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Powerco Limited's transition to the 2020-2025 default price-quality path

Reasons Paper

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Associated Documents

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20 May 2020	ISBN 978-1-869458-15-7	Electricity Distribution Services Input Methodologies Determination 2012 – Consolidated as of 20 May 2020
27 November 2019	ISBN 978-1-869457-68-6	Default price-quality paths for electricity distributors from 1 April 2020 – Final decision reasons paper
20 May 2020	ISBN 978-1-869458-16-4	Electricity Distribution Services Default Price-Quality Path Determination 2020 — Consolidated as of 20 May 2020
7 October 2016	ISBN 978-1-869455-33-0	Orion New Zealand's transition to the 2015-2020 default price-quality path – Final Report
7 October 2016	[2016] NZCC 19	Electricity Distribution Services Default Price-Quality Path Amendment Determination 2016
28 March 2018	ISBN 978-1-869456-33-7	Wellington Electricity's customised price-quality path — Final decision
20 May 2020	ISBN 978-1-869458-17-1	Wellington Electricity Lines Limited Electricity Distribution Customised Price-Quality Path Determination 2018 — Consolidated as of 20 May 2020
28 March 2018	ISBN 978-1-869456-32-0	Powerco's customised price-quality path — Final decision
26 May 2022	ISBN 978-1-99-101208-1	Powerco's transition to the 2020-2025 default price-quality path – Process and Issues paper
18 August 2022	ISBN 978-1-99-101228-9	Powerco's transition to the 2020-2025 DPP – Draft Determination – 18 August 2022
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30 November 2022	ISBN 978-1-99-101249-4	Powerco's transition to the 2020-2025 DPP – Final Determination – 30 November 2022

Contents

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Executive Summary

Purpose of this Reasons Paper

X.1 This reasons paper explains our decision to amend the 2020-2025 default price-quality path (**DPP**) to provide for Powerco Limited's (**Powerco's**) transition from its 2018-2023 customised price-quality path (Powerco **CPP**) to the 2020-2025 DPP (**DPP3**).

X.2 Powerco will move from its CPP to DPP3 on 1 April 2023. This means Powerco will be subject to DPP3 for only the last two years of the five-year regulatory period. DPP3 is the default price path generally applicable to EDBs that do not have a customised price path. DPP3 currently applies to 14 electricity distribution businesses (**EDBs**).[1]

X.3 The focus of our decision is on the starting prices for Powerco when it moves onto DPP3. Under s 53X(2) of the Commerce Act, we have a choice of rolling over the prices that applied at the end of Powerco's CPP or setting different starting prices.

Decision on starting prices

X.4 Our decision is to:

X.4.1 not allow prices to roll-over under s 53X of the Act, but instead to notify Powerco that different prices will apply;

X.4.2 use a Building Blocks Allowable Revenue (**BBAR**) approach to set starting prices for Powerco under DPP3.

X.4.3 set Powerco's 2024 forecast net allowable revenue (**FNAR**) at $321.696 million. This is a 28.22% nominal increase from the 2023 FNAR set as part of the Powerco CPP.

X.5 This significant increase in Powerco's FNAR does not include pass-through and recoverable costs, which are part of gross allowable revenue. Gross allowable revenue more accurately represents the total revenue Powerco can recover from its customers. However, it is more difficult to estimate.

X.6 The estimated gross allowable revenue change is a 9.51% nominal increase. We discuss this in more detail in paragraphs 3.3, 3.185 to 3.186, and 3.203 to 3.204 below.

X.7 The significant increase in Powerco's FNAR had two main drivers (discussed in more detail from paragraph 3.2, and in paragraphs 3.200 to 3.201 below):

X.7.1 The growth in Powerco's regulatory asset base (**RAB**) following a period of heightened investment during its CPP; and

[1] Currently only two of the 16 non-exempt EDBs have customised price paths. The two EDBs on a customised price path are Powerco and Aurora Energy.

X.7.2 the impact of a decrease in the Weighted Average Cost of Capital (**WACC**) in our 2020 WACC change model, which we implemented two years into Powerco's five-year CPP.

X.8 In making our decision we are exercising our discretion under s 53X, while being guided by s 52A and s 53K. In particular, we consider that our decision:

X.8.1 maintains Powerco's incentives to innovate and invest (s 52A(1)(a));

X.8.2 limits Powerco's ability to extract excessive profits (s 52A(1)(d)); and

X.8.3 reflects a relatively low-cost approach to the transition (s 53K).

X.9 We also consider that our decision is consistent with s 53P because it is based on Powerco's current and projected profitability, does not seek to recover excess profits from the prior period, and is not derived from comparative benchmarking.

X.10 The BBAR approach provides a way to take account of Powerco's current and projected profitability to set starting prices. The approach is largely similar to that used for each of the other EDBs subject to DPP3 but uses information from Powerco's latest information disclosures.

X.11 Table X1 below set out the source data we have used for our decision.

Table X1 – Source data for determining allowable revenue

Data	Source
Real forecast capex	Powerco 2022 AMP Update, 2021 AMP
Base-year opex	Powerco 2022 ID, schedule 6b (audited)
Opex trend – household growth	StatsNZ, Family and household projections: 2018(base)–2043, 15 December 2021
Opex trend – line length growth	Powerco ID 2015-2021, schedule 9c Powerco ID 2022, schedule 9c (audited)
Opex step changes – non-recurring costs	Powerco CPP application Commission analysis
Opex escalators (LCI, PPI) **Capex escalator (CGPI)**	NZIER forecasts, 12 September 2022
Financial model base year data	Powerco 2022 ID (audited)
All other values	2019 DPP3 financial model, Powerco information provided in response to Commission request

X.12 This decision uses audited Information Disclosure (**ID**) data for the year ended 31 March 2022. Our draft decision used early unaudited ID data supplied to us by Powerco per our request.

