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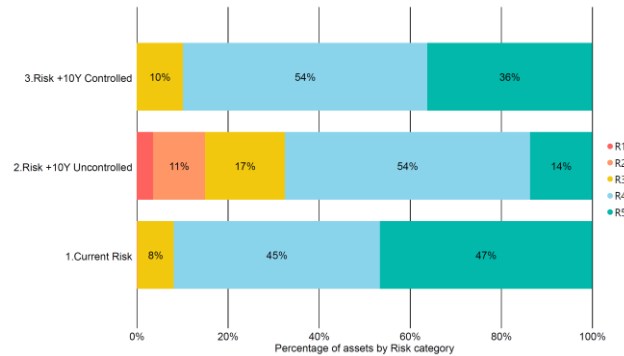
Horizon Energy Distribution Limited (Horizon Networks) submission on DPP4 capex workshop

1. Thank you for providing us the opportunity to make a submission on the EDB *DPP4 capex workshop*.
2. Horizon Networks is a small trust-owned Electricity Distribution Business (EDB) serving over 25,000 consumers in the Eastern Bay of Plenty region. As a trust-owned EDB, we have a strong consumer focus and seek to benefit both our Shareholder Trust Horizon and the communities we serve.
3. In addition to the issues raised below, Horizon Networks wishes to emphasise the following:
 - EDBs understand the risks planned capital investments are designed to address.
 - Horizon Networks has a clear understanding of the reasons for increased forecast expenditure in Asset Management Plan 2024-2034 (AMP 2024).
 - The IAEngg report is a missed opportunity to gain confidence that EDBs are appropriately planning to manage future risks.
 - Historical expenditure will not accurately predict future needs.
 - A reliance on reopeners and a Customised Price-Quality Path (CPP) to manage uncertainty increases the risk of not meeting future needs.

Investment decisions are made to manage risk

4. As a regulated business EDBs are required to meet quality standards while operating within the DPP set capital expenditure (capex) and operational expenditure (opex) allowances.
5. Failure to meet quality standards can result in poor consumer outcomes, backlash from the community, scrutiny by the media and Commerce Commission as well as penalties.
6. The Horizon Networks AMP uses a risk-based approach to identify and prioritise the most pressing capital investment needs and impacts while considering the costs of financing those capex decisions and the impact of regulatory settings on recovering those costs.
7. The risk profile changes as new information becomes available regarding the assets, environmental conditions and the forecast demand placed on network assets. This information informs the prioritisation and timing of projects.
8. As a responsible network owner, we work to manage risk to an acceptable level, based on the latest information available.

9. The additional expenditure forecast in AMP 2024 is targeting the high-risk areas and will help ensure we can address those risks that sit within the R1 and R2 band while limiting the number of R3 band risks over the next 10 years, as shown below.

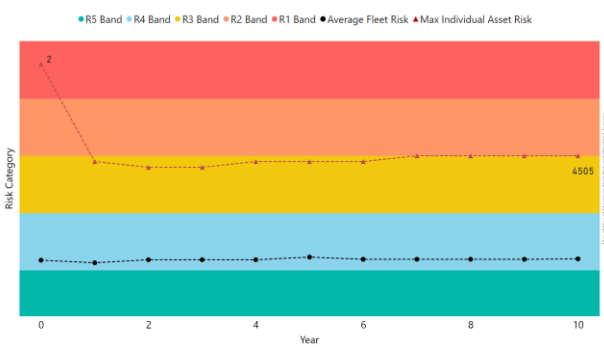
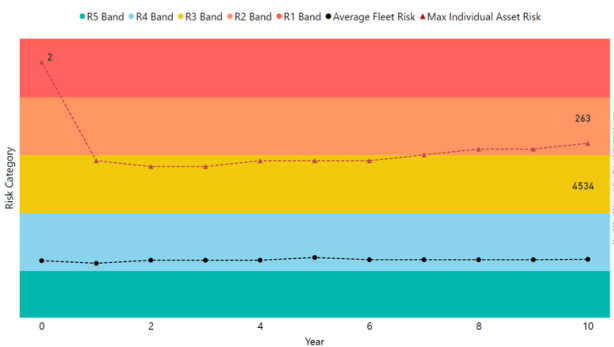


10. The 10-year risk charts (below) illustrate how the 10-year risk profiles for pole, pole hardware, HV conductor, transformer, and ABS asset fleets change over time. On the left is the risk profile if expenditure remains at AMP 2023-2033 (AMP 2023) levels. On the right is an updated risk profile once the additional expenditure in AMP 2024 is considered.

11. As illustrated in these charts, the overall risk profile can be maintained within the tolerable level of R3 under the proposed AMP2024 expenditure. Reducing expenditure will cause long-term issues and result in increased risks that impact consumers.

10-year risk with AMP 2023 investment level

10-year risk with AMP 2024 investment level



12. Risk-based analysis forms part of Horizon Networks asset management planning process¹. This analysis is comprehensive and includes analysis of risk by different types of assets².

13. Capex forecasts are not discretionary. They address known risks and consider the impact of undertaking (and not undertaking) the investment on the network and on consumers.

