Act), as opposed to regulating 'price', so that the exception under s 32(4)(b) will apply.[9]

44. The Authority's proposal to implement 'reliance limits' have the effect of changing the aggregate revenue (a component of 'prices') that Vector and other electricity distributors can obtain from connection prices charged to access seekers.

45. In these circumstances, we consider that it is important for the Authority to explain how these proposed reforms fall within matters that are properly regulated by the Code rather than by the Commission via DPP4 and the Input Methodologies.

46. More broadly, it is also important to note the Commission's point that the proposed Code amendments include "potentially significant impacts on price paths which apply to EDBs". The Commission further commented, in relation to the Authority's reliance on potential reopener mechanisms under Part 4, that:

    Setting and reconsideration of an EDB's price path, either via a customised price-quality path or the default price-quality path requires significant time and effort from the Commission and industry stakeholders.

47. That is in part because the Commission in setting the current IMs and DPP4 has made various assumptions as to the ability of EDBs such as Vector to recoup connection costs (or capital contributions) from access seekers.

48. We are concerned to note for example that certain aspects of the Authority's consultation appear to be directed at the incentives deliberately and carefully created by the Commission's Part 4 determinations: see for example the CEPA Report's section headed "EDBs face a mix of incentives, not all of which are clearly desirable".

49. Ultimately, Vector is concerned that the Authority's proposed Code amendments risk trespassing into the careful assessment of cost, revenue and incentive allocation completed over several years and culminating recently in the Commission's DPP4 determination.

50. We invite the Authority to clarify its position on the legal powers it relies on in passing the proposed Code changes.

Problem definition

51. We have submitted expert reports from Axiom Economics and HoustonKemp, both of which identified significant shortcomings in the Authority's problem definition.

52. Axiom Economics found the Authority had not established that there are significant problems that would be best addressed by the proposed reforms. Similarly, HoustonKemp found the problem definition, falls significantly short of establishing

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[9]Letter from Vhari McWha to Sarah Gillies (11 November 2024) available: https://www.ea.govt.nz/documents/6063/Response_to_EA_s54V1__-_Proposed_amendments_connection_pricing_and_DG_application.pdf

grounds for material regulatory intervention by reference to the Authority's statutory objective.

The Authority has not presented empirical evidence of the problem

53. The Authority's analysis is entirely theoretical. It has not provided empirical data to support the contention that connection rates are being constrained to inefficiently low levels.

54. We note more connections are not necessarily desirable if these connections are not efficient. The pricing 'efficiency benchmark' the Authority sets out in its paper is (necessarily) imprecise and also incomplete. It is consequently difficult to say whether the majority of EDBs' connection prices are 'too high' (as appears to be the suggestion) and, in turn, whether the rates of connections are 'too low' (or 'too high').

Increasing connection charges are not necessarily problematic

55. The Authority is concerned that capital contributions are increasing, and in the case of Vector are projected to increase. However, this is not necessarily evidence of a problem (provided they are efficient). Many of the drivers of increasing capital contributions cited by the Authority appear to be legitimate reasons for an EDB to increase the contributions required upfront to avoid burdening consumers with higher lines charges.

56. Managing demand growth, managing financing costs (rather than increasing prices through higher debt), limiting year-on-year movement in consumer bills and managing connection volume risk are considered desirable outcomes under the Part 4 regime. Indeed, in the context of gas pipeline businesses, the Commission has stated it expects these businesses could *increase* capital contributions to manage connection volume risk in the context of asset stranding risk.[10]

57. The only driver cited by the Authority that doesn't appear to promote customer benefits under the Part 4 framework is the potential to obtain benefits under the regulatory incentives to underspend assumed capex. If this issue was occurring in practice, it would be visible in the expenditure and contribution data, and would be appropriately dealt with by the Commission who have recently considered efficiency incentives at length both as part of the Input Methodologies Review and the DPP4 process.

58. Furthermore, the available evidence suggests that EDBs are not using capital contributions to obtain benefits under the incentive regime. This is set out in more detail below. The Authority's consultation paper and the supporting report from CEPA does not provide any evidence to the contrary, only conjecture. Moreover, the paper suggests Vector may benefit from the projected increase in contribution rate (reflected in our 2024 AMP). However, the Commission's DPP4 decision uses the same projection to set our expenditure allowances, which means that we would only benefit if our actual contribution rate were higher (all else held constant) than that projected.

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[10] For example, see Commerce Commission, Default price-quality paths for gas pipeline businesses from 1 October 2022 (May 2022) at 6.58

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The theoretical issues appear to relate to the incentive properties of the Commission's Part 4 framework

59. A key concern driving the Authority's proposals appears to be the potential incentive for EDBs to obtain benefits under the Commerce Commission's incentive framework (i.e. through the incremental rolling incentive scheme or "IRIS").

60. It is worth noting the Commission carefully monitors the performance of Part 4 regulation and recently found, "*Local lines companies have been effectively limited in their ability to earn excessive profits*."[11] If connection rates were being unduly stifled due to the incentive properties of the Part 4 framework, it is unclear why radical pricing reforms by the Authority would represent the best solution. Rather, best regulatory practice might suggest that the Authority should encourage the Commission to address any issues with the Part 4 regime (e.g. by amending how the capital expenditure IRIS works) rather than independently attempt to instigate a complicated and novel framework as a means to address a perceived problem that it believes a fellow regulator has failed to address.

61. We consider it unlikely that EDBs are gaming the incentive framework in the way suggested by the Authority (and its consultant CEPA):

