

15 September 2022

Submissions: *Powerco CPP-to-DPP Draft*  
Commerce Commission  
Via email [infrastructure.regulation@comcom.govt.nz](mailto:infrastructure.regulation@comcom.govt.nz)

Tēnā koutou,

## **We support the Commission's evidence-based approach to setting Powerco's revenues**

Powerco welcomes the Commission's draft decision relating to the reset of Powerco's electricity network revenues<sup>1</sup>. Powerco is one of Aotearoa's largest gas and electricity distributors, supplying around 340,000 (electricity) and 112,000 (gas) urban and rural homes and businesses in the North Island. These energy networks provide essential services and will be core to Aotearoa achieving a net-zero economy in 2050. This is an important decision for us and our customers as we close in on the final year of a five-year customised programme of work, and look to meet Aotearoa's electrification needs.

The Commission's draft reasons paper takes an evidence-based approach to developing Powerco's allowances for the two-year period April 2023 – March 2025. This includes:

- using a building-block approach to set revenues
- using the most recent Powerco forecasts and disclosed information to inform the financial modelling
- using current forecasts of cost drivers and network characteristics
- reviewing Powerco's capital expenditure forecasts, forecasting approach, and underlying systems and processes as part of applying the input methodologies

Our submission on the process and issues paper provided evidence to support the Commission's development of the draft decision. The draft decision is relatively concise and consistent with past applications, with only a handful of adjustments made to reflect Powerco's circumstances. Our approach to this submission mirrors that: we've provided evidence and commentary only where we think it usefully adds evidence or clarifications to our earlier submission. To this end, we've appended our detailed comments:

- Operating expenditure baseline data (Attachment 1)
- Capital expenditure forecasts (Attachment 2)
- Remaining topics (Attachment 3)

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<sup>1</sup> <https://comcom.govt.nz/regulated-industries/electricity-lines/projects/powercos-20232025-dpp>



We look forward to engaging with the Commission on our revenue reset for 2024/25 and communicating the outcome with our customers in due course.

Nāku noa, nā,

**Andrew Kerr**

Head of Policy, Regulation, and Markets

**POWERCO**

## Attachment 1 Operational expenditure

The draft decision includes adjustments to Powerco's operational expenditure allowances based on Powerco's CPP application and forecasts. This section provides additional evidence (and confidence) to the Commission and interested stakeholders that these reductions are not required.

Note: throughout these appendices we refer to disclosure years using DY##. For example, DY24 is the year ending March 2024 (or the period April 2023-March 2024). This aligns with the time periods used for information disclosure and asset management plans. Powerco's most recent information disclosure was for DY22, and the Asset Management Plan was published in March 2022 (referred to as AMP22) for the ten-year period DY23-DY32.

### 1.1 Draft adjustment for non-recurring vegetation management

The Commission's draft decision reduced Powerco's nominal DY24 opex allowance by \$2.29m on the basis that the vegetation management expenditure that Powerco incurred during the CPP is not expected to recur. While we can understand the underlying principle, the evidence detailed supports our view that this adjustment is not warranted.

While our CPP Proposal predicted a reduction in vegetation management costs post-CPP due to catch-up spending being completed, we know the assumptions used for those forecasts are no longer relevant. Therefore, they shouldn't be used to determine opex allowances for 2024 and 2025. Instead, we believe using the most recent information is essential to deciding whether any step changes should be made to Powerco's opex allowance.

Below we outline the information that shows why our base-year vegetation maintenance opex is reasonable and necessary, and why the Commission and stakeholders can have confidence that a negative step change is not required.

**LiDAR (Light Detection and Ranging) surveys tell us that we have a more significant vegetation management challenge to work through than we had forecast**

Light Detection and Ranging (LiDAR) is an efficient and effective way to monitor vegetation close to our powerlines. After a successful LiDAR trial in 2019, we commenced a complete LiDAR survey of our network. This survey will record the vegetation close to our powerlines.

The data collected from our LiDAR surveys tell us that we have a more significant vegetation management challenge than we had forecast when preparing the CPP application. In response, we have ramped up our vegetation management work and revised our future forecasts. For instance, from 1 April 2021 – 31 March 2022, we managed 16,210 tree sites, almost 7,000 more than we initially planned.