14. Management of risks and consumer impact is typically managed within the capex envelope of the DPP.

¹ Horizon Networks Risk Management Methodology can be found in Section 3.2 of its [2023 Asset Management Plan](#).

² Horizon Networks Fleet Management can be found in Section 10, and includes a breakdown of risks by the type of asset.

EDBs are the party best placed to manage risk

15. Horizon Networks believes EDBs are best placed to understand the risks that influence investment decisions for their specific network.
16. Horizon Networks has undertaken extensive sensitivity analysis to identify and manage network and commercial risks associated with investing in the network.
17. We are concerned that without the benefit of detailed analysis and understanding from within EDBs the Commerce Commission's role in setting the DPP could result in the Commerce Commission making price-quality path decisions that are not in the interests of consumers or reflective of the needs of the EDBs.
18. One of the most effective ways of improving the Commerce Commission's decision-making process would be to improve their understanding of the AMP and forecast expenditure needs. Those EDBs such as Horizon Networks who are certified to ISO55001 standards have well established processes, systems and risk-based frameworks to ensure that there is an adequate balance between the level of investments and the risks to its assets. This should provide the Commerce Commission with a high level of confidence on the proposed investment needs.

Horizon Networks expenditure profile has increased from AMP2023 to AMP2024 as we better understand the risks that need to be managed

19. Like many EDBs, Horizon Networks is forecasting an increase in capital expenditure in AMP 2024³, compared to the published AMP 2023. This increase is driven by new information that better reflects the risks that need to be addressed⁴ and a better categorisation and quantification of the risks and costs associated with managing existing risks.
20. For Horizon Networks there are two areas where capital expenditure is significantly higher than forecast in AMP 2023. These are *system growth* and *asset replacement and renewal*.

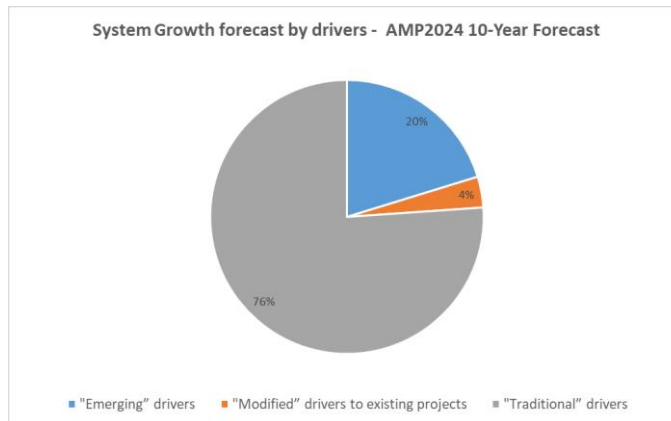
System growth changes are driven by decarbonisation and major projects

21. Expenditure on system growth has increased due to an improved understanding of the impact of decarbonisation and major projects.
22. We have grouped the system growth expenditure forecast by driver, with three different drivers for system growth expenditure:
 - *“Traditional” drivers* – these are understood and based on traditional sources of change.
 - *“Modified” drivers* – these are where there was a traditional need, but the timing or scale of investment has been modified by an emerging need. For example, a substation upgrade that has been brought forward due to EV uptake, or a transformer upgrade that has increased capacity due to decarbonisation needs.
 - *“Emerging” drivers* – these are less certain and based on emerging technologies and emerging needs.

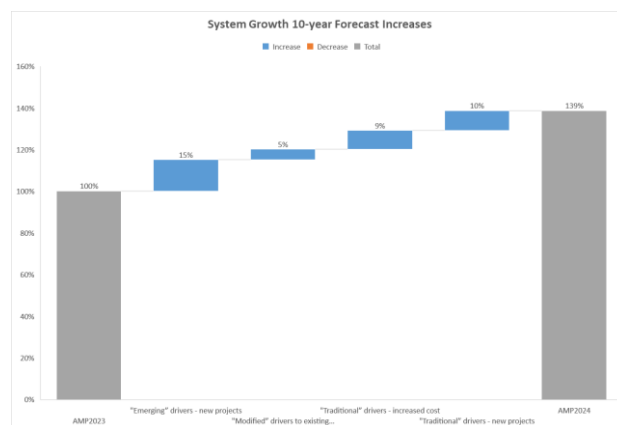
³ At the time of drafting this submission, AMP2024 remains in draft, so references to AMP2024 refer to that draft.

⁴ In 2023 Horizon Networks engaged with experts to gain insights into the impact of electrification and climate change to understand the changing needs of the network and to update existing projects as well as develop targeted projects to meet those needs.

23. With respect to the total expenditure forecast for System Growth, “traditional” drivers account for 76%, followed by 20% of “emerging” drivers. 4% of the total System Growth forecast are due to “modified” drivers, to update the scope of planned growth projects to support decarbonisation. Our expenditure forecast for “emerging” drivers anticipates a slower uptake rate of electrification in our region relative to the national uptake rate.



24. Between AMP 2023 and AMP 2024 the 10-year forecast system growth costs have risen by approximately 39%. The breakdown is shown below.