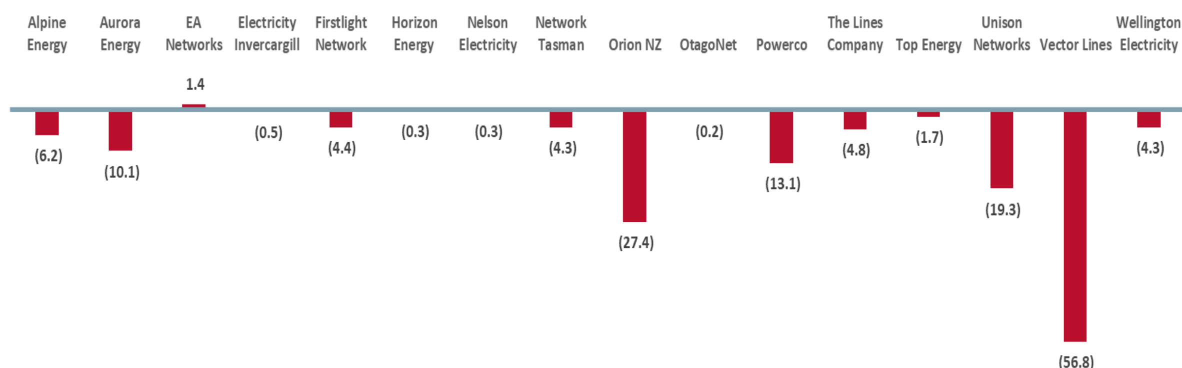
- The practical realities of connecting a large number of customers would make this extremely difficult in practice;
- The available evidence does not support this theoretical problem. The trend in DPP2 (2015-2020) and DPP3 (2020-2025) periods has been for EDBs to be penalised under IRIS suggesting EDBs have not been using capital contributions to obtain benefits under the incentive regime. This appears to be a reality that the Authority has failed to take into account in its theoretical problem definition hypothesis.

62. The last point can be seen in Figure Two below, which shows the capital expenditure IRIS incentive amounts allowed by the Commerce Commission in its DDP3 and DPP4 decisions for the non-exempt EDBs. Most EDBs, including Vector, received negative incentive amounts (i.e., penalties) resulting from the operation of that scheme. If EDBs were, as the Authority suggests, benefiting from increasing contribution rates, we would expect to see positive incentive amounts across EDBs and time periods.

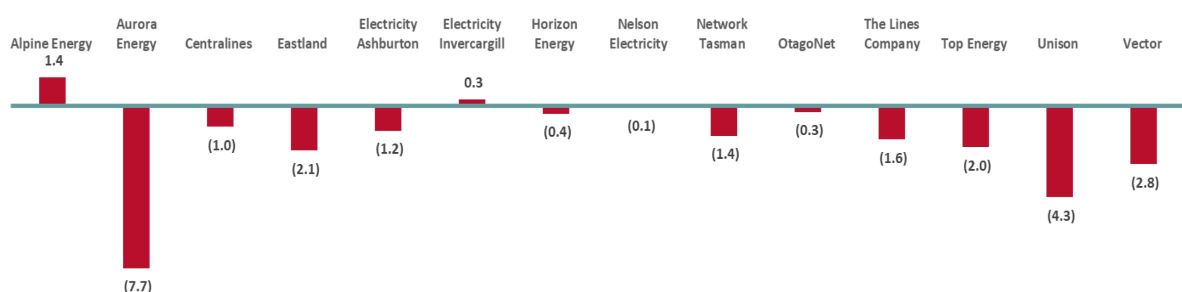
63. If the Authority remains concerned about potential incentive concerns, then we encourage it to engage with the Commission which is clearly tasked under legislation with monitoring and incentivising expenditure efficiency. Importantly, the Commission did not identify concerns with contribution rate incentives in its recent DPP and Input Methodology determinations.

Figure Two: Capital expenditure IRIS incentive amounts (negative = penalty, positive = reward)
Panel A. Incentive amounts in DPP4 decision based expenditure over the DPP3 period ($Million, $2025, end year).

[11] Commerce Commission, *Trends in local lines company performance* (June 2024)



Panel B. Incentive amounts in DPP3 decision based expenditure over the DPP2 period ($Million, $2020, end year)



The Authority's welfare calculus is incomplete

64. The Authority's welfare calculus does not sufficiently consider allocative efficiency. As acknowledged by CEPA, higher up-front capital contributions mean lower use-of-system charges. Those lower ongoing prices will have resulted in a static efficiency *improvement* in the form of higher usage by existing connected customers but appears to have been overlooked by the Authority.

65. As explained in Axiom's expert report, the existence of the potential trade-off between attaining greater levels of allocative efficiency and greater levels of dynamic efficiency is widely recognised. Such trade-offs are particularly significant when it comes to decisions about the pricing of services provided by long-lived infrastructure assets. It is consequently surprising that CEPA has neither acknowledged nor accounted for this well understood feature of regulatory pricing.

66. Instead, CEPA has assumed (implicitly) that the welfare gain obtained through lower use-of-system charges is *zero.* This is clearly not the case and represents a key omission in the Authority's analysis (i.e. even in principle it has not been demonstrated that increased capital contributions have adversely impacted efficiency).

The Authority's approach is not good regulatory practice

67. The Ministry of Regulation's expectations for good regulatory practice explains that:

"The government believes that durable outcomes of real value to New Zealanders are more likely when a regulatory system

- *has clear objectives*
- *seeks to achieve those objectives in a least cost way, and with the least adverse impact on market competition, property rights, and individual autonomy and responsibility*

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- *is flexible enough to allow regulators to adapt their regulatory approach to the attitudes and needs of different regulated parties, and to allow those parties to adopt efficient or innovative approaches to meeting their regulatory obligations*
- *has processes that produce predictable and consistent outcomes for regulated parties across time and place*
- *is proportionate, fair and equitable in the way it treats regulated parties*
- *is consistent with relevant international standards and practices to maximise the benefits from trade and from cross border flows of people, capital and ideas (except when this would compromise important domestic objectives and values)*
- *is well-aligned with existing requirements in related or supporting regulatory systems through minimising unintended gaps or overlaps and inconsistent or duplicative requirements*
- *conforms to established legal and constitutional principles and supports compliance with New Zealand's international and Treaty of Waitangi obligations*
- *sets out legal obligations and regulator expectations and practices in ways that are easy to find, easy to navigate, and clear and easy to understand, and*
- *has scope to evolve in response to changing circumstances or new information on the regulatory system's performance."*[12]

68. The current proposals do not fulfil a number of these elements. As discussed above, shortcomings with the problem definition mean the proposals cannot be said to have "clear objectives", nor does the proposal "seek to achieve those objectives in the least cost way" given the rushed move to pricing reform rather than investigating a more targeted solution or exploring the ability to better address any perceived problem through more targeted Commerce Commission regulation.

69. It also removes flexibility and does not "recognise the value of a regulatory approach that adapts "to the attitudes and needs of different regulated parties, and to allow those parties to adopt efficient or innovative approaches to meeting their regulatory obligations."

70. It is also not "well-aligned with existing requirements in related or supporting regulatory systems." In particular, as we expand further below, it is not consistent with the approach taken to transmission connection pricing or the process for developing the transmission pricing methodology (TPM).