Our vegetation management opex forecast in our 2022 AMP update is to maintain current levels with a slight upward trend over the 10-year forecasting period due to increasing network size. The LiDAR data implies higher expenditure is needed – our forecasts will be revised as we collect and analyse the full LiDAR dataset.<sup>2</sup> Therefore, we expect that our optimal long-term strategy will require a short-term *increase* in expenditure above current levels, rather than a *reduction* as proposed in the draft decision.

We recognise that doing more work can increase costs to consumers. So we are introducing new, more efficient ways of clearing vegetation around our overhead lines and other electricity assets. You can find examples of the efficiencies we achieved in the 2022 disclosure year on our website.<sup>3</sup>

The LiDAR surveys have been a worthwhile project. We have previously published information on our LiDAR trail and LiDAR surveys on our website and in our annual delivery reports.<sup>4</sup> We are happy to provide interested stakeholders with more details.

### Our base year vegetation management opex is below the industry average

Lifting our vegetation management works to a sustainable and prudent level was one of the objectives of our CPP.<sup>5</sup> Our expectation was that this would bring our vegetation management opex more in line with the industry average.

While the industry average isn't a target, we consider it a helpful reference point in this context when considering whether expenditure is reasonable. For that reason, we have included some industry comparisons to check the impact of our CPP and whether our draft vegetation management opex allowance appears reasonable.

### Comparing our pre-CPP vegetation management opex to the industry

Figure 1 shows that our pre-CPP (2016-2018 average) vegetation management opex per km of overhead line (purple dot, \$282) was well below the industry average (green dot, \$392).

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<sup>2</sup> This increase in vegetation management opex will be included in our AMP23 forecast

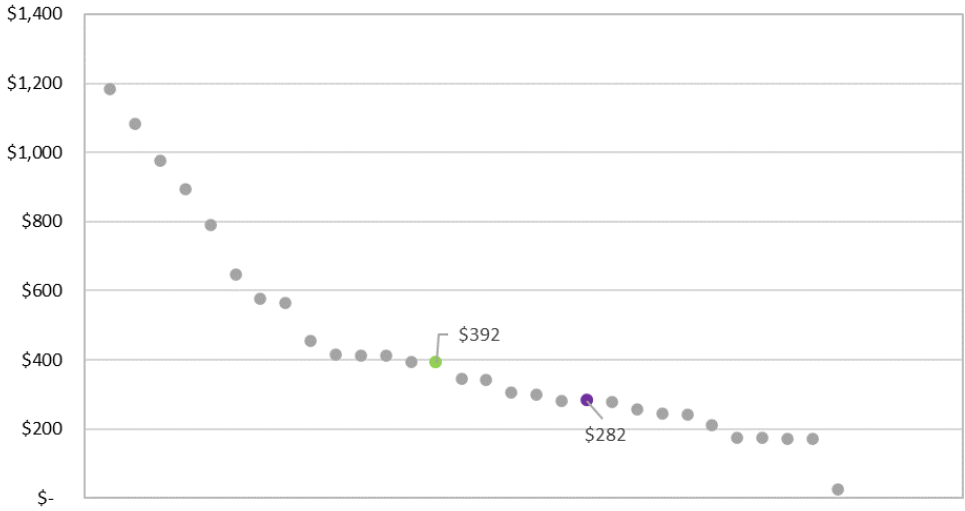
<sup>3</sup> <https://www.powerco.co.nz/what-we-do/our-projects/vegetation-management/achieving-efficiencies-in-the-way-we-manage-vegetation>

<sup>4</sup> Website links to LiDAR information : <https://www.powerco.co.nz/what-we-do/our-projects/pole-top-photography-and-lidar/pole-top-photography-and-lidar---summer-2020-21> and <https://www.powerco.co.nz/what-we-do/our-projects/pole-top-photography-and-lidar/lidar-trial>. Our Annual Delivery Reports can be found here: <https://www.powerco.co.nz/who-we-are/disclosures-and-submissions/electricity-disclosures>

<sup>5</sup> Page 272, *Powerco Electricity Asset Management Plan 2017 - Supporting our Customised Price-Quality path application*