Chapter 1 Introduction

Purpose of this Reasons Paper

1.1. This reasons paper explains our decision for Powerco's transition from its 2018-2023 CPP to DPP3.

Powerco's CPP and the DPP3 currently applying to 14 electricity distributors

1.2. Powerco applied for a CPP for major network investment to address ageing assets, to address an increase in network faults, and to keep up with population and economic growth in the region.[2]

1.3. On 28 March 2018, we determined a CPP to apply to Powerco between 1 April 2018 and 31 March 2023.[3]

1.4. Powerco has entered the final year of its five-year CPP. One requirement of its CPP determination was for it to prepare and disclose an annual delivery report. This included agreed measures that demonstrate the progress of its network upgrade and how capital and operating expenditure (**capex** and **opex**) are tracking with allowable amounts. Powerco's reports to date show that actual capex has been above its allowable capex, while opex has been below its allowable opex.[4]

1.5. On 27 November 2019, we set the DPP for the five-year period from 1 April 2020 to 31 March 2025 (i.e., DPP3).[5] The DPP3 determination specified the quality standards that would apply to Powerco when it transitioned to the DPP on 1 April 2023, but did not determine its starting prices.[6] In the associated reasons paper we noted our intention to determine Powerco's starting prices once more up-to-date information became available.[7]

1.6. Powerco will move from its CPP to the DPP3 on 1 April 2023. Once it moves, we expect Powerco will be subject to the DPP3 for the remaining two years of the regulatory period unless it applies for another CPP.

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2 See: comcom.govt.nz/__data/assets/pdf_file/0023/61592/CPP-application-Powerco-CPP-12-June-2017.pdf

3 Available at: comcom.govt.nz/__data/assets/pdf_file/0028/78715/Final-decision-on-Powercos-2018-2023-customised-price-quality-path-28-March-2018.PDF

4 Latest report (for year ended March 2021) available at: powerco.co.nz/news/media/annual-delivery-report-2021-now-available

5 Available at: comcom.govt.nz/regulated-industries/electricity-lines/projects/2020-2025-default-price-quality-path?target=documents&root=91370

6 For more detail on the treatment of Powerco in the DPP3 determination refer to Attachment I of: comcom.govt.nz/__data/assets/pdf_file/0020/191810/Default-price-quality-paths-for-electricity-distribution-businesses-from-1-April-2020-Final-decision-Reasons-paper-27-November-2019.PDF

7 Paragraph I15, ibid

In making our decision we considered submissions received

1.7. On 18 August 2022 we published our draft amendment determination and draft reasons paper for Powerco's transition from its CPP to DPP3. We received two submissions by 15 September and two cross-submissions by 29 September.

1.8. We would like to thank those who provided the submissions and cross-submissions that helped inform our decision. Submissions were received from Powerco and Aurora and cross-submissions from Powerco and the Electricity Networks Association (ENA).

Structure of this paper

1.9. In this paper, we explain:

1.9.1. the legal framework relevant to Powerco's transition to the DPP3 (Chapter 2);

1.9.2. our decision on Powerco's starting prices when it transitions to DPP3 (Chapter 3); and

1.9.3. how we propose to implement Powerco's transition to the DPP3 (Chapter 4).

Chapter 2 Legal Framework

Purpose of this chapter

2.1 This chapter sets out the legal framework relevant to our decision for Powerco's transition from its CPP to DPP3.

Section 52A – Purpose of Part 4

2.2 Part 4 of the Act provides for the regulation of the price and quality of goods or services in markets where there is little or no competition, and little or no likelihood of a substantial increase in competition.

2.3 Section 52A sets out the purpose of Part 4 and states:

> **52A Purpose of Part**
>
> (1) The purpose of this Part is to promote the long-term benefit of consumers in markets referred to in section 52 by promoting outcomes that are consistent with outcomes produced in competitive markets such that suppliers of regulated goods or services—
>
> (a) have incentives to innovate and to invest, including in replacement, upgraded, and new assets; and
>
> (b) have incentives to improve efficiency and provide services at a quality that reflects consumer demands; and
>
> (c) share with consumers the benefits of efficiency gains in the supply of the regulated goods or services, including through lower prices; and
>
> (d) are limited in their ability to extract excessive profits.

2.4 In deciding whether to roll over the prices that applied at the end of the CPP, or to set different starting prices, the primary consideration is which option will better promote the objectives in the s 52A purpose.

Section 53K – Purpose of default/customised price-quality regulation

2.5 Section 53K establishes that "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."

2.6 This purpose emphasises the desirability of keeping the cost and complexity of a transition low, including in our approach to setting starting prices.

Section 53X – What happens when a customised price-quality path ends

2.7 Section 53X(2) of the Act gives the Commission two options for determining prices for the CPP-to-DPP transition. Section 53X states:

53X What happens when customised price-quality path ends

(1) When the customised price-quality path of a supplier of goods or services ends, the supplier is subject to the default price-quality path that is generally applicable to other suppliers of those goods or services.

(2) The starting prices that apply at the beginning of the default price-quality path are those that applied at the end of the customised price-quality path unless, at least 4 months before the end of the customised price-quality path, the Commission advises the supplier that different starting prices must apply.

(3) The supplier remains subject to the default price-quality path until—

(a) the end of the period for which it applies to other suppliers; or

(b) a new customised price-quality path begins to apply to the supplier.

(4) To avoid doubt, a supplier who is or was subject to a customised price-quality path may apply in accordance with section 53Q for another customised price-quality path

2.8 Section 53X(1) and 53X(2) contain the most relevant considerations and are explored in more detail below.

Section 53X(1) – Making the supplier subject to the DPP

2.9 Section 53X(1) establishes that when Powerco's CPP ends it will become subject to the DPP that is "generally applicable" to the other EDBs. In this case, the generally applicable DPP is the DPP3 determination.[8]

2.10 Under clause 3.3 of the DPP3 determination, the determination does not apply to Powerco until the expiration of Powerco's CPP determination. This means that, when Powerco's CPP determination expires on 31 March 2023, the EDB DPP3 determination will apply to Powerco from 1 April 2023 onwards.