Comparison with TPM

71. The Authority has not provided any explanation of the extent to which it has relied on transmission precedent for connection pricing, if at all, or the reasons for adopting a different approach.

72. It is curious no reference at all is made to TPM despite the funded-asset mechanism Transpower developed for First Mover Disadvantage being very similar to the "Pioneer scheme pricing methodology requirements" the Authority is now proposing.[13]

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[12] Government expectations for good regulatory practice (April 2017), available: https://www.regulation.govt.nz/assets/Uploads/Government-Expectations-for-Good-Regulatory-Practice.pdf

[13] The only reference is limited to CEPA's commentary that "[FMD] issues were recently addressed by the NZEA in its review of the Transmission Pricing Methodology." CEPA, *Regulation of distribution connection charges in New Zealand*, (October 2024).

73. Comparing the connection pricing proposals with that of Transpower gives rise to the following concerns:

   - The TPM Guidelines do not impose restrictions on, or limit capital contributions/recovery of, upfront costs for Transpower. In contrast, the Authority proposes to cap capital contributions for distribution.

   - Unlike the Authority's reliance limit, which will require the price-paths for EDBs such as Vector to be re-opened, the Authority did not interfere with Transpower's IPP when implementing TPM. The IPP was in effect treated as sacrosanct[14] - - an outcome more logical when you consider the jurisdictional interface between "pricing methodologies" (Authority) and pricing/revenue (Commission).

74. It undermines regulatory certainty and confidence in the regime where the regulator provides no clear reasons for taking a different approach to transmission and distribution services, especially after the extensive multi-year process followed to develop the TPM.

75. We are unclear why the Authority continues to recognise the value of flexibility in connection charges for Transpower but intends to so radically depart from this approach for EDBs.

76. Different treatment between Transpower and EDBs (both in this consultation and the *network connections consultation – stage one* consultation) could lead to inefficient outcomes. In particular, it may lead parties to inefficiently connect to the distributor rather than Transpower due to –

   - Lower connection costs regardless of whether this is efficient or inefficient. This could arise either because, at full reform, distributors are limited to the net incremental cost approach and Transpower is not; or if reaching the reliance limit prevents distributors from further charging capital contributions to fund growth.

   - That connecting parties can fall back on the prescribed terms when dealing with distributors (as proposed in the *Network Connections – Stage One proposals)*, but must negotiate with Transpower.

Comparison with other regulated services

77. It is also worth noting other regulated sectors retain flexibility in their connection pricing. As described above, Transpower retains flexibility in connection pricing.

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[14] The Authority – supported by Transpower – did request the ommission re-open the IPP, but only so Transpower could recover the cost of the new TPM

78. This is also the case for Fibre and Gas Pipeline Businesses (GPBs). Indeed, in the last DPP reset the Commission noted its expectation that GPBs might increase their capital contribution rate in the context of asset stranding risk.[15]

79. We consider there should be a higher regulatory hurdle to impose regulation that does not exist in other comparable services.

Moving rapidly from flexibility to highly prescriptive regulation undermines confidence in the regulatory framework

80. The Authority's guidance about its expectations in relation to distribution connection charges and use of capital contributions, prior to the release of its latest consultation paper, has been limited. The Authority has bypassed providing distributors with an opportunity to meet its expectations about treatment of new connections before deciding to regulate.

81. Instead the Authority has gone from:
    - adopting distribution pricing principles that say nothing explicitly about connection charges/capital contributions; to
    - to a letter of expectations in 2022 which briefly references FMD; to
    - scorecards in 2023 which provide minimal (conflicting) guidance about what would be acceptable; to now
    - issuing proposed mandatory Code requirements for connection charge pricing methodologies.

82. It undermines confidence where regulation rapidly moves from a light-handed approach to extensive prescription.

Reliance limit

83. The Authority's proposed reliance limit is not supported by economic or pricing theory – a point our expert reports fully address. If prices are efficient, which is the intention of the Authority's reform, a further and separate overarching aggregate limit has no logic. We also consider imposing the reliance limit is likely to result in customer harm.

84. As recognised by the Commission in setting DPP4, EDBs have significant upcoming capex requirements to meet the electrification demands of the energy transition. This investment may be compromised and artificially constrained by the introduction of an arbitrary reliance limit and which, in sharp contrast to the approach of the Commission, is determined through *historic* charging practices rather than forward-looking network upgrade investment requirements.

[15] For example, see Commerce Commission, Default price-quality paths for gas pipeline businesses from 1 October 2022 (May 2022) at 6.58

The Authority has not provided adequate justification for introducing the reliance limit

85. The Authority states it has imposed the reliance limit for the following reasons:

    "*without limits on changes to reliance on capital contributions, the fast track measures do not prevent distributors from continuing the historical trend of increasing connection charges.*

    We expect the drivers that contribute to this trend will continue in the foreseeable future. These drivers include:

    (a) growing capital expenditure programmes, including due to connection growth, organic (demand per connection) growth, and asset renewal cycles

    (b) elevated real and nominal financing costs

    (c) revenue paths profiled to limit year-on-year movement in consumer bills

    (d) regulatory incentives to under-spend assumed capital expenditure envelopes

    (e) exposure to connection volume risk

    The Authority therefore considers the risk remains that distributors will manage pressures on their businesses by inefficiently increasing connection charges. To mitigate this risk, we propose a further fast-track pricing methodology, referred to as reliance limits, in cases where reliance on up-front contributions is already high."[16]

86. The Authority is concerned that capital contributions are increasing, however, in and of itself this is not necessarily evidence of a problem. It is equally plausible that increasing contributions reflect a trend towards more efficient contribution levels. The drivers of increasing capital contributions cited by the Authority appear legitimate reasons for an EDB to increase the "user-pays" contributions required upfront to avoid burdening consumers with higher lines charges.

87. Managing demand growth, managing financing costs (rather than increasing prices through higher debt), limiting year-on-year movement in consumer bills and managing connection volume risk are considered desirable outcomes under the Commission's Part 4 regime. Indeed, in the separate context of regulated gas pipeline businesses, the Commission has stated it expects these businesses would *increase* capital contributions, for example, to manage connection volume risk in the context of increased risk of asset stranding.[17] Inconsistency as between regulators further undermines regulatory confidence and predictability at a particularly important time in the energy transition to electrification.