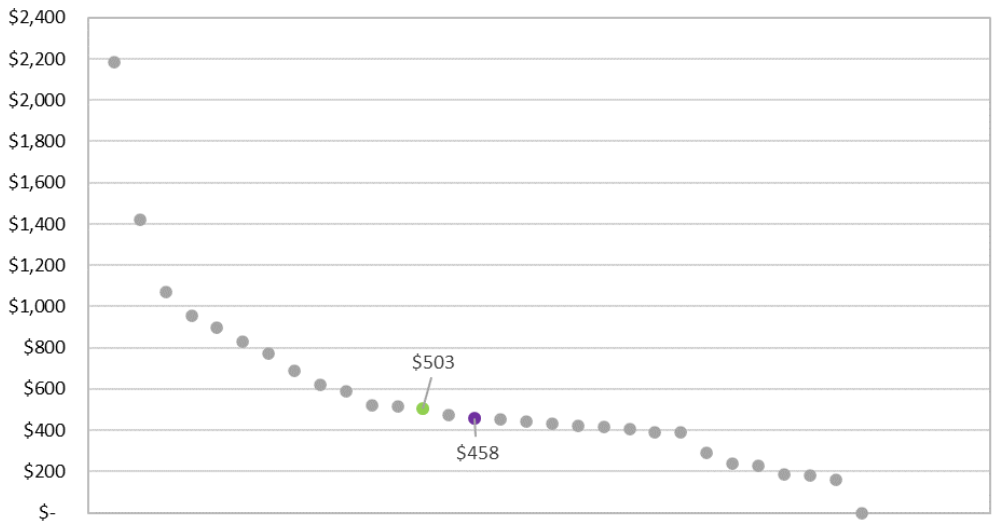
Figure 1 Comparison of Powerco’s pre-CPP vegetation management opex to other EDBs (DY16-DY18 average)



**Comparing our base-year (DY22) vegetation management opex to the industry**

Figure 2 suggests that our base-year vegetation management opex is reasonable. It shows that our vegetation management spend per km of overhead line (purple dot, \$458) is more in line with, but still below, the industry average (green dot, \$503).

Figure 2 Comparison of Powerco’s DY22 vegetation management opex to other EDBs.

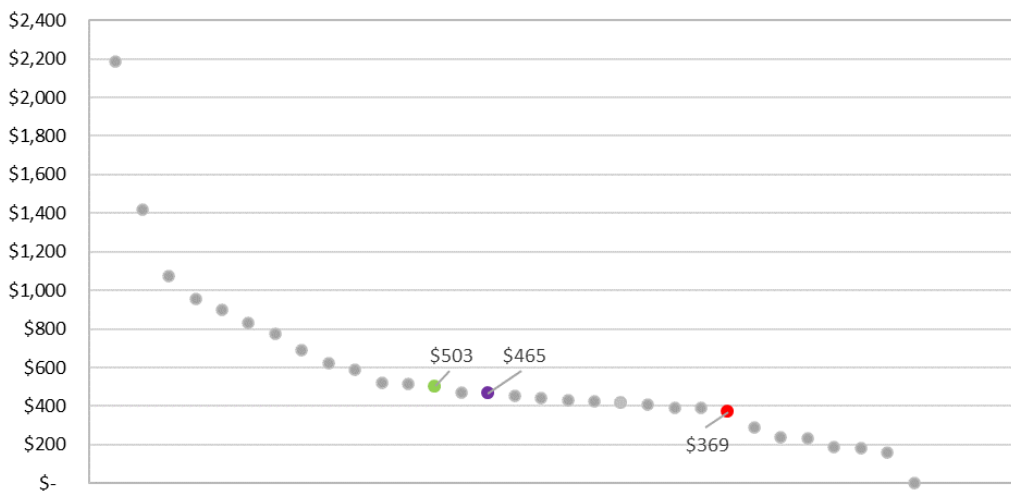


### Comparing our draft decision DY24 vegetation opex allowance to the industry

To make this comparison, we have calculated a proxy for Powerco’s draft DY24 vegetation management opex allowance by modifying the Commission opex projections model.<sup>6</sup>

Figure 3 suggests that our draft decision vegetation opex allowance could be unreasonably low. Our vegetation management allowance per km of overhead line (red dot, \$369) is well below the DY22 industry average (green dot, \$503). However, our vegetation management allowance appears reasonable if the negative step change isn't applied. Per km of overhead line the allowance without a negative step change (purple dot, \$465), is considerably closer to the DY22 industry average and our DY22 result (\$458 as shown in Figure 2).

