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Cross submission on Connection Pricing and Network Connections – Stage One consultations

1. This is Vector's cross-submission on the Electricity Authority's (Authority) consultations *distribution connection pricing proposed code amendment* and *network connections project – stage one.*

2. No part of this cross-submission is confidential and we are happy for it to be published on the Authority's website.

3. As noted in our submission, we submitted a request for information related to this consultation under the Official Information Act 1982 and have not yet received the majority of this information. We reserve the right to provide additional comments once this information has been received.

4. We also asked Axiom Economics and HoustonKemp to consider submissions and whether any of the issues raised would cause them to revise their findings (in line with the reports Vector submitted[1] as part of our response to the initial consultation). Axiom Economics did not revise any of their original conclusions and, instead, found submissions largely reinforced them. Similarly, HoustonKemp found the submissions did not cause them to change their opinions and, in some areas, strengthened their degree of the concern with the Authority's proposals.

5. From our review of the submissions received, the most striking aspect was widespread criticism of the Authority's problem definition including that it was not supported by any empirical evidence. Based on the submissions received, we infer that the industry as a whole believes a robust, evidence-based problem definition must be at the heart of significant regulatory reform. In the absence of any empirical evidence, it is impossible for the Authority to assess either the existence and/or scale of the problems it thinks it has identified, and, ex post, to determine whether any of its proposed interventions have been

[1] The HoustonKemp report was submitted jointly with Orion

successful. We therefore do not consider the Authority can justify pursuing further reform ahead of reconsidering its problem definition.

6. The vast majority of submitters appeared opposed to the reliance limit largely due to potential negative consumer outcomes, a lack of economic justification and the potential for it to create long-term disbenefit to consumers, especially in concert with the other interventions proposed. Again, we do not consider the Authority can justify imposing the proposed reliance limit following the feedback it has received.

7. Accordingly, we recommend:
    - The Authority does not progress any substantive regulation of connection pricing until it has revisited its problem definition and obtained more quantitative data;
    - The Authority should abandon the reliance limit proposal entirely;
    - If the Authority determines regulation is needed it should be more proportionate and targeted (e.g. at connections for Charge Point Operators (CPOs) specifically).
    - The Authority should not attempt to address perceived issues with incentives in the Commerce Commission (Commission's) regulatory framework. These are more appropriately addressed by the Commission (if necessary); and
    - The Authority should pursue principles based, rather than prescriptive, regulation.

8. Many of the same criticism by submitters applies equally to the Authority's concurrent consultation on network connection processes. In the interests of expediency, we have compiled a single cross-submission covering both of the Authority's consultations.

9. The remainder of this cross-submission is structured as follows:

Topic	Summary
Distribution connection pricing proposed code amendment	
Problem definition	Submitters highlighted significant shortcomings in the Authority's problem definition. There was widespread acknowledgement the problem definition was not supported by empirical evidence. The overwhelming concern from submitters (including those who support the proposed code changes in theory) that the proposed code changes are not backed by evidence suggests a need for the Authority to pause and obtain empirical evidence ahead of pursuing reform. **Lack of empirical evidence** From our review of the submissions, there has been no empirical evidence submitted to suggest connection pricing is preventing efficient connections.

	For this cross-submission we have provided data on Vector's capital contribution rate and connection growth from 2013 – 2024. This shows very weak correlation between capital contribution rates and new connections. **Variation in connection charges** We have considered evidence from BP and Meridian which presented evidence of variation in connection charges across different EDBs. We acknowledge this would be frustrating for access seekers, however, it does not present evidence of a problem with connection charges. Indeed, it may simply represent justifiable differences in the incremental cost of connecting, which is exactly what would be expected if pricing were efficient. **Promoting the long-term benefit of consumers is not the same as promoting the benefit of access seekers** Some submissions from access seekers assessed the proposals solely in terms of how they will promote the objectives of access seekers. While this is important for the Authority to consider, it must also be remembered the Authority's statutory objective to promote the long-term benefit to consumers is not the same as promoting the benefit to access seekers. There are circumstances where these are not necessarily aligned. **Affordability** A number of submitters highlighted the potentially significant impact of the proposals on consumer affordability. We strongly recommended the Authority provide greater weight to the impact of the proposals on existing consumers.
Reliance limit	We do not consider the Authority can justify imposing the proposed reliance limit in light of submissions received. The vast majority of stakeholders appear to disagree that this proposal would be in consumers' long-term interests and submissions have shown there are clear practical issues which risk negative consumer outcomes, including the potential for cross-subsidy. Accordingly, we strongly recommend the Authority abandon the reliance limit proposal.

	A number of submitters also echoed Vector's concern that the reliance limit appears to encroach on the Commission's jurisdiction. We continue to have significant concerns that the reliance limit is outside the Authority's jurisdiction to impose. As proposed, the 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. As discussed in our submission, 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.
Connection charge reconciliation methodology	As discussed in our submission, our concern about the connection charge reconciliation methodology relates to the potential for it to become the required approach at full reform. We have submitted additional reports from Axiom Economics and HoustonKemp which, following their review of submissions, remain clear that pricing below the neutral point could harm the long-term benefit of consumers by: • Transferring risks from connection applicants to existing consumers; and • Hindering competition for competitive connections Submissions from parties such as Aurora and Orion described areas of existing contestable connections. This highlights that the risk of hindering competitive connections is a live issue.
Connection enhancement costs	We note Sapere for Drive Electric recommended "*the Authority modify the connection enhancement cost and network capacity cost to a full implementation of the network capacity charging method only for deep connection*." This proposal would not support the long-term benefit of consumers. Sapere's submission does not consider the shortcomings of shallow connection pricing or the benefits of deep connection pricing (such as promoting allocative efficiency).

	HoustonKemp's additional report explains the trade-offs between deep and shallow charging, and addresses Sapere's recommendation, in more detail. We consider the Authority's proposed approach to posted capacity rates, allowing distributors to choose the extent they retain deep connection charges, will best promote the long term benefit of consumers. This will allow distributors to determine the approach most appropriate to their network and customer circumstances.
The Authority should pursue a more targeted solution if it still considers regulation is warranted	Given the shortcomings with the problem definition and other issues identified by submitters, we do not consider the proposed wide ranging pricing reform (particularly the reliance limit and the signalled approach for full reform) can be justified by the Authority. Taking account of submissions to this consultation, we recommend the Authority adjust its proposal by: • Pursuing more targeted and proportionate regulation (e.g. specifically targeted at CPOs and solar generation projects) • Not attempt to address perceived issues with incentives in the Commission's regulatory framework. These are more appropriately addressed by the Commission (if necessary); and • Pursuing principles based, rather than prescriptive, regulation. **Timeframe for reform** A number of submitters suggested the Authority pause, delay or otherwise reconsider the problem definition ahead of pursuing regulation. The weight of submissions strongly suggests it is worth taking a step back to obtain further comment and evidence on the problem before imposing any regulation. As highlighted by a number of submissions, there is a real risk of negative consumer outcomes if the Authority embarks on such substantive regulation without sufficient certainty around the problem.
Network connections – stage one	

Obligation to connect	A number of submitters questioned the ability of the Authority to impose an obligation to connect loads >69kVA. Accordingly, in line with our submission, we request the Authority articulate the legal basis on which it considers it can impose an obligation to connect load.
Ensuring there is sufficient evidence for proposed changes	Consistent with the responses to the pricing consultation, a common theme amongst submitters, whether agreeing or disagreeing with the proposed changes to Part 6, was that the Authority did not provide enough evidence to understand if and why connection process modifications for DG or Load may be necessary. We recommend that the Authority consider less disruptive and lower cost options that focus on gathering relevant information about connections in collaboration with the Commission. This information will build a strong evidence base that can be used to determine whether there is a net benefit to consumers from regulatory interventions.
Risks of application timelines and defaulting to 'approved' of timelines not met	We acknowledge some submitters (e.g. Chargenet and Meridian) advocated shortened timeframes compared to the proposal. We have considered these submissions, however, we do not consider shortening the timelines would promote the long term benefit of consumers. As noted earlier, it is not clear that the evidence has been gathered to justify these interventions, and shortening timelines will force additional costs onto all consumers to benefit only those seeking connection applications.
Revising or removing the capacity thresholds so that complex processes are only used for complex applications	Many submitters suggested that the Authority increase the thresholds for 'large connections'. We agree this would better support the long term benefit of consumers by aligning with other industry standards and requirements, future-proofing to match industry trends, and focussing resources. An adjustment to the capacity threshold would partly address the concerns we shared in our submission about the capacity of an application being considered a reasonable proxy for the complexity of the connection. Vector suggested scrapping the thresholds and allowing EDBs to develop 'simple' and 'complex' connection processes and