2.11 However, some amendments to the DPP3 determination may be required to ensure the DPP that is "generally applicable" to the other EDBs is workable for Powerco.[9] Without these amendments, the mechanics of the DPP determination may not effectively regulate Powerco's revenue.

Section 53X(2) – Setting the transitioning supplier's starting prices

2.12 Section 53X(2) establishes a default position whereby Powerco's CPP prices will be applicable when it transitions to DPP3.[10] However, it also gives the Commission the discretion to apply alternative starting prices provided we give Powerco notice of this at least four months prior to their CPP ending.

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8 A copy of DPP3 can be found here: comcom.govt.nz/__data/assets/pdf_file/0029/191972/2019-NZCC-21-Electricity-distribution-services-default-price-quality-path-determination-2020-27-November-2019.pdf

9 Any amendments to a DPP determination must be made under s 52Q of the Commerce Act, and we note that s 52Q(1) requires the Commission to consult with interested parties on any material amendments to the DPP determination.

10 We note that s 53X(2) deals with the starting prices that apply when a CPP ends and the supplier transitions to the DPP, while s 53P(11) deals with the starting prices (and rates of change and quality standards) that apply when a DPP ends and the Commission has not reset the DPP for the next regulatory

2.13 We have previously considered how we should set a transitioning supplier's starting prices under s 53X(2). We did this when Orion New Zealand Limited transitioned from its CPP to the EDB DPP for the last year of the 2015-2020 regulatory period,[11] and when Wellington Electricity Limited transitioned from its CPP to the EDB DPP one year into the 2020-2025 regulatory period.[12]

2.14 Our discretion in setting starting prices under s 53X(2) involves:

2.14.1 choosing between rolling over the prices that applied at the end of the CPP or setting different starting prices; and

2.14.2 if we choose to set different starting prices, deciding on the prices that apply.

2.15 In exercising our discretion under s 53X(2), we must do so in the manner we believe best meets the purpose of Part 4 of the Commerce Act (as set out in s 52A), and the purpose of DPP/CPP regulation (as set out in s 53K) which emphasises the desirability of keeping the cost and complexity of the transition low, including our approach to setting starting prices.

2.16 However, the s 52A purpose provides the primary objectives and considerations that we must give weight to when exercising our judgement.

Section 53P – Resetting starting prices and rates of change

2.17 If we decide to set different starting prices, s 53P (which sets out the requirements for resetting the DPP at the end of a regulatory period) is a relevant consideration. Section 53P requires that starting prices at the start of a DPP:

2.17.1 be either the prices that applied at the end of the preceding regulatory period (s 53P(3)(a)), or based on the current and projected profitability of the supplier (if prices are being reset, s 53P(3)(b));

2.17.2 must not seek to recover any excessive profits made during any earlier period (53P(4)); and

2.17.3 must not be derived from comparative benchmarking (53P(10)).

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period. Section 53P(11) has the effect of extending DPP starting prices if the Commission doesn't reset it when a DPP ends, while s 53X(2) establishes that the CPP starting prices will roll over at the end of a CPP, unless the Commission advises differently before the end of that CPP. The relevance of s 53P is discussed in further detail in paragraphs 2.17 to 2.20.

11 Available at: comcom.govt.nz/__data/assets/pdf_file/0021/63255/Orions-transition-to-the-2015-2020-DPP-Final-report-7-October-2016.PDF

12 Available at: comcom.govt.nz/__data/assets/pdf_file/0034/228886/Wellington-ElectricityE28099s-transition-to-the-2020-2025-DPP-final-decision-Reasons-paper-26-November-2020.pdf

2.18 We have some flexibility in how we set prices based on the current and projected profitability of the supplier. In particular, we are not required to undertake a full 'building blocks' analysis. Nor are we required to accommodate all of a supplier's specific circumstances, given the low-cost nature of DPP regulation. See our commentary on s 53K above which highlights the desirability of keeping the cost and complexity of transitions low.

2.19 Our view is that it is appropriate for us to apply the s 53P restrictions on setting starting prices when making decisions under s 53X. This is unless particular circumstances lead us to consider that this would be inconsistent with s 52A or s 53K.

2.20 Price shocks are also a relevant consideration we refer to later in this paper, and we note that s 53P(8)(a) states:

> (8) The Commission may set alternative rates of change for a particular supplier—
>
> (a) as an alternative, in whole or in part, to the starting prices set under subsection (3)(b) if, in the Commission's opinion, this is necessary or desirable to minimise any undue financial hardship to the supplier or to minimise price shock to consumers.

Section 52Q

2.21 Any amendments to the DPP determination must be made under s 52Q of the Act. Section 52Q(1) requires the Commission to consult with interested parties on any material amendments to the DPP determination.

2.22 We consulted with interested parties through inviting submissions on our draft DPP3 amendment determination and draft reasons paper for Powerco's transition from its CPP to DPP3 and considered those submissions when reaching our final decisions.

Chapter 3 Our decision

Purpose of this chapter

3.1 This chapter explains our decision on Powerco's DPP starting prices as it moves to DPP3. Specifically, it explains:

3.1.1 how our decision aligns with the Act and the legal framework set out in Chapter 2;

3.1.2 our decision not to allow prices to roll-over under s 53X(2) of the Act, but instead to set Powerco's starting prices based on a BBAR approach;

3.1.3 how we decided to forecast Powerco's opex using a base-step-trend model;

3.1.4 how we decided to assess Software-as-a-Service (**SaaS**) expenditure being accounted for, once audited actual information for the year ended 31 March 2022 from ID became available;

3.1.5 how we decided to forecast Powerco's capex allowance largely based on its 2022 AMP Update, subject to a top-down assessment with certain modifications;

3.1.6 our decision to use the most recently available inflation forecasts with respect to opex and capex cost escalators;

3.1.7 how the Incremental Rolling Incentive Scheme (**IRIS**) mechanism will apply;

3.1.8 our decision not to smooth Powerco's price path; and

3.1.9 details of our methodology for how the existing building blocks models have been used to calculate Powerco's starting prices.