88. The only driver cited by the Authority that doesn't appear to promote customer benefits under the Commission's Part 4 framework is the potential to obtain benefits under the

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[16] Electricity Authority, *Distribution connection pricing proposed code amendment* (25 October 2024) at 7.80 – 7.82

[17] For example, see Commerce Commission, Default price-quality paths for gas pipeline businesses from 1 October 2022 (May 2022) at 6.58

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regulatory incentives to underspend assumed capex. While the Authority did not even attempt to analyse such IRIS incentive outcomes as part of its proposals, as we highlight above the evidence from both DPP3 and DPP4 periods strongly suggests this is not the case and, in any event, it would be appropriately dealt with by the Commission if it was occurring. We discussed this in more detail in our response to the problem definition above.

89. We also note the proposed reliance limits, based simplistically on the past 4 years, are entirely arbitrary. The Authority has not presented any evidence why the specific levels (e.g. 82% for Vector) would support efficiency, any more so than any other number.

The reliance limits are likely to result in customer harm

86. Even if the Commission re-opens the price-path following the Authority's fast-track Code amendments, the practical implications of managing capex growth under the reliance limit could undermine necessary investment. An EDBs measured reliance (i.e. ratio of contributions to growth capex) will be affected by a range of factors that can't be influenced by connections policy (e.g. system growth investment not related to new connections and the timing of receiving the capital contributions versus incurring actual capex). This will be very difficult for the distributor to manage and is likely to result in perverse outcomes through driving conservative and constrained non-connections investment profiles with consequential impact on the wider economy's ambitions to electrify.

87. We are concerned the reliance limits will result in existing customers cross-subsidising connecting customers. To the extent the additional growth capex cannot be wedged to the access seeker would have to be included in the RAB requiring all existing customers to cover the cost through higher lines charges. The only way to avoid customer bill impacts would be to delay important network investment upgrades which could constrain the ability to connect further access seekers and/or delay wider economy ambitions to electrify.

88. We note that it is uncertain how compliance with the reliance limit will be assessed or enforced. The proposed Code amendment requires distributors to use "best endeavours to ensure the policy or methodology (or schedule) is unlikely to result in its capital contribution reliance for load exceeding its capital contribution reliance limit for load."

89. If the Authority progresses the proposal we would welcome more guidance on how this will work in practice.

The proposal has been introduced too rashly

90. We do not consider it good regulatory practice for the Authority to rush through such a significant change and we are concerned the potential adverse and unintended consequences have not been sufficiently considered. We are not aware of any regulatory precedent for the reliance limit which further increases our concern about the rushed nature of the change. This contrasts with the Authority's approach in relation to the net incremental cost (i.e. starting with disclosure obligations only) despite this proposal having regulatory precedent to draw from.

Our concern about the reconciliation methodology relate to full reform

91. The proposals in the fast-track reform, including the net incremental cost approach required in the reconciliation methodology, generally relate to information disclosure.

92. We have significant concerns about the potential for the reconciliation pricing methodology to become a requirement for connection pricing at full reform. We consider distributors should retain flexibility in how they charge for connections to ensure they can meet customer and network needs. Providing a connection price is efficient, an EDB should be left to determine the level of upfront pricing and through-time pricing.

93. As explained in the HoustonKemp report there are sound economic reasons why different efficient prices might be determined for different customers. Historically our capital contributions policy has benefitted Auckland consumers by funding significant growth and not implicitly forcing electricity consumers to underwrite speculative commercial ventures such as housing developments, public EV charging stations and data centres, while minimising customer bills.

94. Furthermore, as currently drafted, we are concerned that if the reconciliation approach is adopted for full reform price setting this could compromise the interests of existing customers, particularly households, for the benefit of new connections.

Efficient prices and customer equity

95. We consider the Authority's proposals could be in direct conflict with its additional statutory objective "*to protect the interest of domestic consumers and small business consumers in relation to the supply of electricity to those consumers"* by privileging new connecting customers over existing customers.

96. Our understanding is full reform would require total connection charges to fall between the 'neutral point' (where the combination of connection charges and ongoing distribution charges is equal to the net incremental cost of the connection) and 'balance point' (where the network costs recovered from a connection applicant over the life of their connection is similar to that from other customers within the same consumer group). The Authority suggests connection charges within this range would likely be efficient. The Authority does not explain why prices above the balance point but below the bypass point are not also efficient. It would appear the Authority, by setting the ceiling at the balance point, is more concerned with equity as opposed to efficiency, despite equity not being a stated (nor statutory) objective of the Authority as a reason to underpin its regulation of connection pricing.

97. HoustonKemp's report found there is no sound economic basis for the Authority's conclusion that prices between the 'neutral point' and 'balance point' are likely efficient. It also found no economic basis for any general conclusion that prices above or below a 'balance point' are more or less efficient than the other, let alone inefficient or efficient.

What are efficient prices?

98. HoustonKemp and Axiom Economics set out the meaning of efficient pricing.

99. HoustonKemp's report notes that the Authority's connection pricing framework is ostensibly (although not in substance) focussed on efficient connection, which is most closely related to allocative efficiency. Allocative efficiency is promoted where prices are set –

- At least equal to the incremental cost of providing a connection service to the customer; and
- No more than the opportunity cost of the connection service to a customer, whether through bypassing the connection service, obtaining an alternative source of energy or ceasing its economic activity.

100. Prices within this range can be considered efficient.

Potential harm for existing customers if distributors are required to price based on the reliance limits methodology at full reform

101. The Authority's approach appears driven by concerns over equity between existing and new customers rather than economic efficiency. However, in practice, the proposals risk creating further inequity by treating new customers preferentially:

- It will inevitably result in costs being wash-up between customers that don't have a bespoke tariff (i.e. mass-market customers including households).
- The Authority proposes to defer recovery of some of the incremental cost of connection. This exposes existing customers to the risk that the new customer disconnects before they have paid the incremental cost, leaving those costs to be recovered from the existing customer base.
- This risk is particularly acute in the context of connection applicants providing new services where there is uncertainty around optimal locations, commercial models, technology and customer preference and demand.
- The recent announcement that Solar Zero, owned by multi-national investor BlackRock, is in liquidation demonstrates this is a live issue in New Zealand.

102. We have expanded on this point in our discussion on the connection charge reconciliation pricing methodology. The economic reports by Axiom Economics and HoustonKemp also provide further detail on why this is a significant concern.

Connection charge reconciliation pricing methodology

103. We understand (and support) that the Authority intends that connecting parties should pay their incremental costs. However, we are concerned that this will not be achievable in practice and instead will result in cross-subsidisation if mandated at full reform given distributors cannot charge an individual tariff for every customer.