	assign applications accordingly. A number of other submitters also supported flexibility in designing connection processes.
Providing capacity and pipeline information and minimising speculative applications	We acknowledge several submitters supported the disclosure of capacity information by EDBs. We consider the potential benefits for the publication of capacity maps will vary significantly with each EDB. There are still issues with access to high quality data, and the Commerce Commission's allocation of funding to address this in DPP4 has not yet taken effect. We have concerns that extending the requirement for capacity maps to the low-voltage areas of networks increases the chances of misinterpretation of that information by consumers or 3rd parties that should not need to understand the underlying factors associated with network design and planning. We recommend the Authority work with the Commission to align disclosure requirements for network capacity information and ensure that the costs of any additional disclosure requirements will provide benefits to consumers.
Prioritisation, Queueing and Capacity 'Rights'	There was general support by submitters for industry developed policies for prioritisation and queuing management that enabled greater discretion for EDBs, as well as ensuring that any capacity allocation principles don't result in applicants reserving capacity and acting as a barrier to competitors. Vector's concerns in the area of queue management relates to the ability to remove any applicants that had received a capacity allocation but had failed to meet further milestones of progress. The EEA provided a good set of recommendations in their response to question F with a key one being *"Avoiding Exclusivity or Permanence: Any allocation framework must avoid creating exclusive or permanent entitlements that could limit flexibility and hinder broader system optimisation. It is critical that capacity rights remain adaptable and aligned with the evolving needs of the electricity sector."*

Distribution connection pricing proposed code amendment

Problem Definition

1. Submitters highlighted significant shortcomings in the Authority's problem definition. There was also widespread acknowledgment from submitters that the Authority's problem definition was not supported by empirical evidence, including from those who supported the problem definition in general.

2. For example, Aurora submitted that:

> "*The Authority's problem definition outlines five perceived aspects of pricing inefficiencies. We comment on each of the five aspects below:*
>
> *(a) We fundamentally disagree that a trend towards higher connection charges is evidence of economic inefficiency. The Authority's subsidy free test in the Pricing Principles already provides a sound basis for assessing economic efficiency by requiring costs to be greater than the incremental costs of connection, and less than or equal to the network bypass cost. Adherence to the subsidy free test should be all that is required to ensure that both existing customers and new connecting customers benefit from being part of the network. We disagree that the trend towards higher connection charges is evidence of weakening distributor efficiency incentives. In fact, we consider the current application of the IRIS mechanism to consumer connection capex is a case of distributor incentives working against what the Authority considers efficient connection pricing. We believe the Authority would be better served by working with the Commission to achieve get regulatory alignment.*
>
> *(b) We agree in principle that inconsistent connection practices across the industry could theoretically lead to increased costs for parties connecting across multiple regions. However, we question how often this occurs in practice. We believe the Authority needs to conduct robust quantitative cost benefit analysis to ensure that the costs of distributor compliance do not exceed the benefits to connecting parties before embarking on changes to the regulatory framework.*
>
> *(c) We agree that pricing structures and practices could be improved across the industry. We encourage the Authority to publish guidance about their preferred connection practices and allow the industry time to adapt. This approach has worked well for encouraging cost-reflective pricing and is likely to lead to better outcomes than reverting to regulation as a first step.*
>
> *(d) We share the Authority's concern with the practice of inefficiently low connection charges that result in cross-subsidisation from existing customers. This practice is especially concerning in areas where there is competition for new connections between distributors or distributors and embedded network operators.*

(e) We agree with the Authority's definition of wealth transfers that can occur when capital contribution policies change. Maintaining consistency of contributions (within the subsidy free-range) is an essential consideration for a fair and efficient capital contribution policy."[2]

3.Similarly, EECA submitted:

"*EECA agree with the problem statement. We think it could be useful for the paper to present evidence that observed variability in charges is inefficient, to support the problem statement*"[3]

4.and Orion submitted:

"*We agree in principle that there is a need for better consistency and transparency of distributors approaches to connection charging however the Authority has provided little evidence of a widespread issue with customer outcomes across the breath of connections distributors process each year*."[4]

5.We consider the overwhelming concern from submitters (including those who support the proposed code changes in theory) that the proposed code changes are not backed by evidence suggests a need for the Authority to pause and obtain empirical evidence ahead of pursuing reform. Without this evidence, there is a real risk that (at best) the proposals do not achieve the intended outcomes and (at worst) they result in real harm to consumers. Further, there will be no way of assessing the efficacy of any intervention, ex post.

6.As explained by Wellington Electricity:

"*the paper appears to link an increase in connection charges with inefficient connection pricing. We disagree with this presumption. Our own experience is that significant cost increases have been driven by increasing costs, and the growth in the type and size of connections sought by customers. As such, the basis for the view of inefficiency presented in the paper has not been substantiated.*

The presumption of inefficiency is then used in the paper as a basis for many of the proposed changes. We consider that the EA needs to provide detailed analysis supporting its proposed changes if this is to be relied upon for regulation, and a demonstration of how the proposed changes meet the requirements of the Act."[5]

7.Further supporting the need for the Authority to pause, and potentially reconsult, is concern from stakeholders that the proposals lack clarity and, accordingly, there is a risk stakeholders have not had a chance to sufficiently consider the intended proposals.

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[2] Aurora submission, Response to Question 2

[3] EECA submission, Response to Question 2

[4] Orion submission, Response to Question 2

[5] Wellington Electricity submission, Response to Question 1

8. For example, Sapere for Drive Electric submitted:

> "*After carefully going through the Authority's distribution connection pricing proposal we are not clear on exactly what the Authority is proposing. We have also gone through the proposed Code amendments and have distilled what we think would be interpreted from those amendments on a 'plain English' basis. Our comments below on pricing are based on this interpretation. However, the proposed Code amendments are ambiguous. We have established our interpretation of the Code amendments, but others are possible, and we are unable to reconcile the Code wording to the Authority's proposal document*."[6]

9. We also note Sapere's comment that:

> "*we continue to see the Authority's treatment of pricing issues occurring separately to access issues. From a customer's perspective, they are intimately connected, as made clear in our previous work. Releasing two separate consultations, developed by different parts of the Authority and with scant reference to each other has failed to address this critical connection. It also appears that future work will also occur on different timelines.*"[7]

<u>Aspects of the proposal appear to be addressing perceived issues with the Commission's incentive framework</u>

10. A number of submitters recognised the Authority appears to be concerned with incentives in the Commission's regulatory framework and that, if these issues exist, they are appropriately dealt with by the Commission.

11. We agree with Frontier's statement that:

> "*if existing incentives encourage distributors to set inefficient connection charges, the appropriate response to this is refining either the incentive regime or providing increased guidance on the approach to connection charging*"[8]

12. That the proposal appears, at least in part, directed at the issues the Authority perceives with the Commission's regime furthers our concern about the Authority encroaching on the Commission's jurisdiction.

13. As noted by HoustenKemps's updated report:

> *Incenta goes on to explain that the Commerce Commission appears likely to consider further adjustments to capital expenditure allowances for levels of connection activity for the purposes of the IRIS. Incenta's comments at paragraph 21 of its report highlight that the Commission has considered,*

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[6] Sapere for Drive Electric submission, page ii

[7] Ibid

[8] Frontier for the ENA submission, page 27

and may consider in future, proposals to amend the incentive regime to address the same incentive issue that the Authority sets out in its problem definition for this consultation. These observations cast further doubt on whether the Authority should proceed with any policy action responding to issue raised with the Commission's regulatory framework."[9]

14. This also calls to mind the 2019 judgment of the Court of Appeal (in the context of quality standards):

"*it is now common ground that while the Commission is required to regulate quality standards, the effect of s 32(2)(b) is not to wholly exclude the Authority from mandating some quality standards affecting distributors.* ***It may regulate quality issues that fall outside the purposes of pt 4 of the Commerce Act***. *That consensus falls some way between the prior stances of the parties. Vector had earlier submitted that the Authority could not prescribe quality standards for distributors at all; the Authority had submitted that the regulatory regime was a shared one, and that it could specify quality dimensions of UoSAs to the extent the Commission was not empowered to do so*. [10] [emphasis added]

Lack of empirical evidence that there is a problem with connection charges

15. As discussed above, many submitters were concerned the Authority's proposals were not supported by empirical evidence.

16. From our review of submissions to this consultation, submitters have not provided any additional empirical evidence that connection charges are deterring efficient connections.

17. We have investigated the rate of connections to Vector's network from 2013 - 2024, alongside Vector's reliance limit. We found only weak correlation between ICP growth and capital contributions. In particular, see the year on year growth in table two which highlights this weak relationship.