25. This is driven by improved information, which informs the timing, cost and need for upcoming major projects. Out of the 39% increase:

- 15% is due to “Emerging” drivers, which are based on our latest decarbonisation scenarios modelling. This expenditure includes voltages support, upgrading the LV network, and distribution transformer upgrades.
- 5% is due to “Modified” drivers. Modified drivers are where we have “traditional” projects, which are needed but the timing, cost and scope are influenced by decarbonisation. We believe undertaking this additional expenditure is efficient as it will increase the capacity of previously planned growth projects to account for decarbonisation needs. The increment in the forecast increase is a reflection of the allowance for additional capacity.
- 19% is due to "Traditional" drivers. Traditional drivers include new projects where forecasts identify upcoming constraints that need to be addressed and updates to existing projects based on the latest understanding of the cost and effort to deliver the project. These projects are typically complex and high value, such as the planned conversion of our Opotiki supply from 11kV to 33kV, new substations at CBD and Manawahe, and power transformer upgrades.

Asset Replacement and Renewal is driven by decarbonisation and our risk-based approach to asset management

26. Between AMP 2023 and AMP 2024 the 10-year forecast asset replacement and renewal costs have risen by approximately 40%.
27. This increase is informed by new information, including updated risk profiles, and improved data collection such as asset attributes and age.
28. As the risk profile has influenced these changes, cost increases are not limited to a small number of causes but are spread across multiple categories.
29. The main affected categories of expenditure include:
 - **Major substation asset replacement projects.** These are major asset replacements including two indoor switchboard replacements and one transformer replacement. The need and timing of the replacements are driven by the age and condition of the assets.
 - **Secondary and protection asset life cycle replacement.** This need is identified through an improved understanding of our secondary and protection asset fleet. This informs the life cycle replacement requirements.
 - **Reactive work.** Historical fault trends are analysed and in 2023 we identified that the historical fault rates and the cost to resolve faults are consistently higher than forecast. This update more accurately forecasts upcoming fault costs. In addition, our asset inspection programme continues to provide current asset condition information. This informs our forward defect management forecast.
 - **Structures and conductor replacement.** We regularly review and improve our asset risk model to ensure it continues to align with good industry practice. Recent improvements include identifying LV structures as a separate asset class given the increased need to invest in low voltage assets as a result of decarbonisation or climate-related resilience upgrades. This has allowed Horizon Networks to understand and address risks specific to these assets. In AMP2024 we have identified that additional investment is required to manage the risks associated with overhead conductors.

The Horizon Networks AMP is an up-to-date, informed view of future investment needs that manages network and commercial risk

30. When developing the AMP, Horizon Networks considers the future investment needs and models the impact of meeting those needs on the network, based on the DPP settings to ensure the investment considers the network and commercial risks to the network.
31. As a result, the Horizon Networks AMP is an up-to-date and informed view on the investment needed to manage future network risks.

IAEngg NZ EDB 2023 AMP review

32. As a precursor to the DPP reset, the Commerce Commission arranged for IAEngg to review EDBs 2023 AMPs.
33. AMPs are a formal, public information disclosure requirement that needs to pass Board scrutiny and director certification. They require significant analysis, scenario testing and sensitivity analysis to produce.
34. Horizon Networks was optimistic that the IAEngg review could be used to verify if the AMPs were sufficiently robust enough to be used by the Commerce Commission to set forward-looking capex allowances.
35. However, the IAEngg report did not go far enough and only provided an opinion on whether EDBs forecast practices were reasonable, not the accuracy of the forecasts.
36. This is a missed opportunity, to help assess if AMPs could be used as a foundation for setting the capex allowance. Instead, the starting point for the DPP remains historical trends, modified by AMP forecasts.
37. It was noted in the DPP4 Issues Paper and submissions that *forecasting based on historical expenditure is no longer appropriate. A forward-looking approach is required*⁵. a backwards-looking starting point increases the risk

⁵ Table 3.1 Investment and Uncertainty Issues https://comcom.govt.nz/_data/assets/pdf_file/0025/332944/Default-price-quality-paths-for-electricity-distribution-businesses-from-1-April-2025-Issues-paper-2-November-2023.pdf

that informed, risk-based forecast expenditure will not be fully funded because it does not align with historical trends.

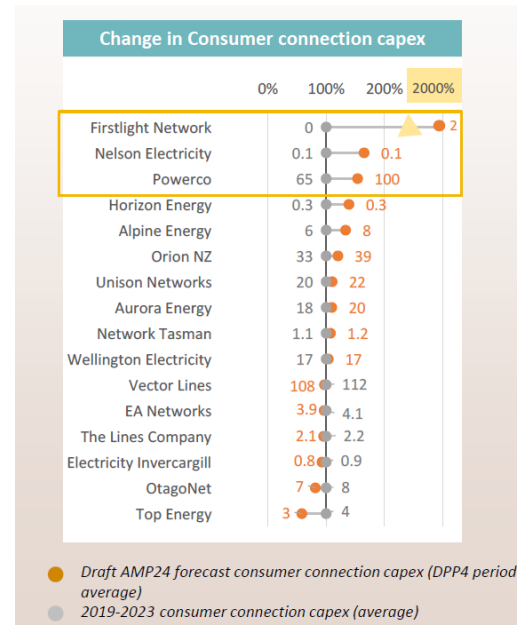
38. This will result in poor consumer outcomes and encourage the Commerce Commission to rely on a reactive reopener or customised price path (CPP) process to help EDBs address major gaps in allowances. Over the long term, this will add unnecessary cost and complexity to the DPP regime.
39. Horizon Networks believes that AMPs should be a starting point for setting capital expenditure allowances and can be modified for expenditure that is uncertain. As noted above, we recommend the Commerce Commission gets better insights into the level of certainty and range of scenarios considered when developing the 2024-2034 AMPs.