The increase in Powerco's allowable revenue following the end of its CPP

3.2 We have set Powerco's 2024 FNAR at $321.696 million. This is a 28.22% nominal increase from the 2023 FNAR set as part of the 2020 WACC reset. We discuss the drivers behind this significant increase here and in more detail in paragraphs 3.200 to 3.201. These drivers are:

3.2.1 the growth in Powerco's RAB following a period of heightened investment during its CPP; and

3.2.2 the impact of a decrease in the WACC in our 2020 WACC change model, which we implemented two years into Powerco's five-year CPP.

3.3 This significant increase in Powerco's FNAR does not include pass-through and recoverable costs, which are part of gross allowable revenue. Gross allowable revenue is the total cost of distribution services that gets passed on to customers and impacts customers' electricity bills. We have not estimated the value of pass-through and recoverable costs, and have used Powerco's estimates for these costs to estimate gross allowable revenue.

3.4 Our approval in 2018 of Powerco's CPP proposal recognised Powerco had a substantial program of capital work, and we expected that after its CPP ended (on 31 March 2023) Powerco's growth in its RAB would lead to significant price increases:

> We noted that this [price] impact would largely result from the fact that the opening RAB for the subsequent pricing period will include all of the commissioned assets from the CPP period, whereas the opening RAB of the CPP period is lower and the RAB only gradually increases while new assets are being commissioned. Consequently, the average RAB in the subsequent pricing period could be considerably higher than in the CPP period.
>
> and
>
> In particular, the extent of the price increase in the subsequent pricing period would depend on Powerco's actual capex during the CPP period as well as the WACC rate at that time and the expenditure forecasts used when resetting prices. None of these are known or easy to forecast at this stage and could be significantly different from the assumptions we used in the preliminary analysis we did for the Issues Paper.[13]

3.5 Now that there are fewer uncertainties before Powerco's CPP ends, it is clearer to see what the effects are of the growth in Powerco's RAB, opex and capex and what an appropriate Maximum Allowable Revenue (**MAR**) is to satisfy the purposes of the Act.[14]

3.6 We had proposed smoothing the price path during the CPP due to the long-term pricing impact:

> We asked… whether we should address this long-term pricing impact in the CPP period by adjusting the MAR series (through the X-factor) such that any price increases would be minimised from the CPP period to the subsequent pricing period. As an alternative to this potential solution, we sought feedback on whether we should leave the MAR series of the CPP period unchanged with a view to considering in the subsequent pricing period whether there is a price increase that should be minimised (through the X-factor) for that subsequent period.[15]

3.7 Feedback provided was mixed on this proposal. Some submissions said price increases should be deferred until closer to the time the CPP ended, while others focused on the transparency of the increase. As such, we did not implement our idea to smooth the path of Powerco's CPP MAR:

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13 Paragraphs 516 and 520, see: comcom.govt.nz/__data/assets/pdf_file/0028/78715/Final-decision-on-Powercos-2018-2023-customised-price-quality-path-28-March-2018.PDF

14 MAR is the forecast value from the financial model. FNAR is the amount specified in the determination, and is updated each year for changes in inflation. In the first year of the regulatory period – or after a transition – these values are the same.

15 Paragraph 517, see: comcom.govt.nz/__data/assets/pdf_file/0028/78715/Final-decision-on-Powercos-2018-2023-customised-price-quality-path-28-March-2018.PDF

Given the views provided in submissions, especially those from customers or customer groups, do not clearly express a preference that we should aim to minimise these MAR increases, we have not adjusted the MAR series to minimise future price increases.[16]

How our decision promotes the Part 4 and CPP/DPP purposes

3.8 We consider that our decision:

3.8.1 maintains Powerco's incentives to innovate and invest (s 52A(1)(a));

3.8.2 limits Powerco's ability to extract excessive profits (s 52A(1)(d));

3.8.3 reflects a relatively low-cost approach to the transition (s 53K); and

3.8.4 is consistent with the requirements of s 53P.

Maintaining Powerco's incentives to innovate and invest

3.9 Our decision uses the BBAR approach and updates the DPP3 models with more recent information (for example from Powerco's 2022 AMP Update and audited 2022 ID schedules) around recurring and CPP-specific (i.e. non-recurring) expenditure from Powerco. This allows us to better match DPP expenditure allowances with projected expenditure requirements. We consider that appropriate scrutiny of costs helps maintain Powerco's incentives to innovate and invest.

Limiting Powerco's ability to extract excessive profits

3.10 Our decision to use a BBAR approach takes account of Powerco's current costs and projections of expected costs. This takes into account Powerco's more recent actual spending on opex (based on its audited 2022 ID) and most recent forecasts of capex (for the 2022 AMP Update) compared with its allowable opex and capex during the CPP period. In particular, its actual opex has been consistently lower than its allowable opex during its CPP. This approach best promotes the s 52A outcome of limiting a supplier's ability to extract excessive profits.

A relatively low-cost approach to Powerco's transition

3.11 Our decision is a relatively low-cost way of managing Powerco's transition to the final two years of DPP3. We have made use of existing models, and available information, and the level of scrutiny we have applied is proportionate to both the levels of expenditure involved, and the period of time remaining on the DPP. This has allowed us to keep the keep the cost and complexity of the transition low in line with the purpose of s 53K (see paragraphs 2.5 to 2.6).

[16] Paragraph 518, ibid

3.12 We consider a roll-over approach would have been higher-cost to develop than applying established BBAR models. A s 53X(2) roll-over has not been carried out before. This would require developing a method of making the roll-over consistent with the IRIS mechanism. The IRIS mechanism needs a consistent 'forecast opex' and 'forecast aggregate value of commissioned assets' to be determined, potentially requiring significant resources and extensive consultation.[17]

3.13 Given that Powerco will be subject to the DPP3 for two years, we consider the benefits of adopting a BBAR approach to be justified.

Our decision is consistent with s 53P

3.14 We have sought to remain consistent with s 53P when determining starting prices using a BBAR approach. It requires that starting prices be based on the current and projected profitability of the supplier, must not seek to recover any excessive profits made during any earlier period, and must not be derived from comparative benchmarking.