Table one: Vector's ICP numbers and capital contributions

[9] HoustonKemp updated report for Vector, para 9

[10] Vector limited versus Electricity Authority CA481/2017 [2019] NZCA 49, Para 26

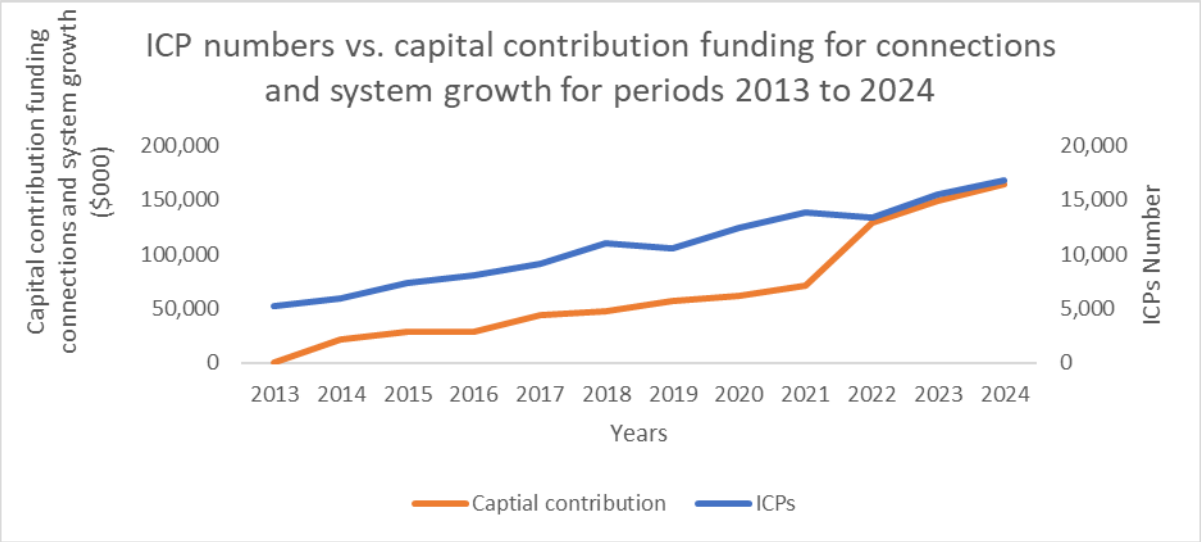
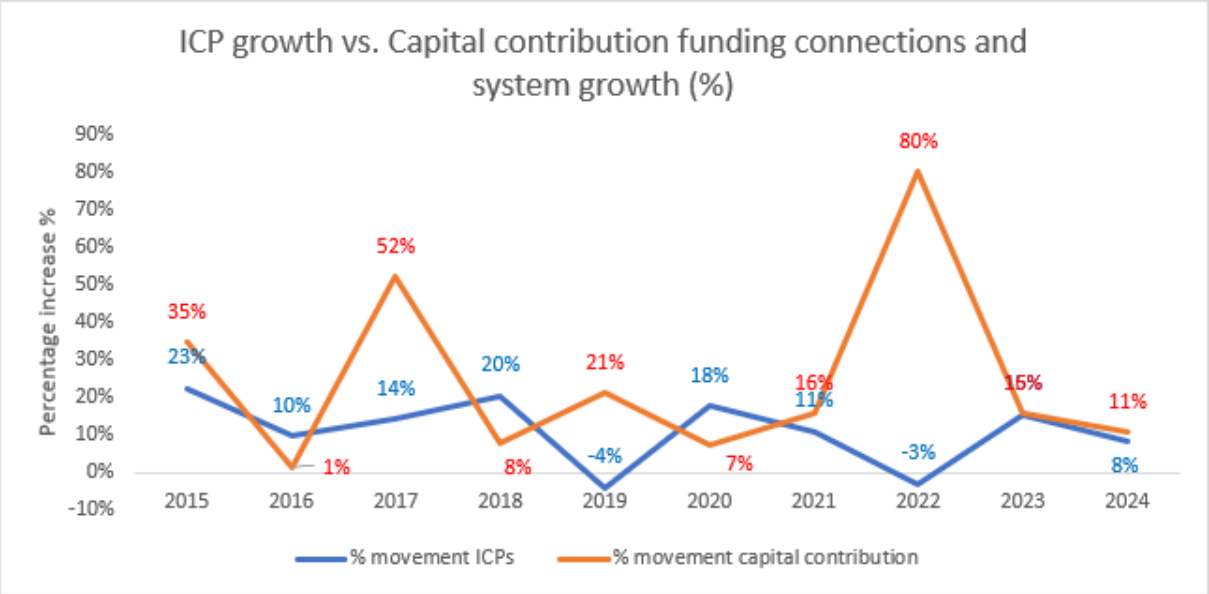


Table two: Vector's year on year ICP growth and capital contributions



Variation in pricing

18. We have considered the submissions from BP and Meridian both of which presented data showing variability in quotes for connection charges and lines charges.[11] We acknowledge this variability would be frustrating for access seekers. However, we do not consider this provides evidence of any sort of problem in connection charging. The data may simply represent perfectly justifiable differences in the incremental cost of connecting, which is exactly what would be expected if pricing were efficient. Assuming this is the case, divergences would not suggest any inefficiency; in fact, it would be more suspicious if there *weren't* material differences between these quotes. Further, it is also

[11] BP submission, table one and table 2 and Meridian submission, page 2

not clear from this data whether the ranges are inclusive or exclusive of vested assets. Accordingly, no firm conclusions can be drawn from the data provided by these parties.

19. Regional variances in pricing are present across other industries so we do not expect connections to the electricity network are an outlier. For example, Table Three below provides an initial comparison of water connections (focussing on residential 20mm connections) showing variances in the cost of connections across New Zealand.

20. We also note Vector commissioned a report in 2019 from Infometrics into cost pressures in Auckland compared to the rest of the country. This report concluded Auckland has higher labour costs and worse congestion than elsewhere in New Zealand.[12]

Table Three: Comparison of water connection charges

Region	Entity	Charge	Connection Fee (inc GST)	Shared network charge (inc GST)
Auckland	Watercare	Standard connection fee 20 mm diameter	$1,780.20 to $2,300.00	$10,586.90 (Auckland metro)
Upper Hutt	Council		$100 (admin fee) +Actual connection costs (with a minimum of $145)	Does not appear to be any except for as required for direct connection
Wellington	Council	Connection application fee	$0 for greenfield, $61.50 for residential, $205.00 for other * Connecting party needs to engage a third party to undertake the connection works	Not able to be determined from publicly available information
Hamilton	Council	Single service water connection, 20mm	By quote	Not able to be determined from publicly available information
Dunedin	Council	Single service water connection, 20mm	By quote	$5,340.00
McKenzie	Council	Residential connection, 20mm	$221.00 (application fee)	$13,685.67

[12] Infometrics, *Investigation of cost pressures in Auckland compared to those of the result of New Zealand* (March 2019) available: https://comcom.govt.nz/__data/assets/pdf_file/0027/149760/Infometrics-on-behalf-of-Vector-Auckland-cost-escalators-29-March-2019.pdf

			$3205.00 + reinstatement	
Marlborough	Council	Standard connection fee 20 mm diameter	$3,026.00 to $3,962.00	To be determined based on contributions policy

The Authority's role is to promote the long term benefit of consumers not that of access seekers

21. It is important to bear in mind that the Authority's statutory objective is to promote the long-term benefit of consumers. This is not necessarily the same as that of access seekers.

22. We note Sapere's report for Drive Electric summarised the Authority's proposals against its principles for network access and pricing (developed for Drive Electric) and provided recommendations based on these principles.

23. Sapere's network access and pricing principles are designed for an efficient role out of EV charging stations. However, this is not the same as the Authority's statutory objective to promote the long-term benefit of consumers. Accordingly, the assessment criteria used by the Authority in whether to undertake network pricing reform in line with its statutory objective is not the same as that used by Sapere to assess the proposals.

24. Counties Energy's submission describes the potential wealth transfer from residential customers to commercial and industrial customers. This provides a good example where acting in the interests of access seekers is not the same as acting in the long term interests of consumers.

25. Counties Energy submitted:

> "*A further perverse impact of the proposals as they stand is the wealth transfer from residential customers to commercial and industrial customers. Along with other EDBs, CEL's approach to connection charges for new homeowner and business owners is to ensure that nearly all new homeowners and new business owners do not pay the connection charge for power supply to their property because the developer pays the connection charge to the EDB for the power to the section. The developer then sells the section for the market value, not a cost-plus model. For residential properties they generally sell to builders who then sell a home-land package. Consequently, the EA proposal will result in lower reticulation charges to developers and high line prices to CEL's customers. This is effectively a wealth transfer that will mean lower socio-economic householders, who are least likely to buy a new house, will be paying more to enable reduced connection charges to developers*."[13]

Affordability

[13] Counties Energy submission, page 5

26. We agree with submitters who called for more emphasis on potential affordability impacts on consumers (not just access seekers) arising from the proposals.