Figure 3 Powerco's draft DY24 vegetation management opex allowance per km of overhead line compared to other EDBs DY22 results (all figures in 2022 dollars)



### Climate change

We're seeing the effects of climate change in the speed and type of vegetation growing in and around our network. Not only are slow-growing species growing much faster, and therefore needing attention more regularly, but we're also seeing species growing on our network that traditionally grow in other areas of Aotearoa.<sup>7</sup>

## 1.2 Draft adjustment for non-recurring systems operation and network support opex

The Commission's draft decision has reduced Powerco's nominal DY24-DY25 opex allowance by \$0.64m because it considered there should be a decrease in SONS opex FTE costs due to asset management, design, and service delivery improvement initiatives ending in DY23.

<sup>6</sup> The steps involved include replacing 2022 network opex in cell D33 of the inputs tab with Powerco’s DY22 vegetation management opex, and removing the other draft decision opex step changes

<sup>7</sup> <https://www.powerco.co.nz/what-we-do/our-projects/vegetation-management/achieving-efficiencies-in-the-way-we-manage-vegetation>

We disagree with the draft decision and corresponding adjustment to the base year opex. Below we outline information that shows why our base-year SONS opex is reasonable and why the Commission and stakeholders should have confidence that a negative step change is not required.

While our CPP proposal predicted a reduction in SONS costs post-CPP due to improvement initiatives being completed, we know the assumptions used for those forecasts are no longer relevant. Therefore, they shouldn't be used to determine opex allowances for 2024 and 2025. Instead, we believe using the most recent information is essential to deciding whether any step changes should be made to Powerco's opex allowance.

System Operations and Network Support (SONS) comprises our engineering staff and others who directly support electricity network operations. It also covers related network support expenses, including professional advice, engineering reviews, quality assurance, and network running costs.

Our SONS opex forecast in our 2022 AMP shows a slight increase from current levels for the DPP3 period. We expect upwards pressure on SONS opex over the coming years, resulting mainly from the following:

- Ongoing investment in developing our people and their capabilities to support more advanced asset management maturity
- Increased investment is required to support our elevated capex programme
- Continued investment is required to address the increased complexity and scale of solutions, including distributed generation and supporting customer decarbonisation and expansion

Any reduction in our opex allowance will impact our ability to deliver these required investments.

### **1.3 Draft adjustment for non-recurring corrective maintenance opex**

The Commission's draft decision reduced Powerco's nominal DY25 opex allowance by \$0.62m for non-recurring corrective maintenance work based on our CPP forecast and information requested in advance to the draft decision.

We disagree with the draft decision and corresponding adjustment to the base year opex. While our CPP Proposal predicted a reduction in corrective maintenance costs post-CPP, we know the assumptions used for those forecasts are no longer relevant. Therefore, they shouldn't be used to determine opex allowances for 2024 and 2025. Instead, we believe using the most recent information is essential to deciding whether any step changes should be made to Powerco's opex allowance.

Below we outline information that shows why our base-year corrective maintenance opex is reasonable and why the Commission and stakeholders should have confidence that a negative step change is not required.

### New corrective maintenance projects have emerged that require our attention

Consistent with best asset management practices, changing the focus of our work programmes is normal. For example, when we complete an improvement project, we immediately shift focus to another area requiring attention. In DY24 and DY25, we will be undertaking the following targeted corrective maintenance programmes that either require an increase in expenditure relative to the base-year or weren't active during the base-year:

- Our ground-mounted switchgear maintenance program is effective. However, our aging fleet shows signs of failure that we must address before they become a safety risk. We are implementing a targeted corrective maintenance program to deal with this issue.
- Our older substation building will continue to require additional work to improve their condition, as substandard conditions can be detrimental to the equipment inside. Our program that kicked off this year, specifically focusing on condition assessments by licensed experts, revealed a more significant problem than we had previously identified. We are implementing a targeted corrective maintenance program to deal with this issue.
- Our DC systems are aging faster than assumed in our current renewal plans. This issue, together with the equipment upgrades, is contributing to DC systems failures at substations. A targeted corrective maintenance program will be implemented to deal with this issue.