104. We have set out further concerns below.

The indicated approach for full reform bundles connection and distribution services together resulting in pricing below the incremental cost of connection services

105. The Authority's approach to efficient pricing through the lens of the neutral point results in its lower bound for connection charges being below the incremental cost of connection services.

106. This is because the Authority's approach to the neutral point bundles distribution and connection services together. The neutral point is based on incremental connection costs, less the present value of expected future distribution revenues (with expected future distribution revenues reduced by 10 per cent to reflect the concept that new connections drive incremental maintenance expenditure).

107. HoustonKemp's report explains this has significant implications for the pricing of connection services and competition for connection services.

108. EDBs earn regulated distribution service revenue that is higher than their incremental cost reflecting the need to earn a return on and return of the regulatory asset base.

109. Accordingly, bundling these two services in the Authority's definition of the neutral point causes it to be materially *below* the incremental cost of providing the connection service. As revenue from distribution services exceeds the incremental costs of distribution services, the revenue from connection services can be commensurately below the costs of connection services when pricing at the neutral point.

110. When these incremental costs are almost entirely incurred as upfront payments, it does result in a substantial transfer of risk from connection applicants to existing users of the distribution network.

The indicated approach for full reform transfers risk to existing consumers

111. Axiom Economics and HoustonKemp both highlight concerns that the Authority's proposed approach, if required at full reform, in practice may disadvantage existing customers on the network.

112. We understand the Authority's intent at full reform is to require distributors to net off the 'incremental revenue' that an EDB is forecast to receive via ongoing payments for use of the network. The Authority proposes a connection revenue life of 30 years for residential connections and 15 years for other connections.

113. This profile of recovery transfers risk from connecting parties to existing customers. If the connecting party exits before the assumes connection revenue life then:

- The revenues collected from the connecting party may not be sufficient to return the residual part of the upfront cost that it did not pay for in its upfront connection charges;
- Any unrecovered costs would either be borne by the distributor, or socialised and recovered from other users through higher distribution charges.

114. This transfer of risk would reflect charges that are inefficiently low. It amounts in substance to a form of unsecured capital funding, similar to debt, provided by customers of the distribution network. It mitigates the upfront capital investment that shareholders must provide, in return for ongoing payments over 15 years, with these payments assessed at the regulatory rate of return.

115. However, the risk faced by such connection applicants is likely to be much greater than the risks that are compensated for by the regulatory rate of return. It is very unlikely connection applicants in a competitive market could source debt funding at the regulatory rate of return.

116. Accordingly, the proposed approach could give rise to the following inefficiencies:

- Inefficient connection decision-making by connection applicants, who may decide to connect when it is not efficient for them to do so, because connection pricing below the incremental connection cost artificially lowers their risk profile; and, associated with this,
- Inefficient business decision-making by connection applicants, who may proceed with an investment that delivers profits only because of the transfer of risk onto distributors and other electricity customers.

117. The Australian framework addresses this risk through its application of the cost-revenue test.

118. The proposed Code amendment (for the fast-track reform) allows distributors to use a shorter revenue life if the distributor reasonably believes the connection will have a shorter revenue generating life. Assuming a similar Code amendment is adopted at full reform, we would welcome clarification whether this allows distributors to impose a much shorter revenue life to riskier connections that the distributor assesses have a greater risk of exiting early (e.g. due to going out of business).

119. However, we note, even if this is permitted at full reform, this may be difficult for distributors to assess and it may result in dispute by connecting parties. Accordingly, it may not offer sufficient protection for existing customers.

120. The Authority's intent is to lower connection charges to see a greater level of connections, including riskier connections with less robust business cases. This will amplify the risk existing customers will be required to cover the costs of connections that exit early.

121. We do not consider exposing existing consumers to this risk can be justified. The recent liquidation of Solar Zero provides a clear example of the potential risk to existing customers of relying on recovery of costs over a 15 – 30 year timeframe.

122. We note in the Australian NEM, EDBs can manage the risk for existing customers by requiring a security fee that involves upfront payment or a financial guarantee from a connection applicant.

123. If the Authority progresses its proposals, we recommend the Authority make it explicit that EDBs can impose similar security schemes to ensure existing customers are not left on the hook for connections that exit early and that EDBs have strong discretion to shorten the expected revenue life for riskier businesses.

124. We also recommend that the EDB be able to reassess contributions over time (e.g. to reflect actual demand) and require an additional contribution if needed. This would be necessary if the security guarantee is time limited.

The Authority's proposals cost could inhibit competition for connections

125. Contrary to the Authority's statutory objective to promote competition in the electricity industry, the proposals would have the effect of locking in a bundle of connection and distribution services. This would inhibit competition in the market for contestable connection services.

126. As described on page 27], the Authority's approach results in pricing below the incremental cost of connections.

127. Pricing connection services at less than incremental cost, where these costs are largely upfront payments, will effectively eliminate the potential for competition in connection services.

128. The Authority has acknowledged potential competition impacts in some circumstances. The Authority stated that:

"…*connection works that include vested assets are more likely to result in a negative connection charge – ie, where the incremental revenue exceeds the incremental cost and contribution to network costs. To support contestability in such cases, distributors should make a payment to the applicant (or their contractor).*"[18]

129. HoustonKemp's report explains competition could be harmed in a wider range of circumstances than contemplated by the Authority. It does not require a negative connection charge to raise barriers to competition – only for the connection charge to fall below incremental costs, being those that are achievable by a third-party service provider.

130. The Authority has suggested distributors make a payment to the applicant or their contractor to mitigate competition impacts. We are unclear if this is a fundamental component of full reform or how this would work in practice.

131. We are also concerned about the potential legal risk distributors could be exposed to if the Code effectively forces them to undercut competitors for connections.

Interaction between the reliance limit and net incremental cost approach

132. As explained above, we consider that both the reliance limit and the proposed net incremental cost approach are flawed. If the Authority proceeds with these reforms it needs to consider how it would implement them in concert with the net incremental cost approach proposed in the reconciliation methodology.

133. If the Authority's problem definition is correct and its proposed solution results in 'efficient capital contributions', it is unclear what purpose the reliance limit serves.

134. That is, if the Authority's proposals result in capital contributions set at 'efficient levels', why would an additional limit on the overall proportion of costs recovered through capital contributions be necessary?

