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Ben Woodham Manager, Electricity Distribution Infrastructure Regulation Commerce Commission Wellington Via email: infrastructure.regulation@comcom.govt.nz

Tēnā koe,

### Powerco submission on EDB DPP4 capex framework design workshop

Powerco Limited (Powerco) welcomes the opportunity to provide feedback on the Commerce Commission's capex framework design workshop and accompanying questions.

Our feedback is provided in Attachment 1. If you have any questions about this submission, please contact Nathan Hill (

Nāku noa, nā,

Stuart Dickson General Manager, Customer POWERCO

# **Attachment 1: Powerco's feedback on the capex framework questions**

### **AMP Review**

Question	Powerco's response
In your view how could the "NZ EDB 2023 AMP Review"	We find the report's applicability within the DPP4 Capex framework somewhat limited. It primarily
report be taken into account within our capex framework?	highlights the challenges of comparing EDBs using qualitative information from AMPs. However,
	one avenue worth exploring is how the report could contribute to setting capex scrutiny thresholds
	tailored to different EDBs. These thresholds could also consider the relative maturity of EDBs AMPs.

## **Session 2: Assessing capex forecasts**

Metrics for assessing system growth, consumer connections, and renewal-related expenditure (slides 28-51)

Question	Powerco's response
Are the proposed metrics (individually and/or in combination) useful for identifying EDBs where additional scrutiny may be warranted?	Yes, we believe that the proposed metrics, both individually and in combination, offer useful insights for identifying aspects of EDBs' forecasts that may require further scrutiny. While these metrics do not singularly determine whether an EDB's forecast expenditure should be approved or rejected, they serve as indicators for the need for closer examination.
	The metrics selected by the Commission are broadly suitable, and we don't propose alternative options at this time. Nonetheless, it's important to acknowledge the following limitations and complexities associated with the proposed metrics:
	• System growth capex per incremental amount of system wide peak demand. The System growth per MW of demand growth metric can be misleading due to the lumpy nature of System Growth spending and its tendency to be out of sync with demand growth. This metric is heavily influenced by EDBs' demand forecasts, with some EDB's forecasting significant demand increases, thus lowering the metric. In contrast, our approach is conservative, projecting only modest electrification demand over the next five years.

Question	Powerco's response
	• <b>Consumer connections: cost per new connection metric.</b> The cost per connection metric, while informative, needs to be more granular to reflect the vastly different costs of different connection types. For example, a decrease in the proportion of lower-cost small connections, which typically constitute around 98% of our connections, coupled with an uptick in higher-cost commercial and industrial connections, could substantially impact this metric.
	We also consider that some of the difficulty the Commission is experiencing in assessing or comparing appropriate expenditure levels arises from substantially varying assumptions applied by EDBs to some of the major cost-drivers. For future resets, it may be beneficial for the Commission to conduct some work, alongside EDBs, to improve some of the commonality of assumptions and how investment forecasts are built up from these. For example, we understand that there are widely diverging EDB views on the impact of electric vehicles on peak demand, or the likely rate and extent of emerging flexibility services. There are also different views on how the increase or reduction in peak demand should be reflected in future investment forecasts.

## Application of additional test (slide 53-57)

Question	Powerco's response
Some EDBs are expected to be identified (according to the	EDBs must be given the opportunity to provide additional information and clarifications regarding
proposed metrics or alternative metrics) to belong to a	their classification into "further scrutiny" groups. In-person meetings with EDB representatives offer
'further scrutiny grouping', for one or several expenditure	the most effective avenue for this. Information requests can serve as an alternative or
categories.	complementary approach.
Please identify effective means of providing additional	
assurance (consistent with the relatively low-cost nature of a	

Question	Powerco's response
DPP) that the forecast levels of investments are in the long-	
term interest of consumers:	
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).	
Historical reference periods are likely required to assess the	We believe that using data from the three most recent years offers a suitable basis for evaluating
scale of change. What reference period should the capex	the scale of change in the DPP4 period. Data going further back may not accurately capture the
framework adopt for DPP4 and why?	evolving trends in the operating environment of EDBs.