3.15 We consider that we have been consistent with s 53P because we have followed the DPP3 processes in all aspects in which they relate to s 53P.

Setting Powerco's starting prices based on a BBAR approach

3.16 As noted in paragraph 2.7, we can choose between rolling over the prices that applied at the end of the CPP or setting different starting prices.

3.17 Our decision is to set different starting prices rather than rolling over the CPP prices, and to base those different starting prices on a BBAR approach. The BBAR approach was used to set the starting prices of the other EDBs subject to the DPP3. In applying the BBAR approach for Powerco, we have used more recent data, where appropriate, than was available when we set DPP3.

3.18 We consider that our decision best meets the Part 4 purpose as set out in s 52A, because it maintains Powerco's incentives to innovate and invest and limits the ability to extract excessive profits. We also consider the decision meets the purpose of price-quality regulation as set out in the s 53K purpose, because it is a relatively low-cost approach to the DPP transition.

3.19 In its submission on our process and issues paper, Powerco commented that a BBAR approach was preferable because:

> It transparently links costs and revenues, is relatively low cost, and sets the right incentives.
>
> …

[17] Orion's starting price, when it moved from a CPP to a DPP, was determined as a different starting price under s 53X(2). Orion moved from its CPP in the final year of a DPP regulatory period and IRIS rules did not apply to Orion for that regulatory period.

> A BBAR approach is appropriate for setting revenues as it aligns revenues with costs, provides Powerco an expectation of a normal return after accounting for efficient operating costs, incentivises cost savings being shared between us and customers, and can transparently account for the specific circumstances of an EDB. A roll-over approach does not deliver these as noted in the [Process and Issues] Paper (para 55, 58, 63) and there are peculiarities associated with Powerco's CPP that make the rollover approach more nuanced than it may appear.[18]

What submissions said on our draft decision on a BBAR approach

3.20 There were no further submissions on our draft decision to use a BBAR approach. Our reasoning for setting Powerco's revenue using a BBAR approach is already explained above.

Our decision on setting Powerco's opex

3.21 This section sets out our approach to forecasting Powerco's opex. It covers:

3.21.1 our high-level approach and the resulting opex allowance;

3.21.2 our decision on the base-year;

3.21.3 our decisions on step-changes; and

3.21.4 our decisions on trend factors.

Our modelling approach to operating expenditure

3.22 We have decided to set Powerco's opex allowance using a base-step-trend model, consistent with the approach taken for other EDBs subject to DPP3, but modified for the most up-to-date information, and to account for non-recurring expenditure during the CPP period.

3.23 As a result of this approach, we have decided to set an opex allowance of $119.639 million in 2024 and $125.654 million in 2025. The details of this decision are set out in Table 1 below.

Table 1: Network and non-network opex, 2024-2025 ($000s, nominal)

Opex Allowances	DY24 ($000)	DY25 ($000)
Network opex	56,866	59,327
Non-network opex	62,773	66,327
Total	**119,639**	**125,654**

3.24 The key parameters within the base-step-trend model are set out in Table 2 below.

[18] Pages 1 and 3, see: comcom.govt.nz/__data/assets/pdf_file/0028/286426/Powerco-Submission-on-Powerco-transition-to-DPP3-Process-and-Issues-Paper-16-June-2022.pdf

Table 2: base opex, scale growth factors, opex PPF, escalators, step changes

Base, step and trend parameters, $000s, nominal	
Base opex, i.e. actual 2022 opex expenditure	103,455
Network annual scale growth, 2018 to 2023	0.93%
Network annual scale growth, 2023 to 2028	0.66%
Non-network annual scale growth, 2018 to 2023	1.04%
Non-network annual scale growth, 2023 to 2025	0.64%
Network opex partial productivity factor	0.00%
Non-network opex partial productivity factor	0.00%
Network opex step factors (nominal) 2024	2027
Network opex step factors (nominal) 2025	1941

3.25 Inflators are also key parameters and are set out in Table 6 below.

3.26 This is consistent with the opex modelling approach taken in EDB DPP3, and allows us to:

3.26.1 model step changes to account for recurring and non-recurring expenditure;

3.26.2 forecast growth due to network changes in scale;

3.26.3 inflate opex using a weighted average of the All-Industries Labour Cost Index (LCI) and Producers Price Index (PPI); and

3.26.4 model partial productivity if this is appropriate.

3.27 In the EDB DPP3 decision we explained we had taken the base-step-trend modelling approach because we considered that, when combined with the IRIS incentive scheme, it created the right incentives for distributors to improve efficiency while at the same time providing an ex-ante expectation of a normal return.[19]

[19] Paragraph X44 of the EDB DPP3 Final Decision, available at: comcom.govt.nz/__data/assets/pdf_file/0020/191810/Default-price-quality-paths-for-electricity-distribution-businesses-from-1-April-2020-Final-decision-Reasons-paper-27-November-2019.PDF

3.28 The base-step-trend modelling approach is appropriate for projecting Powerco's opex for its transition to the DPP3 because most opex relates to activities that recur. As such, the expenditure is likely to be repeated regularly, and can be expected to be influenced by certain known and predictable factors.

Choice of base year

3.29 Powerco was allowed a certain amount of operating expenditure (opex) during its CPP. So far, Powerco's annual delivery reports shows it has underspent on its allowed opex.[20]

3.30 The CPP opex decision for Powerco recognised that an uplift was necessary to ensure Powerco had sufficient funds to:

3.30.1 invest in a range of improvement initiatives, such as the Enterprise Resource Planning tool to coordinate asset and project planning;

3.30.2 correct a backlog of maintenance defects in its network;

3.30.3 improve vegetation management;

3.30.4 deliver a range of renewals and network capacity upgrades; and

3.30.5 increase staff levels to deliver necessary work programmes.