CAPEX Forecasts – data used for assessing the proportion of emerging expenditure subjective

40. Horizon Networks is concerned that there was no clear guidance on how to identify the primary driver within the 53ZD response. As a result, the allocation of drivers is subjective and is being misinterpreted by the Commerce Commission when identifying expenditure that is uncertain. This could lead the Commerce Commission to place unnecessary additional scrutiny on expenditure that is certain and primarily driven by traditional drivers.
41. In responding to the 53ZD, Horizon Networks was led to believe that any expenditure that was being modified by emerging drivers (for example the timing or scale of expenditure may differ), should be flagged as an emerging driver, even when the underlying need was due to traditional drivers.
42. This is true of three substations that Horizon Networks will need to build and three major substation transformer replacements during DPP4. These are not routine, but are necessary and certain, and represent a significant proportion of Horizon Networks' upcoming capital expenditure programme. The need for these substations is driven by traditional drivers such as organic or population growth and step change in load request from the industries, and condition/age for the substation asset replacement and renewal, but the timing of the build within DPP4, and the size of the substation has been modified to meet the expected change in demand driven by emerging drivers.
43. For clarity, for Horizon Networks a material proportion of the expenditure that is flagged by the Commerce Commission as having an emerging driver is certain and necessary.
44. **Horizon Networks recommends:** The Commerce Commission apply a three-tier driver metric to identify uncertain expenditure. This should include:
 - *“Traditional” drivers* – these are certain and based on traditional sources of change
 - *“Modified” drivers (new)* – these are where there was a traditional need, but the timing or scale of investment has been modified by an emerging need. For example, a substation upgrade that has been brought forward due to EV uptake, or a transformer upgrade that has increased capacity due to decarbonisation needs.
 - *“Emerging” drivers* – these are less certain and based on emerging technologies and emerging needs.

CAPEX Forecasts – use of percentage increase metrics can lead to inefficient scrutiny

45. In the DPP4 CAPEX workshop, the Commerce Commission assessed 'significant' increases as being a proportional increase compared to historic levels for each EDB. Significant increases are subject to increased scrutiny.
46. Horizon Networks notes that in several cases, a large percentage increase is driven by a low starting value.
47. For example, on page 40 of the DPP4 capex workshop slide pack, Nelson Electricity is assessed as having a significant increase in customer connection capex, however, according to the graphic, there is no material change, with the value remaining at 0.1 (after rounding).
48. Horizon Networks is concerned that EDBs that were operating at a lower historical base cost are being penalised for forecasting changes that bring them closer to the industry average.
49. **Horizon Networks recommends:** The Commerce Commission consider a two-tier approach to identifying expenditure that requires additional scrutiny. This could combine a percentage metric with an absolute metric, that is benchmarked against average industry costs for that expenditure.
50. Additionally these metrics do not take into account irregular, high-value projects. These projects represent 38.8% of Horizon Networks' capex in DPP4 but were not required in DPP3.



Reliance on reopeners and CPPs is a risk.

51. Horizon Networks understands that there will be an increased reliance on reopeners and that sufficiently uncertain expenditure may not be included in capex allowances and instead would be left to a reopener mechanism.
52. This is an ongoing concern as the reopener mechanism is opaque, time-consuming and resource intensive.
53. Similarly Horizon Networks considers the CPP process is something only the larger EDBs can afford. For smaller EDBs, we believe a CPP is uneconomic and resource-intensive.
54. We also note, as highlighted in the workshop not all expenditure is captured by the reopener regime. Horizon Networks is expecting to need to invest in the LV network in response to EV growth. The location of this need is uncertain, and likely to be spread across the network making the reopener process inadequate for addressing the uncertainty and ensuring Horizon Networks is funded to meet consumer needs.
55. This may result in poor consumer outcomes, as Horizon Networks would face IRIS penalties for investing to meet consumer needs.
56. This outcome would be contrary to the purpose of Part 4 of the Commerce Act as in this scenario the EDB would be penalised for providing services at a quality that reflects consumer demands.
57. Horizon Networks believes that reopeners and CPPs should exist to handle exceptions that the DPP could not accommodate. They should not be used to unreasonably restrict or limit known, necessary expenditure that will benefit consumers.

Deliverability – claims of windfall gains are unfounded.

58. Page 71 of the DPP4 capital expenditure framework slide deck states that the Commerce Commission is concerned that if EDBs receive allowances for projects that are not delivered, this may translate into elevated profits, not through improved efficiency but rather due to non-delivery.
59. The Commerce Commission believes it should take into account deliverability when adjusting expenditure allowances.
60. Horizon Networks notes that the suggestion that EDBs will receive windfall gains is speculative and does not consider the risk-based paradigm under which EDBs operate.