## Questions from Session 3: Other factors which apply to a DPP capex framework

#### Large connection contracts (slide 65)

Question	Powerco's response
Please identify whether LCC-eligible connection expenditure	We have several potential LCC (Large Customer Connection) projects in our pipeline. However,
is listed in AMP 2023 and/or information provided in	accurately predicting the timing of these projects proves challenging, leading us to rely on a trend-
response to the s53ZD notice (issued November 2023) and	based approach for our consumer connections forecast. Consequently, while our forecasts
the location of this information within the documentation	incorporate implicit LCC connection expenditure, it is not allocated to individual projects. Therefore,
provided.	given the nature of our forecasting method and the inherent uncertainties, creating a
If you haven't identified LCC-eligible connection expenditure,	comprehensive list of these potential projects is not practical.
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.	

### Additional reporting requirements (slide 74)

Powerco's response
We advocate for EDBs to produce consumer-facing annual delivery reports, enhancing transparency
regarding their performance and the delivery of planned projects/investments. This transparency
boosts accountability to customers and stakeholders and incentivises efficient expenditure, driving
overall improvements.
It would also support the Commission by improving its understanding of short-term delivery,
including unit costs and actual delivery numbers per major asset type. This information would be
help remove some of the uncertainty and variances in assessing forecasts at future regulatory resets.
The track record of Powerco and Aurora in providing such reports shows their practicality and value
for both EDBs and other stakeholders.
Extra disclosure could have a material operating cost and in some cases a capital cost. So, the
Commission needs to ensure that this is taken into account in determining the extent of additional
information to be delivered and, where appropriate, whether additional allowances are justified.
Annual delivery report content
Additional reporting should focus on matters that are significant to consumers and other
stakeholders, shiping the light on how EDRs are supporting the operaw transition and adapting to
their evolving operating environment. We identify these key areas as:
their evolving operating environment. We identify these key areas as.
• EDB's execution of proposed projects and programs. Given the significant untick in
required expenditure for the upcoming regulatory period and the industry's apparent
challenges in delivering this level of investment, stakeholders are undoubtedly keep on
transparent insights into an EDB's execution of proposed projects and programs included in
its AMP forecasts. We suggest a balanced mix of objective quantitative metrics and

Question	Powerco's response
	subjective qualitative commentary to provide a complete understanding of investment delivery.
	• <b>Resilience improvements</b> . Particular emphasis should be placed on the effectiveness of investment in resilience improvements, considering escalating climate extremes and the increased reliance on electricity as a primary energy source.
	• Non-network solutions. Information on EDBs' connections of, and investments in, non- network solutions, such as flexibility services. Embracing non-network solutions is pivotal in achieving cost reductions and better consumer outcomes. The Commission could design this information requirement to support its innovation incentives and EDB DPP reopener applications, such as comparing actual EV connections versus forecasted figures.
	• Worst-served customers/worst-performing feeders. Network-averaged SAIDI/SAIFI figures only provide an average customers' reliability experience. Reporting on the worst served customers on a network (or worst performing feeders) would help focus on specific areas that (potentially) need improvement.

### Deliverability (slides 68-73)

Question	Powerco's response
We understand that forecast expenditure is driven by project	Like many industries, we have experienced significant cost increases across our delivery portfolios.
size & scope, volume of work and cost of the work	Although we have seen cost increases in all asset types the two most notable areas are overhead
programme. To the extent that the increase in the forecast	line and substation building construction.
work programme is due to cost, please explain the variation	
in cost increases across capex categories beyond CGPI. What	The cost of crossarms materials and traffic management are the main contributors to the increased
support information/analysis can you provide?	cost of overhead line construction. The broader rise in civil construction costs across the economy
	has impacted the cost of constructing substation buildings, which house critical switchgear and