27. For example, Aurora submitted:

> "*Aurora Energy recognises the important role that the distribution sector has in supporting New Zealand's emissions objectives through the enabling of electrification. We are also mindful of our role in serving our communities and are acutely aware of the current affordability challenges facing many households and businesses. We believe further cost benefit analysis needs to be done by the Authority before proceeding to ensure the proposed changes are necessary, and do not benefit a relatively small group of new connecting customers at the expense of adding costs to existing consumers.*
>
> *We believe that connecting new customers and load to our existing network can reduce affordability pressures through increased economies of scale, provided that new connections cover the incremental costs of connection. It is through this lens that we consider new connections and the related capital contributions.*
>
> *We welcome changes that will improve the efficiency of connecting new customers to our network, but we note our connection processes and pricing approach have evolved over time to reflect the unique market conditions in our region and best meet the needs of our consumers. We are wary that if poorly targeted, the proposed changes to standardise processes could either add costs to connecting parties or divert resources away from working directly on customer solutions. We acknowledge the benefits analysis provided by CEPA, but we believe the analysis has significantly understated the additional ongoing transaction costs involved in implementing the proposed changes.*
>
> *There are some inescapable truths of the Authority's proposed changes that need to be openly acknowledged:*
>
> - *Changes to connection processes, such as requirements to publish roadmaps, monitor timelines, and administer pioneer schemes will add cost to distributors' operations. In an environment where resources are already optimised this will require additional FTE and/or system upgrades. These costs will need to either, be passed directly onto new connecting customers or socialised amongst existing customers. For context, we estimate that the cost of these changes could add an additional $100 - $200 for each new ICP connected to our network.*
> - *Any increase in the level of distributor capital contributions will lead to increase in lines charges for existing customers, at least in the short-term. It is important to recognise that it is in the short-term where the affordability challenges of the electrification transition are expected to be most acute, due to the already large step change in infrastructure investments being socialised among existing customers.*
> - *The connecting party is often not the same party that will be paying the ongoing lines charges. For example, in the case of a residential subdivision, the developer will be the recipient of a distributor capital contribution, but the ongoing lines charges will be the responsibility of the household that purchases the section from the developer. We question whether, in practice, higher capital contributions are passed through to the end consumer in the form of reduced section price".*

The additional costs of the proposed changes need to be justified by quantifiable benefits. The impact to consumers is too significant to rely on a qualitative assessment based on economic theory. We question whether there are real world examples of network bypass caused by uneconomic connection pricing practices. This has not been demonstrated in the consultation material and, given the impact of the proposed changes, in our view, is important for the Authority to identify and consider when undertaking robust cost-benefit analysis."[14]

28. In terms of the potential costs of the Pioneer Scheme specifically, Incenta for Powerco and Unison stated:

" *In relation to pioneer schemes, however, we think the Authority may have overstated the potential benefits of these schemes*

…

In addition, pioneer schemes are likely to have a non-trivial cost to operate, as the ad hoc nature of the projects to which they apply means that administration is likely to involve largely manual processes. In addition, pioneer schemes change the nature of the connection transaction from a transaction that occurs at a single point in time to one that must be monitored, executed and enforced over an extended period. In view of the above, the Authority should reconsider whether the benefits from a mandated pioneer scheme are likely to exceed the costs and, if retained, should ensure that there are reasonable measures that permit the administrative cost to be minimise."[15]

29. The Authority needs to place more emphasis on the potentially significant costs to consumers arising from its proposed reform. Particularly in the context of rising energy costs related to step changes in investment and the energy transition, more quantitative analysis needs to be undertaken in relation to the impact on existing consumers, including on affordability.

Reliance limit

30. As discussed in our submission, Vector is strongly opposed to the proposed reliance limit which would negatively impact Vector and our customers for no offsetting consumer or efficiency benefit.

31. From our review of the submissions, the vast majority of submitters were opposed to the reliance limit. The majority were opposed due to potential negative consumer outcomes and lack of economic justification. Even those in favour of pricing reform more generally appeared to consider the reliance limit would not achieve any consumer benefit.

<u>Jurisdiction</u>

[14] Aurora submission, paras 4-8

[15] Inenta for Powerco and Unison, pages 31 - 34

32. Some submitters, such as Horizon Energy, echoed Vector's concern that the proposed reliance limit encroaches on the Commerce Commission's jurisdiction. Horizon Energy noted that:

> "*The reliance limit is a form of price regulation and sets the maximum revenue EDBs can recover*.
>
> *The Electricity Authority's price regulation has been made in addition to the price-quality regulation set by the Commerce Commission under s53M of the Commerce Act, which limits maximum revenues EDBs can recover for the provision of lines services."*[16]

33. We continue to have significant concerns that the reliance limit is outside the Authority's jurisdiction to impose. As proposed, the 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.

34. As discussed in our submission, 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.

<u>The reliance limit is likely to result in poor consumer outcomes, including for access seekers</u>

35. Submitters such as Northpower raised practical issues and possible negative impacts for access seekers with the proposed reliance limit:

> "*While we understand the intention of introducing reliance limits to safeguard against distributors increasing their dependence on up-front charges, we have concerns about its practical implications:*
> *• Capital expenditure is inherently lumpy, with varying timing. This may result in reliance percentages being high in one year and low in another, even when distributors adhere to the connection pricing requirements.*
> *• Approaching the reliance limit could encourage inefficient behaviour, such as accelerating capital expenditure or rejecting new connection requests to stay within the limit, which is not in the long-term interest of consumers. We suggest the Authority reconsider the reliance limits framework to ensure it does not inadvertently incentivise inefficient outcomes.*"[17]

36. Similarly, Wellington Electricity submitted that:

> "*We do not support the inclusion of a reliance limit. In our view the reliance limit is highly likely to distort efficiency of connection pricing. The economic basis for the imposition of a reliance limit is unclear. The imposition of a reliance limit does not in our view ensure or improve the efficiency of connection pricing. The value of the reliance limit is entirely dependent on the nature of the work being undertaken in any one year. The incidence of future connection costs are independent of historical work as they depend on*

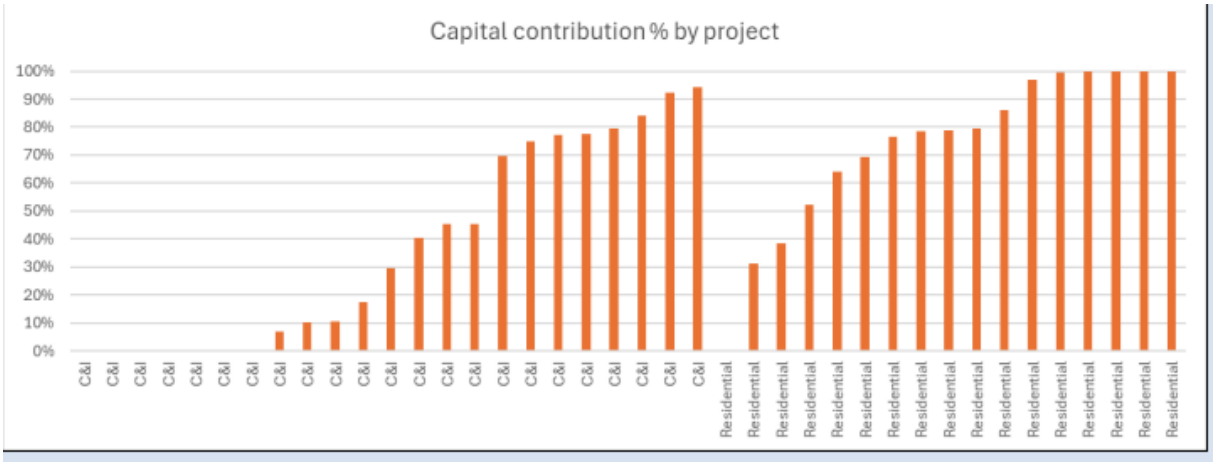
[16] Horizon Energy submission, para 111-112

[17] Northpower submission, pages 3-4

the connection activity of the time. For example, a year with a low level of growth-driven network expenditure might result in a high reliance percentage, simply due to the phasing of network related works. For WELL, we note that this results in a large degree of variation in its 'reliance level' when we look at the historical and forecast numbers. As such, the section of the reliance limit percentages appear to be arbitrary and, in our view, will likely lead to poor and unintended regulatory outcomes over time and need reversing in the future."[18]

37. Unison's submission provided data demonstrating that the reliance limit would not support pricing efficiency and could lead to cross-subsidisation. Unison found:

"*An analysis of 40 random commercial & industrial (C&I) and residential projects (see table below) totalling $12m in cost demonstrates that calculated customer capital contribution percentage varies significantly by project depending on the project cost and the present value of revenue stream. To mandate a capital contribution reliance limit, could result in reducing pricing efficiency and lead to cross-subsidisation of new connections by existing customers*."