3.31 In its submission on our process and issues paper, Powerco noted:

> The length of the historical reference period can have a material impact on Powerco's forward looking allowances and, therefore, on our ability to deliver our efficient and planned investments. We support the Commission using its discretion to right-size historical reference periods and other settings in the BBAR model to assess our allowances.[21]

3.32 The question arises as to how suitable a proxy Powerco's recent opex is for forecasting future opex. In its CPP application, Powerco noted expected opex efficiencies in future years from its CPP expenditure.

3.33 Powerco noted in its process and issues paper submission that pre-CPP opex of approximately $75m per year would not adequately cover future opex. It has projected opex of approximately $100m per year as a result of previously constrained opex prior to its CPP and ongoing higher expenditure due to an increase in required asset management from increased work during the CPP.

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20 Latest report (for year ended March 2021) available at: powerco.co.nz/news/media/annual-delivery-report-2021-now-available

21 Page 5, see: comcom.govt.nz/__data/assets/pdf_file/0028/286426/Powerco-Submission-on-Powerco-transition-to-DPP3-Process-and-Issues-Paper-16-June-2022.pdf

3.34 We agree that pre-CPP opex might not be an appropriate baseline for continuing opex. We are of the view, however, that there should be some observed efficiencies in projected opex, as stated in the excerpt from Powerco's CPP application below in paragraph 3.54. This was the outcome expected by Powerco, the Verifier, and the Commission from the elevated CPP expenditure covering a wide range of initiatives. Therefore, we do not agree that the CPP – without adjustment – provides an appropriate new baseline for opex.

3.35 For this decision, and in applying the base-step-trend modelling, we have used Powerco's audited DY22 opex as base opex. We have used DY22 opex as this is the most recent actual opex, and is consistent with the current opex IRIS.

3.36 The base year determines the initial level of opex that is trended forward. Any efficiencies or inefficiencies contained within the base year will therefore be captured in the baseline opex for the remainder of DPP3.

Proposed step-changes

3.37 Step-changes allow us to adjust base opex for one-off or non-recurring costs present in the base year, or to make allowance for future steps up or down in opex not captured by trend factors.

3.38 We had identified one proposed set of step changes: adjustments to remove non-recurring costs driven by CPP-specific activities.

3.39 We have also tested with Powerco whether step-changes are necessary due to the impact of the International Financial Reporting Standards (IFRS) accounting change in 2021. This change required that Software-as-a-Service (SaaS) costs are no longer treated as non-network capex but should be accounted for as opex.

3.40 We have also identified and decided to approve another step-change that Powerco raised in its submission and ENA supported in its cross-submission on our draft decision. This step-change is regarding opex for data for Low-Voltage (LV) network monitoring. See below.

3.41 We have considered but decided not to implement step-change reductions for anticipated efficiency gains expected to result from the CPP.

3.42 We do not consider it necessary to apply other step-changes that applied at the start of DPP, as these factors are already accounted for in the base year.[22]

[22] These were: the removal of FENZ levies now treated as a recoverable cost, and adjustment for the treatment of operating leases, and an adjustment to remove any pecuniary penalties. See comcom.govt.nz/__data/assets/pdf_file/0022/191704/Commerce-Commission-Amendments-to-electricity-distribution-services-input-methodologies-determination-Reasons-paper-26-November-2019.pdf

LV monitoring operating costs

3.43 In the confidential portion (not published) of its submission on our draft decision, Powerco provided additional financial evidence it considered demonstrated a need to adjust its forecast opex.

3.44 Powerco provided information on the purchase of half-hourly LV meter data that it says was not included in its 2022 AMP Update forecast because the required information was not available to support a robust forecast.

3.45 Powerco stated what these half-hourly meter data costs are likely to be. It also provided an estimate of its expected costs over the remainder of the DPP3 period.

3.46 Powerco described a number of paths it can take in securing meter data, and further noted this was significant enough expenditure to consider separately.

3.47 Our decision is to approve this step change for LV monitoring. We discuss this further below from paragraph 3.101.

Non-recurring CPP costs

3.48 As noted above in the discussion of the base-year (see paragraphs 3.33 to 3.34), we agree with Powerco's submission on our Process and Issues paper that its pre-CPP opex baseline is not the best reflection of the current and likely future state of its operations. However, there are specific initiatives that were undertaken as part of the CPP that led to opex being incurred that we do not expect would recur in future.

3.49 In particular, after reviewing the Powerco CPP opex models we noted in our draft decision the following CPP-specific and non-recurring costs were predicted to end by DY23:

3.49.1 System Operations and Network Support (SONS) opex. There should be a decrease in SONS opex FTE costs due to asset management, design, service delivery improvement initiatives ending in DY23. This should total about $0.5 million over DY24 and DY25.

3.49.2 Vegetation management opex. A reduction of $1.8 million from DY23 onwards after a vegetation catch-up spend is completed, and management moves to a sustainable cyclical strategy.

3.49.3 Corrective maintenance opex. An approximate $0.48 million step down in DY25 for non-recurring corrective maintenance work.

3.50 We considered in our draft decision that, as these activities would not be on-going beyond the CPP, they should be removed from forecast opex via a step-change. These specific costs differ from general improvements in overall operating efficiency, which for the reasons discussed below, we did not propose an adjustment for.

3.51 In response to our questions, Powerco stated it had identified 'three material non-recurring maintenance step change programmes' and 'arguably $1.475 million of non-recurring maintenance opex in our FY22 actuals compared to a long-term level of expenditure', but that:

3.51.1 $475,000 (real 2022 $) for LV pillar box data capture is due to end in DY24 (so will only apply as a reduction in DY25); and

3.51.2 $1 million of defect spend is a forecast reduction from DY26 onwards.

3.52 We tested Powerco about these forecast non-recurring expenditures in the CPP SONS opex and vegetation management opex categories. Powerco responded with further evidence about these opex categories and why there should not be downward step changes. We discuss this further below from paragraph 3.72.

3.53 Our decision is to make downwards adjustments for Powerco's SONS and corrective maintenance opex, but not for its vegetation management opex. These adjustments are set out in Table 3 below.