Concerns that EDBs could receive windfall gains are speculative

61. In the workshop, the Commerce Commission described how EDBs had been subject to supply chain and resource constraints over COVID.
62. Under the deliverability concerns raised by the Commerce Commission, this could result in windfall gains for EDBs as projects are not delivered.
63. No evidence was provided to show that EDBs made windfall gains due to supply chain and resource constraints over COVID. From the workshop, Horizon Networks understands it is simply the magnitude of spend over DPP4 that means the Commerce Commission's concerns differ from DPP3.

Windfall gains through non-delivery do not consider the risk-based paradigm that EDBs operate in

64. As noted at the start of this submission, AMP and expenditure planning is risk-based. Horizon Networks has identified a risk that will need addressing in the future and has put in place a plan to address that risk.
65. If Horizon Networks does not make the planned expenditure, then the risk is not addressed and the EDB is exposed to the commercial and reputational impact of that risk.
66. Non-delivery does not benefit Horizon Networks or the consumers we serve.
67. As a result, while deliverability will be a challenge for EDBs through DPP4, it is a risk and the consequences are borne and managed by EDBs. Horizon Networks does not believe that deliverability needs to be given any more weighting in DPP4 than it was for previous regulatory periods.
68. Horizon Networks agrees that consumer and Commerce Commission confidence can be improved through greater understanding and transparency of how EDBs are spending against their DPP allowances. We believe this is something that can leverage the existing information disclosure schedules and does not require customised annual delivery reports, as are provided for some EDBs on a CPP.

The purpose of default/customised price-quality regulation is to provide a relatively low-cost way of setting price-quality paths

69. The Commerce Act states the purpose of default /customised price-quality regulation as⁶:

The purpose of default/customised price-quality regulation is to provide a relatively low-cost way of setting price-quality paths for suppliers of regulated goods or services, while allowing the opportunity for individual regulated suppliers to have alternative price-quality paths that better meet their particular circumstances.

70. During the DPP reset process the Commerce Commission has made it clear that the approach is “relatively low cost” and there needs to be proportionate scrutiny. The Commerce Commission indicated they will focus on those areas where scrutiny is likely to make the most difference to price and/or quality.
71. Horizon Networks agrees that the DPP should be relatively low cost, and there needs to be proportionate scrutiny, however is concerned that this concept is currently subjective and there is no appropriate reference point against which the cost of setting the DPP can be assessed to check it is relatively low cost.
72. Horizon Networks suggests that the “relatively low cost” should be checked against the costs of reopeners and the costs of CPPs, both in terms of the resources required for EDBs and the Commerce Commission to process these alternative mechanisms, and the cost to consumers from the expenditure, or delaying expenditure.
73. *Over the last two regulatory periods the Commerce Commission has processed a number of reopeners and CPPs. It would be helpful for the Commerce Commission to publish the cost to consumers of these reopeners and CPPs. This will help interested parties, including EDBs understand the likely impact of a DPP regime that has increased reliance on CPPs and reopeners.*

⁶ Clause 53K of the Commerce Act. [Commerce Act 1986 No 5 \(as at 17 February 2024\)](#), Public Act 53K Purpose of default/customised price-quality regulation – New Zealand Legislation

In conclusion, Horizon Networks supports an informed approach to setting capex

74. It is clear that in the context of an energy transition with increased electrification and climate change impacts, setting capital expenditure based on historical expenditure means EDBs won't be able to effectively invest to support New Zealand's decarbonisation goals and respond to increased risk due to climate change. Underinvestment increases the risk of poor consumer outcomes.
75. EDBs understand the risks investment is addressing and the future needs of the network. This informs the forecast expenditure and risk profiles reported in the AMP. This specialist knowledge of the risks and the network should be the foundation from which capex allowances are set.
- It is important to have appropriate scrutiny of forecast expenditure, particularly where this forecast expenditure sits outside of industry norms. However, the Commerce Commission should avoid using a single measure, such as percentage change from historical expenditure to identify 'abnormal' expenditure.
76. Horizon Networks appreciates the level of engagement on this topic from the Commerce Commission and recognises it is critical for current and future consumers that the Commerce Commission get these settings right so EDBs can invest appropriately to meet New Zealand's electrification needs.