Shifting our focus to new corrective maintenance projects is reflected in our 2022 AMP. It shows a steady increase in our forecast corrective maintenance costs over the DY22 to DY25 period.

### We have reduced our defects risk, but we still have a backlog of defects to fix

Our corrective maintenance programme is mainly concerned with fixing defects. Before our CPP, the backlog of outstanding maintenance defects had been growing at an alarming rate. In response, we increased our corrective maintenance during the CPP period.

During the CPP, we have also been expanding and improving our assessment of network defects through more inspections, aerial pole-top photography, and LIDAR surveys. These initiatives give us a much better view of asset condition and enable us to prioritise our work with greater accuracy, which will, over time, result in fewer faults. However, the flip side of this is that the list of known defects in the short term becomes larger, despite our extra effort.<sup>8</sup>

For example, at the beginning of our CPP (DY19), we had 41,579 material asset defects in backlog. Despite remedying 76,928 defects during the CPP period (up to the end of DY22), we still had 35,762 material asset defects in backlog at the end of DY22.

Accordingly, we anticipate upwards pressure on operating expenses over coming years in response to the increasing discovery of asset defects. Any reduction in our opex allowance will impact our ability to address these known defects.

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<sup>8</sup> Whilst our defect backlog is still significant, prioritising the highest risk defects during the CPP period has significantly reduced our risk.



## 1.4 Treatment of costs to access half-hourly consumption data

Powerco is in the process of engaging with retailers to access half-hourly consumption data to support pricing and planning of our network.

In the DPP3 Decision<sup>9</sup> and Wellington Electricity DPP3 Decision<sup>10</sup> the Commission outlines the test for considering whether to accept opex step changes. We believe these costs (if they materialise) should be included in our cost base which is supported by them meeting the requirements set out by that test. An alternative approach could be to treat these costs as pass-through costs as we think they meet the definition in the input methodologies<sup>11</sup>. It would also mean they are excluded from IRIS considerations, so consumers benefit directly from the efforts of, and incentives on, data providers to minimise these direct costs.

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<sup>9</sup> Commerce Commission "Default price-quality paths for electricity distributors from 1 April 2020: Reasons paper" (27 November 2019), paragraph A35.

<sup>10</sup> Commerce Commission "Wellington Electricity Lines Limited's transition to the 2020- 2025 default price-quality path" (26 November 2020), paragraph 3.41.

<sup>11</sup> EDB Input Methodologies 3.1.2.

## Attachment 2 Capital expenditure

The draft decision includes adjustments to Powerco's capital expenditure on facilities and ICT based on analysis of our 2021 and 2022 Asset Management Plans. This section provides additional evidence to the Commission and interested stakeholders that explains the differences between these forecasts, so the adjustments are not required. We also provide information which supports a downward adjustment facilities capex.

### AMP22 non-network capex forecasts can be explained

The Commission's draft decision has used Powerco's 2021 AMP forecast capex amounts for DY2024 and DY2025, rather than the 2022 AMP update forecasts on the basis that they were not explained in the 2022 AMP [para 3.65]. This section explains why the 2022 AMP forecasts should be used for setting expenditure instead of the 2021 AMP forecast. It is our response to the invitation in the draft decision to provide more explanation and evidence [para 3.80.2]. The remainder of this section presents this information in a format tailored for a submission rather than a financial model – we can provide more detailed information to the Commission or interested parties if requested.

Powerco's 2022 AMP forecast of non-network expenditure reflects needs for DY2024 and DY2025. The 2022 AMP forecasts reflect facilities capex brought forward and updates to planned expenditure when compared to 2021 AMP. As a general rule, this applies to *all* of our forecasts – stakeholders should expect the most recent forecasts to reflect the best available information, including revised scope and cost estimates, whether they be higher or lower.