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38. It is worth noting that concern from submitters about the reliance limit was not limited to EDBs.

39. For example, MEUG submitted that:

"The only proposal that we do not support is the reliance limit of 47%. It is unclear what exact problem this proposal is intending to address, and whether it will achieve the results the Authority intends. We believe that greater evidence and discussion is required on this proposal, to ensure it works as anticipated and does not see existing customers unfairly subsidising new connections or other unintended consequences."[20]

[18] Wellington Electricity submission, response to question 12

[19] Unison submission, response to Q12

[20] MEUG submission, para 6

40. BP submitted that:

> "*Outcome required is access to clear policies in plain English with guides and worked examples. The aim must be to get to consistent pricing structures across the EDBs. We feel that it is a possible outcome that the cap of 47% capital contribution could become the standard that all EDBs move to, apart from the ones that the Authority is exempting, and this is of concern as cost from EDBs become less predictable in the short term as pricing structures are adjusted. This makes planning capital for a multi-year rollout very unpredictable. An efficient pricing formula model with a guideline from the Authority is required to create clear, transparent and truly cost reflective pricing that has less variation across regions.*"[21]

41. Overall, we do not consider the Authority can justify imposing the proposed reliance limit in light of submissions received. The vast majority of stakeholders appear to disagree that the proposed code changes would be in consumers' long-term interests and submissions have shown there are clear practical issues which risk negative consumer outcomes, including the potential for cross-subsidy. Accordingly, we strongly recommend the Authority abandon the reliance limit proposal.

Connection charge reconciliation methodology

42. As raised in our submission, Vector is concerned about the potential for the proposed reconciliation methodology to become the required pricing approach at full reform. We consider the long-term benefit of consumers is best promoted by retaining flexibility for EDBs to determine a capital contributions policy that best suits the circumstances of their network and customers.

43. We submitted reports from Axiom Economics and, jointly with Orion, HoustonKemp which critiqued the Authority's economic framework. These reports explain prices can be considered efficient where they fall within the range between incremental and standalone costs.

44. We note submissions from Frontier (for the ENA) and Incenta (for Unison and Powerco) accepted the concept of the neutral point as representing the lower bound for efficient pricing[22] Axiom Economics and Houston Kemp considered these submissions but did not revise their original conclusions. Paraphrasing Axiom's updated report this:
    - Appears to deviate from established economic pricing principals; and
    - Does not consider some of the significant adverse economic consequences of setting prices at the neutral point. i.e:
        - higher ongoing usage prices for existing customers arising from deferring recovery of a significant portion of upfront connection costs, along with risk that existing customers must cover costs if a connecting party disconnects earlier than expected; and

[21] BP submission, page 3

[22] Frontier for ENA submission, page 16 and Incenta page 7-8

- the risk of undermining competition in the downstream market for connection services.[23]

45. As explained in HoustonKemp's original report, pricing at the neutral point allows the connection charge to be materially below incremental cost. This is because:

> "*The Commerce Commission's approach to the regulation of distributors tends to allow revenues from distribution services that are substantially higher than their incremental costs. This reflects the Commission's approach to the setting of revenue allowances, which includes a return on and of sunk distribution assets. This observation is consistent with the Authority's suggestion that the incremental cost of a new connection on distribution services is, on average, 10 per cent of revenue.*
>
> *It follows from these facts that the Authority's approach to combining revenues and costs from these services in its definition of the neutral point allows the connection charge to be materially below the incremental cost of providing the connection service…*
>
> *That is, because revenue from distribution services exceeds the incremental costs of distribution services, the revenue from connection services at the neutral point can be commensurately below the costs of connection services.*
>
> *The pricing of connection services materially below their incremental costs has significant disadvantages for economic efficiency*."[24]

Role of equity considerations in the Authority's statutory objective

46. Our submission raised that the Authority's 'balance point' concept relates to equity rather than pricing efficiency.

47. Incenta's report for Unison and Powerco also recognised that the Authority's approach is focussed on equity, although it indicated approval for this approach. Incenta submitted:

> "*implicit in the Authority's analysis is that an equitable outcome between successive vintages of customers would be one where each customer contributes the incremental costs it causes and then makes a similar contribution to the common costs of the network*…the *Authority should be given credit for the prominence it has provided to equity issues*."[25]

48. The Authority's statutory objective is to promote competition, reliable supply, and efficiency for the long term benefit of consumers. It does not contain an equity limb. Incenta's report suggests the Authority's additional statutory objective is "*permitting the Authority to*

[23] Axiom Economics updated report for Vector, see discussion at 3.1

[24] HoustonKemp for Vector, page 18

[25] Incenta for Powerco and Unison, para 18

consider whether measures generate equitable outcomes in relation to these groups of customers."[26]

49. However, this appears an overly broad reading of the additional statutory objective. As noted in Houston Kemp's updated report:

> "*It is unclear to us that the additional objective has such an expansive role. In particular, the additional objective specifically relates to the dealings of industry participants with domestic consumers and small business customers. Since the principal role of connection pricing is to affect how a distributor recovers the revenue allowance approved by the Commerce Commission, the issues of equity that arise tend to be around equity between groups of customers, rather than to dealings between industry participants and customers*."[27]

50. Furthermore, it is worth noting that in some instances access seekers will be neither industry participants nor customers.

51. We cannot see how adjustments to horizontal equity between customer groups falls within the Authority's statutory objective. As noted above, setting prices at the neutral point transfers risk to existing customers.

Pricing within the efficient range

52. There was extensive discussion from submitters on the range within which prices can be considered efficient.

53. There was broad agreement from economic expert reports that pricing at incremental cost is efficient. However, as explained by Houston Kemp's report, because distribution charges are usually substantially higher than the incremental cost of distribution service, pricing at the neutral point may allow connection charges to fall substantially below the incremental cost of connection.

54. In this context, we disagree with Powerco's statement that, "*setting connection charges at the lower end of the efficient range is better than setting them too high in a period of growth. Customers will get the wider benefits of timely electrification as well as lower costs over time by sharing the costs of the network across more people.*"[28]

55. This would not apply in all circumstances in the Authority's proposed range for efficient connection prices, being between the neutral point and the balance point. This is because there are circumstances in which pricing at the neutral point will not be efficient and will

[26] Ibid, FN 9

[27] HoustonKemp updated report for Vector, page 6

[28] Powerco submission, page 4

harm competition. We also do not agree that the balance point is the correct upper bound of the efficient range (being related to equity concerns rather than efficiency).

56. We agree with Aurora's submission that:

> "*We disagree with the Authority's view in 7.63(d) that connection charges between the 'balance point' and the 'bypass point' can be inefficient. We consider that connection charges in this range are economically efficient, albeit they potentially lead to inequities between existing customers and new connecting parties*."[29]

57. We also agree with Sapere for Drive Electric that the goal should be: "*clear, transparent, cost reflective and subsidy-free pricing that does not unduly deter efficient investment in charging infrastructure*."[30]

58. This is why we don't support the Authority's framework of the 'balance point' and 'neutral points' These concepts are not related to economic efficiency, and – if imposed as a mandatory pricing approach at full reform – would lead to a transfer of risk from access seekers to existing consumers, undermine competition for contestable connections and potentially result in cross-subsidy given distributors don't have the practical ability to implement an individual tariff for each customer.

<u>Impact on competition for connection services</u>

59. Houston Kemp's report explained that pricing at the 'neutral point' could undermine competition for connection services due to the proposed approach of bundling connection and distribution services.