Question	Powerco's response
	protection devices. Shipping costs and global metal prices have also affected the cost of our larger
	transformers and switchboards.
	Evidence of cost increases beyond CGPI
	The ENA is presently organising the compilation of EDB Asset Replacement and Renewal data, encompassing quantity and cost information for common asset types over the past 5 years (ending 31 March 2023). This initiative aims to ascertain whether EDB input costs have increased faster than the cost escalation adopted by the Commission. The ENA plans to share this information with the Commission.
Apart from having considered the challenges of delivering	Powerco maintains ongoing relationship with the major electrical infrastructure contractors in NZ
your work programme at an individual EDB level, what	and through these relationships gains broad insights into the outlook for deliverability and
approach and evidence do you have that you have also taken	resourcing.
into account potential sector-wide deliverability constraints?	
What are your views on our proposal to consider	We understand the rationale behind considering deliverability as part of the uncertainty surrounding
deliverability as part of uncertainty regarding EDB	forecast EDB expenditure. In our submission on the DPP4 issue paper, we stated that this concern
expenditure, alongside need, timing and cost?	reflects a realistic awareness of the current labour market, supply chain, and economic challenges in
What alternatives do you propose?	New Zealand.
	However, reducing EDB allowances due to delivery risks will inevitably result in EDBs falling short of meeting the necessary investment levels crucial for supporting the energy transition and achieving New Zealand's decarbonisation objectives. We believe that premeditating EDBs' ability to deliver does not serve the long-term interests of consumers. It's worth restating that EDBs' 2023 AMP capex forecasts align with the projections made in 2022 by the Boston Consulting Group (BCG) in their 'The Future is Electric' report.
	While delivery constraints may well become a serious issue in the future, we believe that this has to be resolved through industry collaboration and sound advanced planning, not through regulatory

Question	Powerco's response
	restrictions. To reduce under-delivery risk, we accept that the Commission would have to look more
	closely at actual delivery outcomes – which supports our suggestion for additional annual reporting
	(discussed above). We remain open to supporting other viable options as well.
Are there particular categories of capital expenditure which	The expenditures most susceptible to potential deliverability constraints are typically those for very
are more likely to be exposed to potential deliverability	large projects, as these are non-routine and generally require equipment that is not run-of-the-mill.
constraints?	At the same time, these projects by their nature are few in number and would have well-developed,
	individual business cases – thus lending themselves well to consideration for re-openers.
	Should the Commission decide to reduce EDB allowances due to delivery uncertainty, it might
	therefore be logical for this adjustment to focus on expenditures related to these significant
	projects.

## Questions/requests not in the slide pack, but mentioned by the Commission during the workshop

Question	Powerco's response
It would be helpful if EDBs could define in their 2024 AMPs	Defining "uncertain expenditure" presents practical challenges. Customer-initiated work serves as a
the uncertain expenditure.	prime example. While this segment of our portfolio is inherently more uncertain than others,
	determining specific percentages of uncertainty, such as whether it constitutes 10% or 20% of the
	total forecast, poses a challenge.
	This highlights the rationale behind our trend-based approach to forecasting this expenditure.
	Attempting to construct the forecast bottom-up from known customer projects would likely lead to
	over-forecasting in the short term, as some projects may not materialise as expected. Conversely,
	the long-term forecast would likely fall short due to limited visibility of future customer needs.
	Therefore, a trend-based forecast represents a pragmatic approach to obtain a mid-point estimate
	of anticipated consumer connection expenditure.

Question	Powerco's response
	Our forecasts are based on what we deem necessary to serve our customers, ensuring value for
	money, and feasibility of delivery.
	There is also significant uncertainty related to longer-term forecasts for the big electrification drivers
	(EV uptake, process heat conversion, domestic gas conversions, etc.). However, while we expect
	these factors to drive significant future expenditure, their immediate impact (other than for known
	conversions) is generally not included in our shorter term investment plans. Reducing the allowance
	for these factors are therefore not likely to have a major impact on DPP4 price settings.
What "uncertain" expenditure did EDBs exclude from their	Our executive leadership team and Board reviewed and moderated our expenditure forecasts.
AMPs?	Consequently, we made specific exclusions, such as potential 110kV developments in the Western
	Bay of Plenty, because of uncertainty regarding the division of delivery scope between either
	Transpower or Powerco. Additionally, we opted to exclude a potential program for customer service
	line replacements, which is currently being reviewed. While this expenditure wasn't inherently
	uncertain, it's removal was part of our process to achieve a defensible and robust investment profile
	that balances customer cost impacts.