Table 3: Downward step changes due to non-recurring CPP opex ($000, nominal)

CPP proposal expenditure category	DY24 ($000, nominal)	DY25 ($000, nominal)
System operation & network support	-324	-337
Corrective maintenance	0	-552
Total	**-324**	**-889**

Adjustment for CPP efficiencies

3.54 We have considered whether a one-off adjustment to account for efficiencies over the CPP period is justified. We considered this step-change because, in its CPP Proposal, Powerco stated its CPP would result in both capex and opex efficiencies over the CPP period and beyond:

> Through these asset management improvements, we intend to achieve significant cost efficiencies. We estimate that by the end of the CPP Period we will achieve Capex efficiencies of around $6m per year and Opex efficiencies of around $2m because of asset management improvements. These savings have been reflected in the various Opex and Capex portfolios.
>
> Given the structural improvements we are planning, these efficiencies will not only persist, but will grow in future years as the longer-term benefits sets in. Improved asset management is seen as a key area that will contribute to the long-term interest of our customers.[23]

[23] CPP Main Proposal Section 15.9.2 page 192. Available at: comcom.govt.nz/__data/assets/pdf_file/0028/61597/Main-proposal-Powerco-CPP-12-June-2017.pdf

3.55 Powerco's Process and Issues paper submission discussed efficiencies as a result of the CPP. It noted that opex efficiencies exist in the service, interruptions and emergencies opex category due to improved network and asset condition, but that these efficiencies had been offset by increased labour rates and staffing requirements. Additionally, Powerco briefly noted that efficiency was a continued focus in its business support opex category.[24, 25]

3.56 We tested Powerco about the extent of its opex efficiencies as a result of the CPP. We also tested Powerco about the CPP-specific non-recurring opex costs, and how these had been reflected in its 2022 AMP Update opex forecast.

3.57 We also reviewed the Powerco discussion on efficiency initiatives and why these have not resulted in the opex cost reductions that were expected to occur as a result of the CPP. At the time Powerco stated that by the end of the CPP these efficiencies may be worth $2 million per annum and would continue after the CPP.

3.58 Consistent with s 52A(1)(c) of the Act, improvements in efficiencies should be shared with consumers. However, we consider:

3.58.1 to the extent that these efficiency gains have been successfully achieved already, they will be reflected in the base year; and

3.58.2 any future improvements in efficiency will eventually be passed on to consumers in future periods via the opex IRIS mechanism.

3.59 As a general principle, our approach to opex efficiency works on a revealed-cost basis, with gains being passed on as they are made. This is consistent with our overall incentive framework. In certain cases – for example when the justification for particular capex projects is premised on future reductions in opex – we may decide to factor in forecast efficiency gains into expenditure forecasts.

3.60 In this case, we consider the existing efficiency incentive and sharing mechanisms (the base-step-trend model and the opex IRIS) are sufficient to both:

3.60.1 maintain incentives to improve efficiency, consistent with s 52A(b); and

3.60.2 ensure any efficiency gains are shared with consumers, consistent with s 52A(c).

3.61 While Powerco has cited rising input prices as a potential offset to these efficiency gains, we consider this is best dealt with via the input price trend factor discussed below in paragraphs 3.68 to 3.71.

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24 Ibid

25 Page 18, Powerco CPP to DPP Process and Issues paper submission, available at: comcom.govt.nz/__data/assets/pdf_file/0028/286426/Powerco-Submission-on-Powerco-transition-to-DPP3-Process-and-Issues-Paper-16-June-2022.pdf

Software-as-a-Service operating costs

3.62 Software-as-a-Service (SaaS) refers to ongoing subscription-based software services, as opposed to the ownership of software as an asset. It is required to be categorised as opex, rather than non-network capex.[26]

3.63 This change in accounting treatment occurred between the determination of Powerco's CPP and the transition to the DPP.[27] As a result we need to ensure these costs are not double- or under-counted.

3.64 We tested Powerco on its SaaS costs, asking for information about SaaS costs incurred as opex in DY22 and what levels of SaaS opex costs were forecast from DY23. We also asked Powerco to supply us with a non-network capex forecast with SaaS costs removed.

3.65 Powerco responded with further information around its SaaS costs, confirming that 2022 actual opex already included SaaS costs, and estimating the deductions that would need to be made from forecast capex.

3.66 Once audited actual opex information from Information Disclosure (ID) became available for the DPP transition decision, we tested whether these costs were treated appropriately on the opex side. We confirmed the treatment of forecast non-network capex, to ensure the appropriate adjustment was made. This involved seeking further assurance from Powerco about the estimated capex impact. See discussion on non-network capex below from paragraph 3.119.

3.67 Powerco stated that its DY22 opex (which is the base opex year in our base, step, and trend modelling) contains $850,000 (real, 2022) of SaaS opex. Additionally, higher SaaS opex costs will be incurred in DY24 and DY25 and our decision is to include these as step-change opex (in 000s) adjustments (note, these adjustments are not cumulative):

3.67.1 an increase of $2,134 (nominal, 2023) less $850 (real, 2022) in DY23;

3.67.2 an increase of $2,655 (nominal, 2024) less $850 (real, 2022) in DY24; and

3.67.3 an increase of $3,481 (nominal, 2025) less $850 (real, 2022) in DY25.[28]

[26] Due to revised International Financial Reporting Standards (IFRS).

[27] See xrb.govt.nz/assets/pdfs/XRB-Staff-QA-Guidance-on-IASB-Agenda-Decision-Configuration-and-Customisation-Costs-in-Cloud-Based-Computing-Arrangements-.pdf

[28] Expenditure values in our models are converted to a consistent year and basis where applicable.

Trend factors

3.68 The final element of our opex model is a set of trend factors that account for predictable ways in which opex may change over time. We have adopted the same trend factors that we applied when determining DPP3 for other EDBs.[29] These are:

3.68.1 a scale-growth trend factor, based on an econometric analysis of line-length and ICP growth (as a proxy for growth in the number of households). The 2018 to 2023 scale-growth trend factor is used for the base year (2022) to 2023, while the 2023 to 2025 factor is used for growth from 2023 to 2025;

3.68.2 an opex partial productivity factor; and

3.68.3 a weighted average of the all-industries LCI (60%) and PPI (40%) as a cost escalator.