The draft decision includes adjustment to two areas of capex:

- Facilities (DY23, DY24 and DY25)
- ICT (DY24 and DY25)

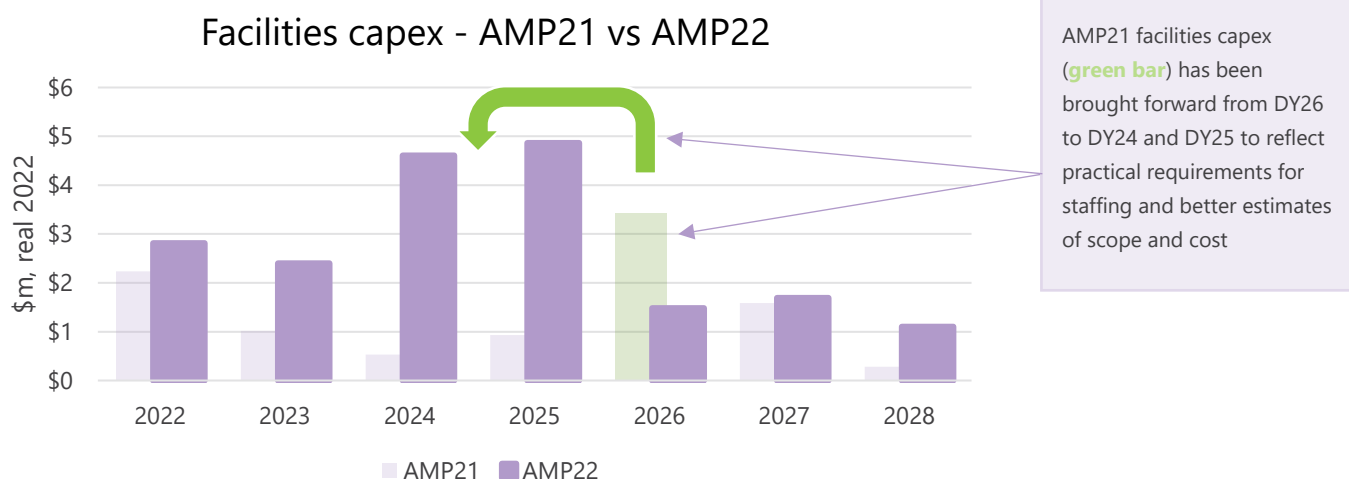
as explained in more detail below, (all numbers are in 2022 real dollars)

#### Facilities

Our facilities management programme aims to ensure our offices and depots:

- Are safe and secure for our employees and contractors.
- Are functional and fit for purpose.
- Can support future staff growth.
- Support improved productivity and efficiency.
- Are cost effective and efficient to operate.

One of the key drivers of facilities capex continues to be the upgrade of the Junction St facility to accommodate the continued growth at this office and ensure that the facilities can accommodate scalable operational needs<sup>12</sup>.



The table below provides a more detailed explanation of the components which changed from AMP21 to AMP22.

Draft decision	AMP21 forecast	AMP22 forecast	Explanation of differences
DY23: Use AMP21 forecast of facilities capex	\$1.0m	\$2.4m	<ul style="list-style-type: none"> <li>increases in the forecast spend on our Tauranga office expansion (+\$0.9m)</li> <li>continued development at our Junction Street offices (+\$0.4m).</li> <li>These increases reflect the progression of office upgrade plans<sup>13</sup></li> </ul>
DY24-25: Use AMP21 forecast of facilities capex	\$1.5m	\$9.5m	<ul style="list-style-type: none"> <li>Development of a depot and offices of \$8.5m to support business requirements. This partly reflects the timing change from the 2021 AMP where expenditure was included in DY26<sup>14</sup></li> <li><i>reductions</i> in various facilities areas -\$0.5m</li> </ul>

Powerco supports using the most recently available information for setting the allowances. New information on our facilities capex forecasts means a substantially lower value, compared to the 2022 AMP update, should be used for setting allowances over the DY24 and DY25 period. The impact is that \$4.3m of forecast facilities capex

<sup>12</sup> Page 335, Powerco Electricity Asset Management Plan 2021

<sup>13</sup> Page 26, Powerco Electricity Asset Management Plan 2022

<sup>14</sup> Page 335/6, Powerco Electricity Asset Management Plan 2021

over the DPP3 period can be removed due to the depot portion of forecast expenditure no longer being eligible as a RAB asset (it will be leased).