135. A simple example can explain why the two proposals should not co-exist. The Authority's reconciliation formula is CC=IC-IR+NC where CC is connection charge, IC is incremental cost, IR is incremental revenue, and NC is network costs. Assume a EDB has a reliance limit of 80% and a new connection cost $100. Then in the above formula IC must equal $100 and therefore CC must equal $80 (if the reliance limit is applied), therefore the net of IR and NC must be $20. But what if actually the net of IR and NC is not $20? The Authority addresses this by making NC the balancing figure

[18] Electricity Authority, *Distribution connection pricing proposed code amendment: consultation paper* (October 2024) page 69

i.e., it does not represent the actual network costs the connection should be contributing to.

136. Our understanding is the Authority's intent would be to remove the reliance limit at full reform once the net incremental cost becomes binding. We agree this would be necessary to avoid compromising the net incremental cost formula. Given the interaction between the two, imposing both measures at fast-track causes confusion and supports the need to remove the reliance limit as a feature of the fast-track proposals.

Elements of the reconciliation methodology are unclear

137. Another concern regarding the reconciliation proposed if it becomes the basis for full reform is that the inputs are not well designed, defined or explained. For example:

- We are unclear how the net incremental cost approach would work where the party paying the upfront contribution is different to the party paying through time (e.g. in the case of a housing development).
- Incremental cost appears to only include capital expenditure of the connection assets and network capacity cost but what about other incremental costs?
- The network cost contribution has no bearing on what network costs should be contributed to as it is in the code changes merely a reconciling figure.
- The incremental revenue makes no allowance that it is revenue related to the distribution service (not the connection service) and will always be larger than the costs of the distribution service as it includes a return allowance.
- It is uncertain how suppliers should interpret elements of the proposed net incremental cost approach is uncertain. For example, "incremental revenue" could mean:
  - Revenue that results from the connection that would otherwise not be realised and would otherwise not be washed up in the aggregate under the Part 4 regime;
  - Revenue added at an aggregate level considering the Part 4 regime;
  - Revenue associated with a consumer after considering the impact their contributions have on the RAB.
- We are unclear why the discount rate uses a 5-year WACC for a 30-year cashflow.
- The reconciliation approach assumes that a distribution price exists when setting the upfront contribution amount but does not consider that a bespoke distribution price may be determined for the connection driven by the level of contribution and therefore level of investment required. Recognising that this creates a circular reference. Several important items that impact price are missing because they do not pertain to cost: e.g. IRIS impacts
- Network costs under full reform should not be a balancing figure in the equation and be determined for each connection. This would be complex to do and require allocation models to be designed and implemented.
- The assumption that maintenance opex is 10% of revenue from prices is extremely broad-brush and simplistic and unlikely to be accurate in many instances.

Overseas jurisdictions

138. The Authority notes it has developed its proposals with reference to overseas jurisdictions, in particular, Australia's connection rules and the United Kingdom's Common Charging Connection Methodology.

139. Both Australia and the UK have a single regulator responsible for both pricing methodologies and regulating prices so the overlapping and conflicting jurisdictional issues do not arise and the risk of connection rules undermining the regulated price-path and incentive regulation is limited.

140. The Authority states it has not attempted to replicate either the UK or Australian approach. However – based on the aspects that have been replicated from the Australian framework – key nuances have been missed.

141. The consultation paper summarises the Australian approach as, "*connectors pay incremental cost net of incremental revenue.*"[19] However, this is only the case in the NEM, and only applied to connection services offered by a particular distributor that are classified as standard control services.

142. HoustonKemp's report explains in more detail important aspects of the Australian regime that appear to have been overlooked by the Authority. In particular:

- There is significant diversity in connection pricing across Australia, including as between the NEM and Western Australia, between states within the NEM (eg, which have different frameworks for contestable connection services), and between individual EDBs, that reflect different classifications of connection services between EDBs and the degree of discretion available to EDBs under the AER's connection guidelines. For example:
    - For contestable connection services, the incremental cost is recovered upfront in its entirety (e.g. In NSW most connection services are contestable and therefore paid upfront in their entirety by the connecting party to an accredited third party);
    - The incremental cost-revenue test in Australia applies only to connection services classified as *standard connection services*. This was not identified by the Authority in its reference to Australian practice but is an important distinction which appears to have been overlooked.
- Furthermore, it does not apply to all connections classified as standard connection services. For instance, most small connections are subject to a fixed connection charge, rather than charge calculated using the incremental cost-revenue test.

[19] Electricity Authority, *Distribution connection pricing proposed code amendment: consultation paper* (October 2024), page 31

- E.g. A granular example is Energex in Queensland for which the same connection service is classified differently (i.e. as a standard or alternative control which has implications for connection charges) depending on whether the customer is a small customer (standard control) or large (alternative control); or the likelihood the asset will be used by other customers (standard control) or won't be used by other customers (alternative control).

- If shared network costs and/or operating and maintenance costs are excluded from the cost side of the incremental cost-revenue test, the AER requires they be excluded from the calculation of incremental revenue.

Alternative approaches to achieve the Authority's objectives

143. Our understanding is the Authority's proposals are driven by concerns from CPOs and the Government's communicated desire to facilitate more connection of EV charging stations in line with current government policy.[20] These businesses have specific features (e.g. level of risk and uncertainty around customer demand) that distinguish them from other types of connections.

144. If this is the case, it does not make sense for the Authority to pursue wide ranging and far-reaching pricing reform for the benefit of a narrow single class of customers. The Authority should instead consider more targeted regulation (or, more appropriately, recommend the Commission pursue more targeted regulation) to facilitate and incentivise these particular connections.

145. We also recommend the Authority consider the alternative reform options that could better address the concerns underpinning the Authority's reform set out in HoustonKemp's report.

146. HoustonKemp recommends the following approaches to support large-scale electrification projects without causing the issues identified with the current proposals (e.g. transferring risk from existing customers to new customers):

- **Supporting electrification**: Providing targeted, lower ongoing distribution tariffs to support electrification projects;
- **Supporting competition:** The Authority's statutory objective is to promote competition, including in the provision of connection services. This would be best served by pursuing options that place distributors and third party connection services on an equal footing when bidding for connection projects. This could be achieved by:
    - requiring distributors to recover the cost of contestable connection services (which might exclude certain services, e.g., shared network augmentations) upfront in their entirety, consistent with the framework for contestable connection services in New South Wales

[20] 2023/2024 Letter of Expectations for the Electricity Authority, available: https://www.ea.govt.nz/documents/2686/Letter_of_expectations_2023_24.pdf

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   - This would also address the Authority's concern that distributors face a lack of incentives to constrain connection costs to efficient costs only.
- **Improve economic efficiency:** One theme of the Authority's problem definition is the potential for the regulatory framework for distribution services to not provide appropriate incentives for distributors to facilitate efficient connections. If this concern were to be substantiated, regulatory best practice would be to amend those elements of the regulatory framework from which the distortion or lack of incentives arise e.g. by encouraging the Commission to amend the IMs to ensure net capital expenditure is unaffected by increases in connection charges.