Yours Sincerely

Jonathon Staite
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HORIZON ENERGY DISTRIBUTION LIMITED

Submission on DPP4 CAPEX workshop	
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Prepared by	Jonathon Staite Regulatory Manager email: [REDACTED] Mobile: [REDACTED]
Date:	11 March 2024
Question	Comment
Findings from Review of 2023 Asset Management Plans	
Q1. In your view how could the “NZ EDB 2023 AMP Review” report be taken into account within our capex framework?	<p>Horizon Networks expected that the “NZ EDB 2023 AMP Review” would provide the Commerce Commission with confidence that EDBs are developing meaningful and accurate plans to meet forecast needs.</p> <p>The engagement process and output were underwhelming. Horizon Networks supports the conclusion that the forecasting approach aligns with good industry practice but does not provide an opinion on whether the forecast expenditure is reasonable.</p> <p>Horizon Networks considers that in the absence of any evidence or concerns regarding the way that EDBs are forecasting expenditure in the AMP, it can be expected that EDB's forecast expenditure is reasonable, aligns with good industry practice and reflects the investment needs of that EDB.</p> <p>Horizon Networks believes that with appropriate scrutiny where there are outliers from the ‘industry norm’, the AMP 2024 should be able to be used to set thresholds within the CAPEX framework as that reflects the most recent updates from EDBs.</p>
Metrics for assessing system growth, consumer connections, and renewal-related expenditure	
Q2. Are the proposed metrics (individually and/or in combination) useful for identifying EDBs where additional scrutiny may be warranted?	<p>No.</p> <p>Emerging and traditional drivers do not tell the full story</p> <p>The metrics have split investment drivers into “traditional” and “emerging” categories.</p> <p>The reporting against these categories is subjective, and when providing information to the Commerce Commission, any project that had its timing or scope modified by an emerging driver was flagged as “emerging”, even if there is an underlying traditional need.</p> <p>This has resulted in the over-reporting of “emerging” drivers for Horizon Networks.</p>

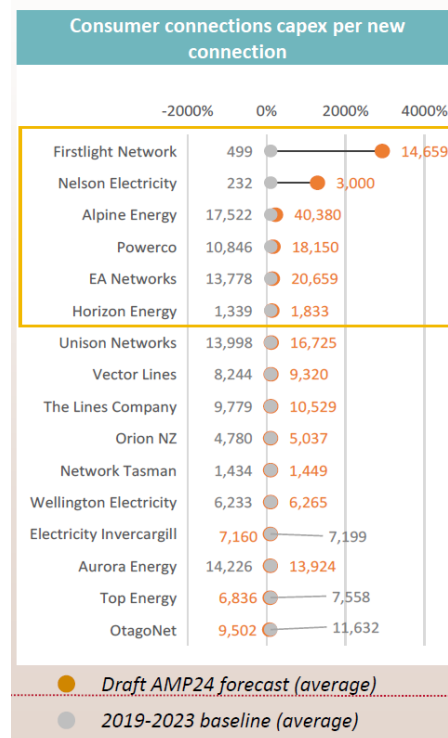
We do not support the Commerce Commission’s conclusion that emerging drivers are more uncertain, as many of our investment requirements that were reported as “emerging” are certain and necessary.

Using a percentage change metric is not impactful

The Commerce Commission's view is that a large percentage change in various CAPEX categories indicates there are significant increases in costs.

Horizon Networks considers this is not the case, and the scale of the change needs to be considered.

For example in the “Cost per new connection metric” Horizon Networks is flagged as having a ‘significant’ increase in costs per connection, as costs have increased from \$1,339 to \$1,833 per connection and should be subject to further scrutiny.



However in absolute dollar terms, the cost per connection has only increased by \$494, and in terms of affordability Horizon Networks is providing the second lowest cost per new connection.

Horizon Network considers that a combination of metrics is required to avoid placing scrutiny on EDBs that are operating efficiently.

CAPEX intensity is not a useful metric

The Commerce Commission is using the ratio of capex to totex to identify where networks are focussing on network solutions.

This metric is unhelpful because non-network solutions are not exclusively opex. Investment in generators or batteries

	<p>are examples of non-network solutions. Additionally, platforms for flexibility and demand response can require up-front capital investment.</p> <p>As a result, the Commerce Commission should not be concluding that EDBs are only implementing network solutions through the capex intensity metric.</p>
<p>Q3. Are there other metrics we should consider? Please explain your reasons and provide evidence to support your proposal.</p>	<p>Horizon Networks believes that the Commerce Commission should consider the following metrics.</p> <p>A three-tier ‘driver’ metric</p> <p>Horizon Networks believes that there should be three tiers of ‘drivers’ behind the expenditure.</p> <p><i>“Traditional” drivers</i> – these are certain and based on traditional sources of change</p> <p><i>“Modified” drivers</i> (new) – these are where there was a traditional need, but the timing or scale of investment has been modified by an emerging need. For example, a substation upgrade that has been brought forward due to EV uptake, or a transformer upgrade that has increased capacity due to decarbonisation needs.</p> <p><i>“Emerging” drivers</i> – these are less certain and based on emerging technologies and emerging needs.</p> <p>Certainty metric</p> <p>Horizon Networks bases its AMP on forecast need and considers the likelihood of the investment being needed.</p> <p>A ‘certainty’ metric, that sets out how confident the EDB is of the need for major investments and expenditure, regardless of the underlying driver could help identify uncertain expenditure that could require further scrutiny.</p> <p>Given the likely variability in how certainty is identified, Horizon Networks suggests certainty classifications are limited to “High” and “Low”.</p> <p>Ideally, there would be examples and a definition for each classification, and any assessment of certainty by the EDB should be justified and link back to the definitions.</p> <p>Additionally, certainty can relate to the likelihood of the project going ahead and the confidence in the costs of the project. For example, Horizon Networks has an upcoming transformer upgrade. It is certain that this expenditure is required, but the size of the transformer required to meet future needs may change, depending on the pace of decarbonisation in the area.</p> <p>Deviation from the industry median</p>