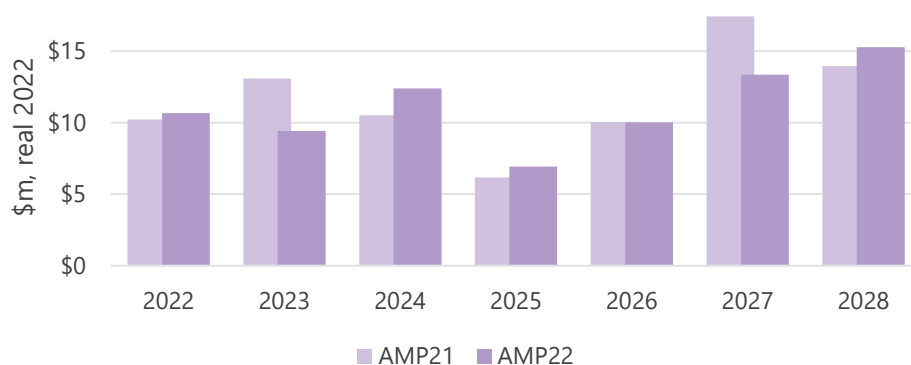
**Summary:** Powerco 2022 AMP update forecasts should be used for setting DY24/25 allowances with a downward adjustment for new information regarding facilities capex categorisation.

### ICT capex

Non-network assets include assets that support the operation of the electricity business, such as information and communications technology (ICT) and asset management data. Investment in ICT and data quality is forecast to grow, driven by the need to reduce technology risk and strengthen our core business operations through the delivery of foundational business practices and technology.

The 2022 AMP forecasts reflect our best estimate of Powerco’s ICT requirements. ICT capex can vary from year on year as seen in comparison below of our 2021 and 2022 AMP. Timing of projects can change at short notice depending on needs of the business and how we efficiently manage priorities across the business.

ICT capex - AMP21 vs AMP22



Draft decision	AMP21 forecast	AMP22 forecast	Explanation of differences
DY24-25: Use AMP21 forecast of ICT capex	\$16.7m	\$19.3m (+\$2.6m)	<ul style="list-style-type: none"> <li>additional \$2.5m in DY24 for Project BIRD (an overhaul of our business intelligence, reporting and data management systems)</li> <li>increased Advanced Distribution Management System<sup>15</sup> (ADMS) expenditure of \$1.7m (from \$1.8m to \$3.5m) included in DY25</li> <li>reductions in other ICT areas -\$1.6m</li> </ul>

<sup>15</sup> Page 332, Powerco Electricity Asset Management Plan 2021

**Summary:** Powerco 2022 AMP update forecasts should be used for setting DY24/25 allowances.

#### Proposed non-network capex values for setting allowances

On the basis that the above explanations are sufficient to support AMP22 forecasts being used, Table 1 shows the forecast values we recommend are used for the Commission’s modelling. These reflect a decrease in capex to reflect the recategorization of forecast facilities and SaaS capex.

Table 1: Summary of non-network capital expenditure inputs for DY24 and DY25 capex assessment

Non-network capex	DY24	DY25
<b>2022 AMP Update</b>	<b>18,262</b>	<b>13,063</b>
Less facilities capex adjustment	(2,140)	(2,140)
Less SaaS adjustments	(630)	(630)
<b>Proposed values<sup>16</sup></b>	<b>15,492</b>	<b>10,293</b>

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<sup>16</sup> These values don’t include any cost of financing adjustments made within the workings of the capex projections model.

## Attachment 3 Summary comments on other settings

Powerco's submission on the issues paper addressed many of the points covered by the Commission's draft decision. The table below lists these, adding additional comment where relevant.