60. Submissions from Aurora and Orion provide evidence around current practices regarding contestable connections.

61. Aurora submitted that:

> "*It is important that the Authority recognises that distributors do not exist in a pure monopoly environment when it comes to connecting new customers to their networks. Distributors can face competition either directly from other distribution networks, embedded network operators, and/or alternative off-grid solutions. The Authority needs to take care to protect these competitive tensions by:*
>
> - *Exempting commercially sensitive information from disclosure requirements. In some instances, the publication of pricing calculations, connection pipelines, and capacity maps could be detrimental to competition.*

[29] Aurora submission, page 15

[30] Sapere for Drive Electric submission, page 16

- *Treating all distributors and embedded network operators equally. All parties should be required to meet the same level of regulatory disclosures to ensure that no one enjoys a competitive advantage*."[31]

62. Orion submitted:

> "*The degree of contestability of connection services across distributors may vary. It is important context for the Authority's understanding of connection management and charging efficiency within New Zealand. It is unclear the extent to which the Authority has sought to evidence understanding of contestability from distributors, and to what extent the Authority's proposals may incentivise or disincentivise contestability.*
>
> *Orion has four independent connection agents. Customers can use any of these for final connection, and for any connection work, along with our other larger service providers, generally related to the more standard (high volume) connections. If augmentation is required Orion will generally coordinate with the customer's connection agent.*
>
> *Orion has five existing larger service providers including Connetics (Orion owned). Four of these have contractual bounds of service for connection work (extension and augmentation), and commercial viability of service providers is important in reference to the volume of work in our region.*
>
> *For non-standard connections (more complex) and where cost share occurs between Orion and the customer (capital contributions) we tender and take the lowest conforming tender and this determines best value for the customer, and who does the work.*
>
> *Any work on the customer side of the boundary can be done by any contractor of the customer's choosing.*
>
> *Where a design and commission is required (large complex job) the customer can go direct to service provider(s) for a price e.g. independent of Orion. 10. Orion's connection management on average means 95% of our connection applications do reach approval and connection*."[32]

63. We also note competition in embedded networks is already occurring. We are seeing an increase in this space at present.

64. Sapere for Drive Electric also endorses an outcome that delivers "*maximum use of competition*."[33] We understand this to mean that CPOs are able to harness competitive forces to drive the lowest-cost, most efficient prices for connection possible, and/or are able to have their own preferred contractors connect their sites, nationwide. As explained

[31] Aurora submission, para 11

[32] Orion submission, para 4-10

[33] Sapere for Drive Electric submission, Page vi

by HoustonKemp, clearly this outcome would be placed at risk under the Authority's proposals.

65. The Authority has barely touched on this issue, meaning it was not drawn to submitters attention, nor were submitters able to engage in its substance. The consultation paper makes a suggestion in passing that EDBs could support contestability by making a payment to the applicant or their contractor.[34] We are not clear how this would work in practice and are not confident it could mitigate the negative impact on competition resulting caused by bundling distribution and connection services resulting in prices below the incremental cost.

66. In terms of the Authority's proposed payments to third parties, further information is needed on how these would be treated under GAAP and under the Commission's regulatory framework.

67. Any options that preclude other competitive models emerging, such as EDBs and access seekers agreeing that access seekers will undertake the entire connection through third parties, would not support the long-term benefit to consumers. We note this is the approach take by Ausgrid in Australia.

68. Accordingly, we strongly recommend the Authority give further consideration to potential competition issues created by the proposals.

Connection enhancement costs

69. Sapere for Drive Electric advocated the Authority allow connection enhancement costs solely for network extensions and customer requested enhancements (shallow connection charging).

70. Sapere stated:

> "*Allowing for connection enhancement costs to only include network extensions and customer requested enhancements with all deep connection costs recovered through network capacity charges would lead to more efficient prices, far greater consistency, and more accurate pricing than the proposed connection enhancement cost in the fast track proposal.*"[35]

71. An approach that mandated shallow connection pricing would not support the long-term benefit of consumers. As noted in HoustonKemp's additional report, Sapere has not considered the downsides of shallow connection pricing, including potential efficiency harms arising from mismatched costs and charges.

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[34] Electricity Authority, at 7.160(b)

[35] Sapere for Drive Electric submission, page 18

72. HoustonKemp's additional report states:

> "*Given the trade-offs between deep and shallow connection pricing, there does not seem to be a clear principled or empirical basis for Sapere's assertion that shallow connection pricing would lead to 'more efficient process' and 'more accurate pricing.' There are likely to be many circumstances in which deep connection pricing will be preferable, particularly in circumstances in which the promotion of economic efficiency is a dominant consideration*."[36]

73. Accordingly, the Authority's proposed approach to posted capacity rates (allowing distributors to choose the extent to which they retain deep connection charges) better supports the long term benefit of consumers than that suggested by Sapere. This will allow distributors to retain the approach best suited to their customer and network circumstances.

The Authority should pursue a more targeted solution if it still considers regulation is warranted

74. Given the shortcomings with the problem definition and other issues identified by submitters, we do not consider the proposed wide ranging pricing reform (particularly the reliance limit and the signalled approach for full reform) can be justified by the Authority.

75. We do recognise CPOs such as Drive Electric have submitted concerns about the current connection process and lack of standardisation. We note industry is already taking steps to promote greater standardisation in the connection process. However, if the Authority determines regulation is necessary to address these concerns, it should be limited and targeted at these parties. It is notable that the connecting parties that have so far participated in the consultation process have largely been limited to CPOs and retailers/generators (as opposed to e.g. property developers).

76. From our review of the submissions, the main concerns from access seekers appear to relate to transparency around pricing rather than prices being too high.

77. Unison and Centralines submission explain that the characteristics of CPOs and large DG investors as "prospectors" make them much more sensitive to certain elements of EDBs' pricing and processes than other access seekers, who are generally only interested in connecting at a single, specific location:

> *We acknowledge the concerns of two particular groups of customers in recent years: public EV charge point operators (CPOs); and solar generation projects (as opposed to roof top solar) …*

[36] HoustonKemp additional report for Vector, page 16

For CPOs and solar generation projects, their distinctive new needs arise from their business models that require finding cost effective locations (land availability, network capacity, and connection cost). This means these customers undertake 'prospecting', often requesting connection capacity and costs for several potential sites being evaluated.

Traditional approaches to connection enquiries by distributors are designed to fully scope customer requirements and develop robust connection and network upgrade solutions to protect the network (and existing customers), and ensure accurate costs form the basis of connection agreements and required works. This serves traditional customers well, but is a costly and a slow approach that 'overserves' the requirements of these 'prospectors'.

Target the problem

If fast track connection reforms are progressed, Unison and Centralines recommend that the Authority limits focus on the issues arising from CPOs and solar generation projects and target the problem proportionately. This is less likely to risk unintended adverse outcomes for existing connection customers, which can be carefully considered through targeted proposals"[37]

78. These connections have distinctive needs so may benefit from targeted regulation, in contrast "one size fits all regulation" would not benefit (or could harm) other consumers. As noted above, the majority of submitters suggest that the presence of empirical evidence could have suggested whether pricing and process issues were specific to certain segments of access seekers, or more widespread.

79. Counties Energy's submission explains:

"*The reconciliation methodology will not improve pricing efficiency. Most new connections are within residential, commercial or industrial developments where the developer has paid for a connection charge. As the developer has already purchased and rezoned the land before talking to utilities (e.g. telco, water, power), and because electricity reticulation costs are 1% of the final sale price, EDB connection charges are not a material consideration. Furthermore, developers would never sell sections on a cost-plus margin (like a plumber) pricing approach because section prices are determined by the market. A developer would develop a financial model for the development before purchasing the land that would make an assumption on the electricity reticulation cost (non-material assumption at 1% of cost), but this would be an assumption only because the actual cost would be subject to the final roading design).*

Where the end customer does pay connection charge, such as large industrials, while electricity is an essential utility for all businesses, the connection cost even for large industrial customers is less than 1% of the cost of a new industrial plant. These large industrials will negotiate connection charges along with power quality, reliability and resilience."[38]

[37] Unison and Centralines submission, page 5

[38] Counties Energy submission, response to Q10

Any issues with the Commission's incentive regime should be addressed by the Commission

80. In addition, we note Aurora's submission and Incenta's report for Powerco and Unison both found the supposed problems with the EDB incentive regime cited by the Authority would be better addressed by the Commission.

81. For example, Incenta submitted that:

> "*we agree that it is desirable for the EDBs to have a financial incentive to process connection requests and connect customers in a timely manner, a better mechanism to achieve this is to refine the DPP regime. The two options for aligning the EDBs incentives in this manner would be to have the capital expenditure allowances that are used in the IRIS adjusting with the level of connection activity, or to apply a revenue-driver (i.e., an adjustment to the revenue cap) that again relates to the level of connection activity*."[39]

82. Contact Energy also recognised the implications under the Part 4 regime, submitting that:

> "*We recommend that the Commerce Commission joins the next phase of this project to more closely consider implications under the Part 4 regime."*[40]

83. Accordingly, we recommend that – if regulation is pursued – the Authority limit this to the specific issues raised by CPOs and, as raised by Unison and Centralines, solar generation projects. We also recommend that – if the Authority remains concerned about the incentive regime – it works with the Commission to address any issues with its incentive framework rather than attempt to back-solve the issue by pursuing pricing reform.