Yours sincerely,

Richard Sharp

GM Economic Regulation and Pricing

Appendix A Format for submissions

Submitter	Vector

Questions	Comments
Q1. Do you agree with the assessment of the current situation and context for connection pricing? What if any other significant factors should the Authority be considering?	No. As discussed on pages 16-22 and expert reports from Axiom Economics and HoustonKemp, the Authority has not established any significant problems that would be best addressed by the proposed reforms. The potential issues identified by the Authority are not supported by empirical evidence. The Authority does not appear to have sufficiently considered – • The practical realities of managing connections or any empirical evidence about the problem; • The major impact on, and undermining of, the Commission's regulatory framework; • Differences between distribution and transmission pricing, including that transmission connection pricing is not prescriptive and the TPM treated Transpower's price-path as relatively sacrosanct; • The potential impact on competition for contestable connections; • The nuances of the Australian and UK regimes that the Authority drew on for its proposals; • The administrative and other costs imposed by the proposals; • The negative price impact for existing customers imposed by the reliance limit.
Q2. Do you agree with the problem statement for connection pricing?	No. The problems identified by the Authority are not supported by any empirical evidence and largely relate to theoretical issues with the Commission's regime. If they were occurring, this would suggest an issue with the Commission's incentive regime that should be addressed by the Commission, not a separate regulator. See discussion on pages 16-22 and reports from Axiom Economics and HoustonKemp.
Q3. Do you have any comments on the Authority's proposed pathway to full reform?	The timing for full reform appears unmanageable and overly rushed. It could result in Vector (and potentially other EDBs) requiring two re-openers in a single DPP period.

	If the Authority implements the proposed fast-track measures, we recommend it delay full reform until it has had a chance to assess whether they are delivering the outcomes it intends. It does not make sense to pursue full reform before it has had a chance to reflect on the impact of the fast-track measures.
Q4. Do you consider the proposed connection enhancement cost requirements would improve connection pricing efficiency and deliver a net benefit?	The Authority should ensure distributors retain flexibility around non-firm connections to avoid potential negative customer outcomes, for example if a lower security standard is agreed with a customer who then sells the site to a third party. We were pleased to see the Authority's minimum flexible scheme appears to recognise the value of flexible and manageable network access to reduce capex. See HoustonKemp's report (at A1.1) on the efficiency implications of the proposed connection enhancement cost requirement.
Q5. Are there variations to the proposed connection enhancement cost requirements you consider would materially improve the proposed Code amendment?	See response to Q4.
Q6. Do you consider the proposed network capacity costing requirements would improve connection pricing efficiency and deliver a net benefit?	See HoustonKemp's report on the efficiency implications of the network capacity costing requirements (at A1.2) If the proposal is implemented, we support the ability to estimate average cost for capacity by network tier ($ per kVA) versus other approaches
Q7. Are there variations to the proposed network capacity costing requirements you consider would materially improve the proposed Code amendment?	Not at this stage, but we may have comments in the cross-submission process.
Q8. Do you consider the pioneer scheme pricing methodology would improve connection pricing efficiency and deliver a net benefit?	See HoustonKemp's report on the efficiency implications of the proposed pioneer scheme at A1.3 We are concerned the administrative burden of managing the scheme would outweigh the benefit. In our prior experience of managing a similar scheme, there can be significant cost and complexity involved particularly where parties entitled to payment cannot be found (e.g. a developer who winds up the company).

	We are also unclear how the pioneer scheme would work where the connecting party makes a partial payment upfront and the rest through time.
Q9. Are there variations to the proposed pioneer scheme pricing methodology you consider would materially improve the proposed Code amendment?	Variations should be made to minimise the administrative burden. For example, we recommend the scheme be triggered by the customer (rather than pro-actively by the distributor) i.e. the customer should 'opt in' to the scheme. The distributor should be able to deduct its reasonable administrative costs of the scheme (in line with Australian precedent). If the scheme is introduced, we support using de-minimum thresholds, however, as currently drafted they are too low (for example, the AER's default length is seven rather than 10 years).
Q10. Do you consider the cost reconciliation methodology would improve connection pricing efficiency and deliver a net benefit?	No. Our concerns relate to the potential for this to become the required approach at full reform. We consider retaining flexibility in capital contributions will better promote the long-term benefit of consumers by allowing EDBs to adopt approaches that best suit the specific needs and circumstances of their network and customers. The Authority's proposed efficient pricing nets off the 'incremental revenue' that an EDB is forecast to receive via ongoing payments for use of the network. We have the following concerns that this – • could disadvantage existing customers where new customers disconnect before their costs have been recouped (i.e. where a business fails); • Will inhibit competition in relation to contestable connections; and • In practice will result in cross-subsidisation from households to larger customers given distributors will not be able to individually price based on the reconciliation methodology for every customer (i.e. it would require the net incremental cost calculation to be undertaken for every customer). See discussion on pages 24-30 and expert reports from Axiom Economics and HoustonKemp.
Q11. Are there variations to the proposed cost reconciliation methodology you consider would materially improve the proposed Code amendment?	If distributors are required to price in line with the proposed cost reconciliation methodology at full reform: • the Code should ensure distributors can manage the risk of new customers disconnecting before their costs have been recouped leaving existing customers to cover these costs. (e.g. the Code