Draft decision	Powerco comment
Set revenues using a BBAR approach	<b>Support</b> Commission's approach to use a BBAR model, base-step-trend model for opex. Our submission on the issues paper contained our rationale for this and we have nothing further to add.
Use DPP3 models with updated inputs	<b>Support</b> the Commission's approach to apply and update the DPP3 inputs to forecasts so that the robust, recent, and up to date information is used <sup>17</sup> . Our submission on the issues paper contained evidence on this topic and we have nothing further to add.  As with the gas DPP and electricity DPP, we anticipate (and recommend) that the most recent forecasts be used in the final decision where available eg cost inflators.
Historical capex reference period	<b>Support</b> the Commission's approach to use a five-year reference period <sup>18</sup> . Our submission on the issues paper contained evidence on this topic and we have nothing further to add.
Treatment of IRIS (3.90-3.91)	<b>Support</b> the retention factor being the same as other EDBs on DPP3 (23.5% for opex and capex).
Correcting the 'sign' error in the pass-through balance	The draft decision did not address this point made in our submission on the issues paper. Powerco's 2018 CPP determination expressed the pass-through balance calculation incorrectly, which flowed through to lower revenue.
Modelling methodology (3.93-3.97)	<i>Modelling inputs.</i> The Commission has used Powerco's most recent (year ending March 2022) information disclosure as input to the final modelling suite. These DY22 values include \$4.6m of depreciation that was excluded from DY21 and included in DY22 as a correction. Although corrections of this nature are not unusual, the impact is that opening RAB and total depreciation are higher (by \$4.6m) than they would have been had the error not occurred. We estimate the impact of using adjusted (lower) values is to reduce MAR by \$10.6m over DY24/25 in present value terms. Consistent with our desire to use the best and most relevant information available, the final decision can be updated to incorporate this.

<sup>17</sup> For example, using DY22 as the base year, and updating the network annual scale growth factor to include updated household growth assumptions.

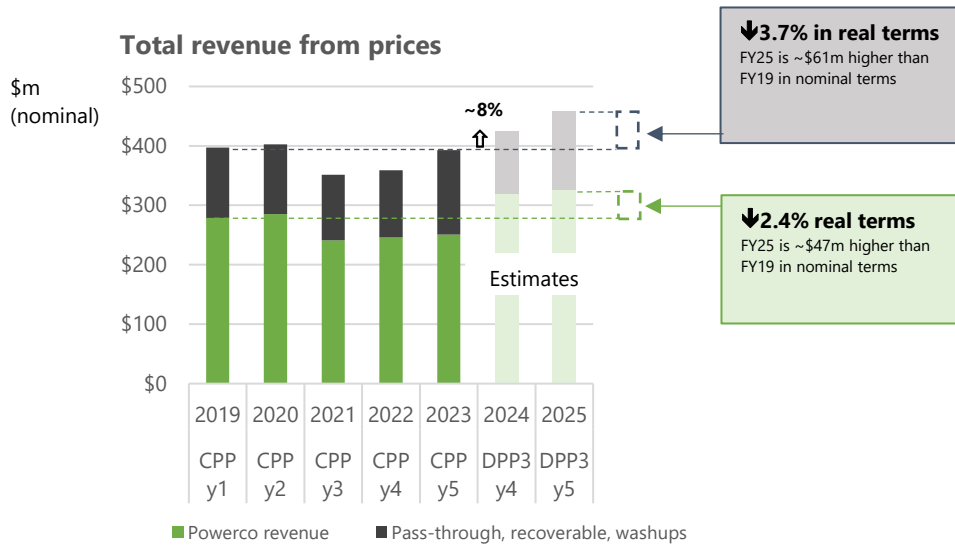
<sup>18</sup> Note that the published modelling suite and results assume a ten-year reference period. These need to be updated to reflect the final decision.

Smoothing the price path not required (3.92.3.98-3.104)

**Agree.** We do not believe smoothing is required.

Powerco’s modelling of the draft decision suggests an average change to ‘revenues from prices’ of around 8% in the year ending March 2024. This revenue total includes revenue washups, transmission costs, and other pass-through costs. This is below the 10% limit set in the DPP determination, suggesting no additional smoothing is required.

The chart below illustrates actual and estimated revenue values to March 2025 (when the DPP3 period ends) using the draft decision and our current estimates of future costs and cost drivers.



In real terms, we expect

- average ‘revenue from prices’ in 2025 is **~3.7% lower in real terms** compared to 2019 (grey box).
- Powerco’s revenue is **~2.4% lower in real terms** than 2019 in real terms (green box).

The 8% change from 2023 to 2024 is shown in the chart as moving from \$393m to \$425m. It differs from the 5.6% referenced in the draft decision (that referred to Powerco’s 2023 MAR set in 2019, rather than the value when reset in 2020 to reflect the reduction in WACC applying to all EDBs). As can be seen, Powerco’s MAR (green bars) has varied considerably over the CPP period, with DY24 MAR (nominal) being 15% higher than DY19 and 27% higher than DY23.

We estimate that applying all the changes proposed in our submission will result in Powerco’s DY24 MAR at a similar level to the draft decision.