Regulation should be principles based rather than prescriptive

84. The ENA's submission explains a principles based approach would better support pricing efficiency:

> "*ENA agrees with the Authority that flexibility is key to the design of efficient connection pricing methodologies. However, as currently designed, there are limitations in the Authority's proposals that have the potential to undermine current flexibility and result in unintended consequences. ENA recommends that the Authority apply pricing principles rather than the proposed rules-based approach. Principles-based regulation allows for greater flexibility and empowers EDBs to flex and innovate in the ever-changing electricity environment to create solutions that meet customer needs. The Authority has not provided*

[39] Incenta for Powerco and Unison submission, page 9

[40] Contact Energy submission, page 1

sufficient evidence to demonstrate that rules are more appropriate for connection pricing, while a principles-based approach has effectively been applied to line charge pricing."[41]

Timeframe for reform

85. A number of submitters suggested the Authority pause, delay or otherwise reconsider the problem definition ahead of pursuing regulation.

86. For example, the ENA submitted:

"*For this connection pricing consultation, we request that, given the range of views the consultation is likely to generate, as well as the nature of the technical issues being identified, the Authority consult again with a 'version 2' before codifying any changes. We note that the Authority already refers to the release of technical drafting before any final decision is made, where a contractual alternative has been pursued.*

We fully support this layered/staged approach to consultation. ENA members find the Commission's technical consultations an effective and efficient means of rule development, and we encourage the Authority to work with the Commission and adapt the approach to its own aims."[42]

87. ETNZ submitted:

"*Firstly, and most importantly, we urge the EA to slow down this process. It is being implemented with undue haste. Mistakes and missteps will only be borne by our existing customers in the form of higher prices and increased risk."*[43]

88. Wellington Electricity submitted:

"*Given the issues with the problem definition, we consider the reasons for the fast track appear to be unsupported. We strongly suggest that the EA takes a more principle-based approach. We also suggest that the EA align the timing of any full reform package to the DPP5 reset rather than re-opening the price path twice within DPP4*"[44]

89. Powerco referred to the Authority's consultation charter, including principal 3 – preference for trial and error options. Powerco submitted:

"*Principle 3 is to be used where analysis demonstrates a clear benefit to a Code amendment proposal, but there is no clear best option in terms of a solution. This is the case with the proposed connection*

[41] ENA submission, page 7

[42] Ibid, page 13

[43] ETNZ submission, page 2

[44] Wellington Electricity submission, response to Q3

pricing Code Amendment – in the absence of quantified cost benefit analysis for regulations, there is a risk of adverse unintended consequences where regulations are not proportionate to benefits.

The pathway to full reform should follow Principle 3: initially small-scale and focused on the largest connections where the benefits of reform are greatest. This will enable the Authority to monitor the implemented option and refine or expand that solution to smaller connections in accordance with the results from the monitoring."[45]

90. We consider that the Authority should pause and reconsider the problem definition and obtain greater quantitative evidence ahead of progressing any reform. The weight of submissions strongly suggests it is worth taking a step back to obtain further comment and evidence on the problem before imposing any regulation. As highlighted by a number of submissions, there is a real risk of negative consumer outcomes if the Authority embarks on such substantive regulation without sufficient certainty around the problem. We also strongly agree with Wellington Electricity that the EA should delay any full reform until DPP5 to avoid the need for two re-openers in a regulatory period.

Network connections project – stage one

Obligation to connect load

91. Vector's submission highlighted a key concern is the proposed obligation to connect load above 69kVA.

92. A number of other submitters questioned the legality of the Authority imposing this obligation through the Code.

93. The ENA submitted that:

"*The introduction of an obligation to connect load customers is a significant departure from some core principles established when the sector underwent legislated reform in the early 1990s. At that time, Parliament determined that EDBs would be relieved of this obligation, and it was implemented with a one-year grace period under Part VIII of the Electricity Act 1992, which dealt primarily with the licensing of the new "Electricity Suppliers" under Sections 68-73. Section 72, described the duty to supply new consumers, but Section 73 had the whole of Part VIII (including Section 72) expiring and repealed on 1 April 1994. For the Authority to re-introduce this obligation it is arguably counter to the intentions of Parliament, and something that should be introduced (if genuinely desired) via amendments to primary legalisation. As stated above, we are not aware that there are significant problems experienced by access seekers such that they are not being offered a network connection. It is therefore difficult to see what problem this new obligation (to connect load) is intended to resolve. There are rare, but not implausible situations, where an EDB should retain the ability to refuse to offer a load connection to an access-seeker. These could include:*

[45] Powerco submission at para 87 - 88

- *A location that would create excessive congestion for other customers and remedy for upstream assets would take some years to install;*
- *A remote exceedingly expensive connection - uneconomic to maintain;*
- *Other connections that might lead to undesirable network configurations (e.g. enclaves within other networks, crossing difficult or inaccessible terrain or land, etc*)."[46]

94. ETNZ submitted:

> "*The proposed changes create an explicit obligation to supply new loads. This was acknowledged by the EA on their webinar of 11 November. This obligation was removed by statute at the start of the deregulation of the sector in the 1990's. Reinstatement of this obligation should not be done through lesser and more opaque methods. Furthermore, reinstating the obligation to connect and dictating the terms (including price) on which this is done is tantamount to forced investment.*
>
> *To be clear, we are not suggesting networks will resort to wholesale refusal to connect, but forcing networks to connect customers under any circumstances is unacceptable*."[47]

95. We strongly recommend the Authority further consider its jurisdiction to impose any obligation to supply for load. The Authority has previously indicated it received legal advice on this point. We recommend that Authority publish this legal advice for stakeholders to consider.

Ensuring there is sufficient evidence of issues for changes to processes in Part 6

96. Consistent with the responses to the pricing consultation, a common theme amongst submitters, whether agreeing or disagreeing with the proposed changes to Part 6, was that the Authority did not provide enough evidence to understand if and why connection process modifications for DG or Load may be necessary.

97. Without a clear understanding of the current situation and a purpose for interventions, it is difficult to make a judgement about whether the proposed changes are addressing real barriers, effectively, or whether the ongoing monitoring plans will be able to determine if the changes yielded improvements. Given shared concern from the submitters about the resources needed by EDBs to deliver on the new obligations, the Authority must also ensure that any resources required for implemented interventions are supported by the Commerce Commission such that they can be made available within the transition period.

98. We agree with the ETNZ who suggested that the Authority "slow down" and focus on gathering the necessary information to determine if, what and when interventions are needed. It is good regulatory practice to gather the evidence to identify the problems,

[46] ENA submission, page 2

[47] ETNZ submission, page 2

understand appropriate triggers for intervention, and propose interventions and monitoring regimes to ensure that those interventions had the desired effect.

99. NewPower also noted that they:

> *"Would like the Authority to release average statistics on how long the DG / load process took for different sizes of DG / load plant. This would be extremely useful data to assess performance of distributors and to identify pain points of the Part 6 process. It would be useful if the Authority asked for historical data from distributors as well as the ongoing requirement for data proposed."*

100. Without a solid base of evidence before these interventions are put in place we risk creating unintended consequences. IEGA speculated in their submission that a potential unintended consequence of introducing Processes 4 and 5 for load would be *longer* application timelines for DG:

> *"We assume there is a positive cost benefit case for regulating a process with specific timeframes for load connection applications. … Unless new resources or streamlined processes are in place, the imposition of specific timeframes (and the potential to breach the Code) in and of itself is unlikely to 'make the boat go faster'. Selfishly, the IEGA is concerned that EDBs applying resources so as to be compliant with load application timeframes could delay EDBs' approval of generation connection applications when there is clearly already a tight supply situation for the next several years even at current demand levels."*

101. The Incenta expert report from Unison and Powerco summarizes these concerns with the scope of the proposed changes to connection application processes:

> *"we note that the proposed measures are broad (especially when considered alongside the pricing measures), and we question whether the mandatory measures in relation to the process of connections is consistent with the proposal to rely principally upon disclosure in the short term to discipline price. We would urge the Authority to seek simpler, lower-cost interventions where possible."*

102. We recommend that the Authority consider less disruptive and lower cost options that focus on gathering relevant information about connections in collaboration with the Commission. This information will build a strong evidence base that can be used to determine whether there is a net benefit to consumers from regulatory interventions.

Risks of Application Timelines and Defaulting to 'Approved' If Timelines not met

103. Several submitters responded to the consultation suggesting that timelines should be dramatically shortened for all of the proposed application processes.

104. We draw attention to the observation from Counties Energy Trust on page 4 of their submission: *"It can reasonably be expected that the shorter the timeframes for processing applications the greater the resourcing requirements (either additional staff or reprioritising work) and these costs will*

be particularly pronounced on networks such as Counties Energy and the Vector Auckland network where there is substantial ongoing new connections and growth."