	should expressly allow distributors to impose security schemes (as in Australia). • The Authority should also consider the nuances of the approaches in overseas jurisdictions. For example, that the incremental cost revenue test actually only applies to a subset of connections. If regulation is required, it should only be contemplated for costs between the incremental and standalone cost pointsas this would be a range within which pricing can be considered efficient. Distributors should retain flexibility to price within this range. See discussion on pages 24-30 and expert reports from Axiom Economics and HoustonKemp.
Q12. Do you consider the reliance limits would improve connection pricing efficiency and deliver a net benefit?	No. The reliance limit appears to have been based on a concern about the potential for contribution rates to increase over time rather than about pricing efficiency. Accordingly, there is no reason to assume it would deliver any pricing efficiency. As discussed in our submission, the Authority has not established why increasing capital contributions are a problem in practice. We consider the reliance limits will ultimately result in consumer harm, given: • The encroachment on the Commission's jurisdiction; • It could result in cross-subsidisation; and • It could compromise necessary investment. We strongly recommend the reliance limits be abandoned. See discussion on page 15, pages 22-24 and expert reports from Axiom Economics and HoustonKemp.
Q13. Are there any variations to the proposed reliance limits you consider would materially improve the proposed Code amendment?	Yes. The proposed Code amendment to introduce the reliance limits should be removed. It has no demonstrably positive impact on the efficiency of connection prices.
Q14. Do you consider the exemption application process (together with guidelines) can be used to achieve the right balance between improving connection pricing efficiency and managing transitional impacts on non-exempt distributors?	We are concerned the exemption process will not provide sufficient certainty to manage distributor and investor concerns about the significant impact of the proposals, particularly the reliance limit. If the Authority progresses reforms, s54V will need to be used to manage the impact of the reliance limit and, most likely, the additional costs involved in implementing the proposals in this consultation and the connections consultation.

	However, given the significant impact and workload involved for both EDBs and the regulators, along with concern around regulatory certainty, it would be more appropriate to delay implementing proposals that impact EDB revenue (such as the reliance limit) proposals until the next DPP. For completeness, we consider the best course of action would be to abandon the reliance limit entirely.
Q15. Do you consider the dispute resolution arrangements proposed (for both participants and non-participants) will provide the right incentives on distributors and connection applicants to resolve disputes about the application of pricing methodologies to connection charges and improve connection pricing efficiency and deliver a net benefit?	The majority of the fast-track measures relate to the provision of information to customers (e.g. the reconciliation methodology). We see a risk where customers engage in the dispute resolution process due to confusion that the reconciliation methodology (etc) is for information purposes only, not a prescriptive pricing requirement. Accordingly, the Authority should take steps to ensure the dispute resolution process does not end up either causing administrative burden (to both customers and EDBs) based on misunderstandings or result in the information requirements of the fast-track measures becoming de-facto pricing requirements through the dispute resolution process.
Q16. Are there variations to the proposed dispute resolution arrangements you consider would materially improve the proposed Code amendment?	See response to Q15.
Q17. Do you consider the alternative contractual terms option would be better than the approach in the proposed drafting attached to this paper? Please give reasons.	In line with our comments on the network connections consultation, we consider that the contractual terms alternative could be beneficial to allow EDBs to develop relevant terms, either individually or collectively (e.g., through ENA) to the extent appropriate, while also allowing for differences across EDB. We support allowing private dispute resolution arrangements without the need for regulatory enforcement processes, in line with the approach used in the DTA and DDA and as understood by the industry.
Q18. Do you think a sinking lid approach to reliance limits would be preferable to the proposed static limits approach described in sections 7.80 – 7.105?	Neither option should be pursued. Further reducing the reliance limit would have a significant impact on Vector and our customers. It could significantly compromise EDB financeability and would undermine the ability of EDBs to invest to deliver electrification. This would materially harm customers. We consider the reliance limits proposal should be entirely abandoned. Further reducing the reliance limit (e.g. through the 'sinking lid' approach) would significantly exacerbate the negative impacts of the proposal and lead to customer harm.

	See discussion on page 22-24 and expert reports from Axiom Economics and HoustonKemp
Q19. Do you think any element of the fast-track package should be omitted, or should begin later than the rest of the package?	The reliance limits should be omitted entirely for the reasons discussed on page 22-24. However, if the Authority decides to introduce the reliance limit (or other measures that impact EDB maximum allowable revenue) it should be delayed until the next DPP to avoid negative impacts on investment and regulatory certainty.
Q20. Are there other parameters you think the Authority should consider for the proposed connection pricing methodologies? If so, which ones and why?	We recommend the Authority move away from the current proposed parameters and pursue more targeted reform. See discussion on page 32
Q21. Do you agree pricing methodologies should apply to LCC contracts? If not, please explain your rationale.	No. Our understanding is the LCC is intended to be an analogous mechanism to Transpower's 'new investment contracts' (which are entirely outside of the TPM). LCCs are limited to large connections (as defined in the IMs) and involve parties that are sophisticated and able to negotiate appropriate terms. If pricing methodologies for full reform were applied to these contracts it would remove the flexibility of these parties to negotiate and subvert the intent of the Commission in including the LCC mechanism in the IMs. It would also mean LCCs and connections to Transpower's network are treated differently. This could incentivise parties to connect to EDBs over Transpower even if this is not the most efficient solution.
Q22. Do you agree the proposed requirements, other than reliance limits, can be applied satisfactorily to connections with vested assets? If not, please explain your rationale.	We have not provided comments on this point, but may in cross-submissions.
Q23. Do you have any comments on the impact of reliance limits on incentives to increase prevalence of asset vesting?	It would appear that introducing such limits could encourage EDBs to require connecting parties to engage a third-party accredited service provider to design and construct connection assets and then gift them to the EDB as part of a contestable regime.
Q24. Do you agree the proposed methodologies are compatible with contestable connection works? If not, please explain your rationale.	No. The reliance limit introduced as part of the fast-track and the foreshadowed net incremental cost approach for the full reform will inhibit competition by effectively forcing EDBs to under-cut any competing option the consumer were to pursue. See discussion on pages 26-29and HoustonKemp's expert report

Q25. Do you agree that fast-track methodologies should not apply to embedded networks? If not, please explain your rationale.	We have not provided comments on this point but may in cross-submissions.
Q26. Do you have any comments on the Authority's anticipated solution for longer-term reform?	We have significant concerns about the potential for the reconciliation methodology to become the mandatory pricing approach. See discussion on pages 24-30 and reports from HoustonKemp and Axiom Economics.
Q27. Are there other alternative means of achieving the objective you think the Authority should consider?	The Authority should first undertake empirical analysis to confirm whether there is a connection pricing issue to address. Our understanding is the Authority's proposals are ultimately driven by concerns from CPOs and a desire to support more of these connections. If this is the case, more targeted reform to support this outcome should be investigated rather than wholesale connection pricing reform. See also our response on page 32 and reports from Axiom Economics and HoustonKemp.