	<p>The Commerce Commission should consider a metric that incorporates both the absolute change and percentage change for a metric for identifying expenditure that should be subject to further scrutiny.</p> <p>This will help reduce the risk of small changes being unnecessarily subject to scrutiny because they are a large percentage of change.</p> <p>Horizon Networks suggests a metric that is based on the 'industry median', where the change is above the median in both percentage and absolute terms be considered for further investigation.</p>
<p>System growth</p>	
<p>Q4. Where an EDBs capex intensity is expected to change significantly (eg, 5% or more than historical), please provide indication where your 2023 AMP or s53ZD response explains the overall expected change in expenditure mix and the extent to which you have assessed the efficiency of this change (given the emerging scope for non-network/non-traditional solutions). Alternatively, please state whether you are expecting to provide an explanation as part of your 2024 AMP.</p>	<p>System and Growth and Asset Replacement and Renewal are the predominant contributors to the increase in CAPEX intensity compared to the historical level.</p> <p>The AMP provides clear information regarding the expenditure mix and drivers.⁷</p> <p>Chapter 10 (Fleet Management) outlines the risk-based approach Horizon Networks takes to forecast its asset replacement and renewal programme. This approach profiles risk across different categories of assets and is updated regularly.</p> <p>Chapter 11 (Network Development plan) outlines the growth needs across the network and future constraints. Planned projects for resolving forecast constraints illustrate our thinking at the time of the solutions that are most appropriate. We have explored non-traditional solutions (such as BESS) to provide investment deferrals, however, they did not proceed due to market and economic reasons. Horizon Networks will continue to consider both traditional and non-traditional solutions for addressing forecast constraints.</p> <p>As noted in our feedback on the metrics, Horizon Networks is concerned that the capex intensity metric if flawed does not take into account uncertainty regarding non-network solutions.</p> <p>It is not helpful to speculate on non-network solutions being available and economic in DPP4 until it is economically rational to procure these solutions to defer or avoid capex spend.</p> <p>AMP forecasts can be updated once there is greater certainty as to the availability and viability of non-network solutions, and it can be demonstrated that these solutions can be delivered at a lower cost to consumers without materially impacting quality.</p>
<p>Q5. How could we assess that forecast expenditure has appropriately considered impacts that could be achieved through</p>	<p>This is an area that is being worked on by the sector as part of distribution pricing reform.</p>

⁷ The [2023 AMP](#) is available on our website.

<p>distribution pricing (in the context of a relatively low-cost DPP)?</p>	<p>The calculation of long-run marginal cost (an input used to help calculate ‘time of use’ distribution pricing) is based on forecast expenditure in the AMP, or on the individual projects that make up the AMP.</p> <p>For Horizon Networks, this information can be found in our pricing methodology, and based on forecast expenditure in the AMP, we calculated avoidable costs of approximately \$269 per low user and standard ICP per year, which have been incorporated into our time of use distribution pricing for 2024/25.</p> <p>Horizon Networks would recommend the Commerce Commission and Electricity Authority align their approach and understanding of time-of-use pricing before placing any reliance on how effective distribution pricing will be in influencing consumer behaviour.</p> <p>Horizon Networks understands in many cases consumers do not receive a price signal from their retailer, or consumers are receiving a price signal that is not aligned with the peak periods that would allow EDBs to defer or avoid planned capital expenditure.</p> <p>We also note that a recent internal review of consumers on a time-of-use price (that is passed through by the retailer), found there was very limited consumer response to the peak period price signals, despite potential savings in doing so.</p> <p>These signals and consumer response to the signals inform our forecast expenditure.</p>
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Application of additional tests