105. We do not endorse shortening the timelines; as noted earlier, it is not clear that the evidence has been gathered to justify these interventions, and shortening timelines will force additional costs onto all consumers to benefit only those seeking connection applications.

106. Vector also disagrees with the current proposal that applications will default to "approved" if an EDB fails to meet the timelines. Counties Energy Trust notes*: "It would be inappropriate, and arguably irresponsible, for a regulatory default approval impacting electrical integrity of a distribution network and safety of the public."* Having strict timelines for all applications, particularly if timelines are shortened for specific parties' benefit, heightens the risk to network integrity due to applications being defaulted to "approved". Ultimately, all consumers pay for the additional administrative and engineering resources necessary to mitigate that risk.

107. The Authority must consider whether shortened timelines, and the accompanying increase in costs for EDBs to meet those timelines, would be in the best interest of all consumers, or even all types of consumers seeking a connection. As Counties Energy Trust pointed out, *"It would be very rare that regulation would benefit all affected parties, as claimed in the consultation, including industry participants that would be regulated. It is more likely that the negative effects and costs of the regulation have not been fully identified or assessed."*

Interaction of timeframes with the Commission's regulatory framework

108. The Authority does not appear to have contemplated how the proposed application timeframes (and default approvals) interact with the Commission's process for re-opening the price-path for unforeseen expenditure.

109. The input methodologies prescribe the circumstances and process where EDBs can apply to re-open their price path if they need to incur additional expenditure. Where a large party connects to the network, EDBs may need to apply to the Commission to re-open their price-paths. However, the Commission does not prescribe a timeframe in which it will assess a re-opener application.

110. We note the Commission is currently consulting on amending the input methodologies for re-openers. Neither this consultation, nor the Commission's re-opener consultation mention the other.

Revising or Removing the Capacity Thresholds so that Complex Processes are only used for Complex Applications

111. The Electricity Engineers Association (EEA), ChargeNet, Air New Zealand, and Business Energy Council, among others suggested that the Authority increase the thresholds for 'large connections'. This would support streamlined processes, aligning with other

industry standards and requirements, future-proofing to match industry trends, and focussing resources. An adjustment to the capacity threshold would partly address the concerns we shared in our submission about the capacity of an application being considered a reasonable proxy for the complexity of the connection.

112. Vector suggested scrapping the thresholds and allowing EDBs to develop 'simple' and 'complex' connection processes and assign applications accordingly. IEGA had a similar comment in their recommended change: *"Adopt an industry wide classification of what constitutes a low, medium or high complexity connection application and adopt a connection application process based on these categories of complexity."*

113. NewPower also *"… likes the idea of a 'complex application' and suggests that the Authority reframe this to have different standard timeframes for 'non-complex applications' and allow extensions / longer timeframes for 'complex applications'."*

114. EECA also suggested that flexibility in the way these processes are defined in the Code should be the preferred approach: *"We particularly note that there should be flexibility in the Code amendments to define Distributed Generation (DG) applications as small, medium and large. This should be a balanced approach that allows for future changes to the defined application sizes if necessary. One potential reason for doing so would be if the threshold was causing a particular size to be chosen during application resulting in a potentially inefficient investment."*

115. Sapere for Drive Electric advocated a, "*fast track process for applications that meet homogonous connection types*."[48] This appears consistent with developing 'simple' and 'complex' application types.

116. We feel there is merit in our proposal of developing 'simple' and 'complex' application processes rather than strictly capacity based, because it allows EDBs to allocate resources proportionally, and provides additional flexibility to incorporate the findings from the ongoing ENA and EEA streamlining connections processes.

Providing Capacity and Pipeline Information and Minimising Speculative Applications

117. The Authority and several submitters supported the disclosure of capacity information by EDBs such that applicants have better information about current and upcoming network conditions as they are exploring opportunities, which may also reduce the number of speculative applications that EDBs receive.

118. Unison and Centralines' submission acknowledged the concerns from charge point operators and solar generation projects noting: *"For CPOs and solar generation projects, their distinctive new needs arise from their business models that require finding cost effective locations (land*

[48] Sapere for Drive Electric submission, para v

availability, network capacity, and connection cost). This means these customers undertake 'prospecting', often requesting connection capacity and costs for several potential sites being evaluated."

119. Unison and Centralines specifically note how the 'prospecting' approach for these two parties is different from the approach taken by "traditional" network connection requests, which have been very satisfied with the existing approach. They note that the current approach may "overserve" the requirements of prospectors and suggest a proportional approach rather than sweeping change: "*If fast track connection reforms are progressed, Unison and Centralines recommend that the Authority limits focus on the issues arising from CPOs and solar generation projects and target the problem proportionately. This is less likely to risk unintended adverse outcomes for existing connection customers, which can be carefully considered through targeted proposals."*

120. PowerCo's capacity maps were recognised by many submitters as an example of how to do this, and we note that PowerCo put significant resources into the data collection, preparation, and analysis in order to produce those maps. Several submitters noted that data access and data analytics capabilities vary significantly between EDBs, and the Authority should continue improving EDBs' access to smart meter data as a fundamental component to enabling this capability.

121. Several submitters suggested that access seekers may be best served by approaching the EDBs to get detailed information about specific sites rather than having EDBs committing resources to make this data available all the way down to the low-voltage level across their whole network.

122. Lodestone specifically noted that there are likely diminishing returns of the benefits of this information as you go further into the network: *"Lodestone (and the wider large DG market) has benefitted from the availability of subtransmission information. The disclosures in the Asset Management Plans are sufficient to make informed decisions and build development strategies. Additional information on the types of conductors and cables that make up the sub transmission network would allow large DG developers to become more self-reliant on selecting viable connection options without network resource. Reporting beyond this level may have diminishing returns."*

123. A similar sentiment was noted by ERANZ: *"However, the Authority must be careful not to place an undue burden on distributors, the costs of which would ultimately be passed on to consumers. We are also aware that requiring low voltage capacity information would essentially be getting down to the building level, which would be onerous for distributors to provide. The Authority should weigh the benefits the data will provide to the sector against the costs it will place on distributors, and work with distributors to determine the most efficient way for them to provide it."*

124. Sapere's submission on behalf of Drive Electric also noted that while PowerCo's maps help provide information down to the 11kV level, they were unclear on the trade-offs for making more low voltage information available. *"There does not appear to be any analysis of the quantum of that benefit, and at what point the resulting costs faced by EDBs would be 'too onerous and costly'."*

125. We believe that the potential benefits for the publication of capacity maps will vary significantly with each EDB. There are still issues with access to high quality data, and the Commission's allocation of funding to address this in DPP4 has not yet taken effect. We have concerns that extending the requirement for capacity maps to the low-voltage areas of networks increases the chances of misinterpretation of that information by consumers or 3rd parties that should not need to understand the underlying factors associated with network design and planning. We recommend the Authority work with the Commission to align disclosure requirements for network capacity information and ensure that the costs of any additional disclosure requirements will provide benefits to consumers.

126. We also note it may not be the most efficient approach for EDBs to provide capacity and price information without cost. There are potentially significant costs involved in developing the digital capability (e.g. building the user interface) to manage proposed requirements that only 'prospecting' customers would benefit (versus all customers on the network). It is worth considering whether the user interface and analysis could become a contestable service with EDBs merely providing the raw data.

Prioritisation, Queueing and Capacity 'Rights':

127. There was general support by submitters for industry developed policies for prioritisation and queuing management that enabled greater discretion for EDBs, as well as ensuring that any capacity allocation principles don't result in applicants reserving capacity and acting as a barrier to competitors.

128. Greater discretion could be applied to the grouping requirements as noted by Flick and Z Energy.

129. Z Energy submitted:

> *"…Z does not see a clear process for how two commercially competing groups in this situation are brought together effectively and a desirable outcome is achieved. Z suggests that in the situation above, it would be better if the EDB worked with both applicants to ensure the parties are connected to the distribution network. If additional investment in capacity in that area of the network is required as a result, applicants should be informed about the cost and process to achieve the connection – especially as grid studies are likely to have already been undertaken for these connections at the Interim Application stage."*

130. The EEA suggested queue management improvements: *"This could include mandatory regular updates from applicants and clear criteria for removing inactive projects from the queue."* These are similar to our recommendation that there should be explicit capabilities for EBDs to remove projects from the priority queue.

131. Vector's concerns in this area have to do with the ability to remove any applicants that had received a capacity allocation but had failed to meet further milestones of progress.

The EEA provided a good set of recommendations in their response to question F with a key one being *"Avoiding Exclusivity or Permanence: Any allocation framework must avoid creating exclusive or permanent entitlements that could limit flexibility and hinder broader system optimisation. It is critical that capacity rights remain adaptable and aligned with the evolving needs of the electricity sector."*

Yours sincerely

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