<p>Q6: Some EDBs are expected to be identified (according to the proposed metrics or alternative metrics) to belong to a ‘further scrutiny grouping’, for one or several expenditure categories. Please identify effective means of providing additional assurance (consistent with the relatively low-cost nature of a DPP) that the forecast levels of investments are in the long-term interest of consumers:</p> <ul style="list-style-type: none"> • additional information requirements and/or tests that could be applied • how investments that are particularly uncertain could be identified (on the basis that they may be better addressed through reopeners). 	<p>Horizon Networks supports the use of additional scrutiny where there is a change in expenditure that sits outside of industry norms.</p> <p>additional information requirements and/or tests that could be applied</p> <p>Horizon Networks considers that project-specific information could be provided for the main drivers of the expenditure.</p> <p>Information could be provided regarding the range of scenarios considered by the EDB and research undertaken when determining the level of expenditure forecast.</p> <p>For the AMP 2024, Horizon Networks commissioned studies into various electrification scenarios, which were assessed against the expected regulatory settings to manage the network and commercial risk of investment.</p> <p>how investments that are particularly uncertain could be identified</p> <p>As covered in our response to Q3, Horizon Networks recommends a very coarse certainty measurement. Certainty has multiple dimensions (for example need, timing, cost) and is not necessarily well correlated to the underlying driver for the investment.</p>
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<p>Q7: Historical reference periods are likely required to assess the scale of change. What reference period should the capex framework adopt for DPP4 and why?</p>	<p>Horizon Networks has no strong preference for a specific reference period, however, a material amount of expenditure in DPP4 is related to the construction and upgrade of substations.</p> <p>These investments are very 'lumpy' and it is unlikely that any recent reference period would capture our last major investment in a new substation.</p>
<p>Large connection contracts</p>	
<p>Q8: Please identify whether LCC-eligible connection expenditure is listed in AMP 2023 and/or information provided in response to the s53ZD notice (issued November 2023) and the location of this information within the documentation provided.</p> <ul style="list-style-type: none"> • If you haven't identified LCC-eligible connection expenditure, please comment on the feasibility of creating a list of connection projects and programmes that would potentially meet the definition of an LCC in AMP 2024. • If the information is readily available, please provide the listing. 	<p>Horizon Networks has not identified any LCC-eligible connection expenditure.</p> <p>Information regarding potential connections that may be LCC-eligible is not readily available for AMP 2024, and it is not feasible for Horizon Networks to create a list of LCC-eligible projects and programmes in AMP 2024.</p>
<p>Additional reporting requirements</p>	
<p>Q9: What are your views regarding our proposal to place additional reporting requirements on EDBs with significant increases in work programmes?</p> <ul style="list-style-type: none"> • What alternative proposals can you suggest that would achieve a similar outcome of enabling interested stakeholders to assess how well EDBs are delivering their significantly increased work programme? 	<p>In principle, Horizon Networks supports reporting against planned deliverables.</p> <p>Schedule 7 of the information disclosures already reports forecast expenditure against the actual expenditure.</p> <p>Horizon Networks expects under the relatively low-cost DPP regime it would be straightforward for the Commerce Commission to leverage its existing datasets to be able to automatically report actual expenditure against the work programme under which capex allowances were set for DPP4, without requiring additional information from EDBs.</p> <p>Horizon Networks does not support any form of onerous reporting requirements that would prevent EDBs from reprioritising expenditure or accessing non-capex solutions to manage the risk.</p> <p>We would expect the Commerce Commission and interested parties to already be monitoring expenditure against targets and assessing how well EDBs are delivering against their work programme. We would also expect any exceptions (such as innovation meaning projects are delivered below forecast or shifting from capex solutions to non-network solutions) to be covered in the explanatory notes provided in the relevant disclosure.</p>

<p>Q10: What are the challenges you perceive in providing additional reporting?</p> <ul style="list-style-type: none"> • Are there any implementation or workability concerns that we should be aware of? • What information do you currently produce for internal reporting purposes that could be used to achieve similar outcomes? 	<p>Horizon Networks is concerned that additional reporting places additional burden and cost on EDBs and this needs to be recognised in the operational expenditure allowances.</p> <p>While individually, each additional report is not a significant burden, the number of changes being made to the various reporting regimes is increasing costs to Horizon Networks. These costs are passed onto consumers.</p> <p>As noted in the answer to Q9, Horizon Networks believes the information disclosure data already available can provide the Commerce Commission and interested parties with an understanding of how EDBs are delivering their increased work programme.</p>
<p>Deliverability</p>	
<p>Q11: We understand that forecast expenditure is driven by both the size and cost of the work programme. To the extent that the increase in the forecast work programme is due to cost, please explain the variation in cost increases across capex categories beyond CGPI. What support information / analysis can you provide?</p>	<p>Horizon Networks' forecast expenditure is driven by several major substation upgrades and new substations. This expenditure is significant but infrequent.</p> <p>As a result, we do not consider that a substantial increase in the forecast work programme is driven solely by an increase in cost.</p>
<p>Q12: Apart from having considered the challenges of delivering your work programme at an individual EDB level, what evidence do you have that you have also taken into account potential sector-wide deliverability constraints?</p>	<p>Horizon Networks' planning process enables us to measure the resource requirements (engineering, technicians, linesmen) to deliver the works programme across the 10-year AMP period.</p> <p>We work closely with our contractor (Horizon Services Limited) to identify resource requirements across the 10-year AMP planning period so that workers are recruited, trained and certified ahead of the forecast need.</p> <p>Horizon Networks is aware there are risks of project delays for our more complex projects, where there is a need for specialist resource or consultants that we don't train in-house.</p> <p>We are considering options and anticipate that our forward-planning approach will help ensure we can book access to this specialist resource when planning the project.</p> <p>We do not envisage any delivery risks from a lack of onshore resources and will monitor global events that could cause supply chain disruptions. We have a diversity of supplies to manage these risks.</p>
<p>Q13: What are your views on our proposal to consider deliverability as part of uncertainty regarding EDB expenditure, alongside need, timing and cost?</p> <ul style="list-style-type: none"> • What alternatives do you propose? 	<p>The AMP and its investment requirements are driven by identified needs. If EDBs are unable to deliver and meet that need, (for example because equipment is delayed), then the EDB and consumers will wear the risk that not meeting this identified need will have a negative consumer impact.</p>

Are there particular categories of capital expenditure which are more likely to be exposed to potential deliverability constraints?	
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