3.69 We have updated:

3.69.1 the historical line-length values from ID used to extrapolate forecast growth;

3.69.2 StatsNZ forecasts of household growth used to proxy forecast ICP growth; and

3.69.3 the most recently available NZIER forecasts of LCI and PPI inflation.

3.70 However, because these factors are more stable over time, we have not updated:

3.70.1 the network and non-network opex elasticities to line length growth and ICP growth; and

3.70.2 the 0% forecast change in opex partial productivity.

3.71 We discuss our approach to cost escalation, and its relationship to the inflation forecasts used to smooth the revenue path further below from paragraph 3.172.

What submissions said on our draft decision on opex

3.72 Powerco submitted additional explanation of why its actual opex increased from AMP21 to AMP22, and why it expected its opex levels to continue for certain categories for which we had based on its AMP21 in our draft decision. These categories were SONS, vegetation management, and network support opex.

3.73 Powerco said regarding its opex forecasts prior to its CPP beginning in 2018:

[29] Details of this approach can be found in the DPP3 Final Reasons paper, available at: comcom.govt.nz/__data/assets/pdf_file/0020/191810/Default-price-quality-paths-for-electricity-distribution-businesses-from-1-April-2020-Final-decision-Reasons-paper-27-November-2019.pdf

While our CPP Proposal predicted a reduction in [specific opex] 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.[30]

3.74 Regarding our draft decision on a downwards adjustment to its SONS opex, Powerco disagreed and stated:

We disagree with the draft decision and corresponding adjustment to the base year opex. Below [in this submission] 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.[31]

3.75 Powerco also stated there was upward pressure on opex because of: staff development requirements for more advanced asset management; support needed for its capex program; and solutions becoming increasingly complex and larger. It argued any decrease would limit its ability to deliver necessary investments.

3.76 Regarding our draft decision on a downwards adjustment to its vegetation management opex, Powerco disagreed and stated:

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.[32]

and

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.[33]

and

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.[34]

30 See page 3 of Powerco's draft decision submission, available at: comcom.govt.nz/__data/assets/pdf_file/0027/293085/Powerco-Submission-on-Powerco-transition-to-DPP3-draft-decision-15-September-2022.pdf

31 Page 7, ibid.

32 Page 3, ibid.

33 Page 3, ibid.

34 Page 4, ibid.

3.77 Powerco also provided evidence that its vegetation management opex per kilometre of overhead line is lower than its industry average. However, as we explain in paragraphs X.9, 2.17.3, and 3.14 we have sought to be consistent with the provisions in s 53P, including s 53P(10), which states we cannot use comparative benchmarking on efficiency to set starting prices.

3.78 Regarding our draft decision on a downwards adjustment to its corrective maintenance opex, Powerco disagreed and stated:

> 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.[35]

3.79 Powerco mentioned expenditure needed for various substations, its defects backlog that has grown at an alarming rate, and faster signs of failure than previously realised in existing switchgear and DC systems.

Our response to what submissions said on our draft decision on opex

3.80 We disagree that earlier forecasts are not relevant information to consider. In particular, if forecast efficiencies or future cost reductions are used by an EDB as evidence in a CPP proposal, this justification may be taken into account to inform future decisions where relevant. If we did not consider these expected outcomes, there would be a lack of accountability in our regulatory program.

3.81 We agree with Powerco's general point that forecasts are inherently uncertain, and that Powerco's forecasts made several years ago are not as relevant a predictor of future expenditure as more recent information. However, we explain how we tested Powerco's reasoning for opex it forecast not to recur after the CPP ended.

3.82 In our draft decision for SONS opex, we modelled a downward adjustment of $318,000 (nominal 2024 dollars) in DY24 and $327,000 (nominal 2025 dollars) in DY25. These downward adjustments were based on the Powerco CPP SONS opex model, which identified CPP-specific full-time-equivalent costs ending in DY23. These were asset management, design, and service delivery improvement initiatives costs.

3.83 In its draft decision submission, Powerco disagreed with the downward adjustment, stating its base years SONS opex is reasonable and assumptions from the CPP forecasts are no longer relevant.

3.84 However, in our view Powerco has not explained why the expenditure related to its CPP initiatives ending in DY23 for SONS opex should continue. Our decision is to retain the SONS opex downward adjustment as modelled in our draft decision.

[35] Page 7, ibid.

3.85 In our draft decision for vegetation management opex, we modelled a $1.8 million (in real 2016 dollars) downward step change from DY23 onwards that was forecast in Powerco's CPP application.

3.86 We reviewed Powerco's 2021 AMP and 2022 AMP Update to investigate the use of LiDAR surveys, the results of those surveys and how these results linked to the vegetation management opex required. The 2021 AMP discusses the use of LiDAR in relation to vegetation management:

> From this, we will have a complete record of the vegetation in close proximity to our powerlines and, during 2021, we will develop new vegetation analytics to allow us to greatly improve our understanding of vegetation risks.
>
> This updated knowledge will be used to develop an updated vegetation strategy that is intended to move us to a more efficient programme – one that achieves compliance while reducing long-term costs. It will also support improving reliability through the targeted removal of out-of-profile vegetation in critical sections of the network. (The optimal long-term strategy may require a short-term increase in expenditure to realise the longer term sustainable minimum.)[36]

3.87 In its 2021 AMP Powerco states:

> We are currently executing a LiDAR survey covering the entire overhead network, which will create improved visibility of network vegetation and risk as discussed in the Future Improvements section.[37]

3.88 On the basis of the 2021 AMP information, the LiDAR survey was still in development and had not concluded that an increase in vegetation management opex was justified.

3.89 The 2022 AMP Update states that Powerco's use of LiDAR was in its 'initial phases'.[38] There was also no material change discussed in Powerco's vegetation management programme.

3.90 Powerco presented outage analysis in its 2021 AMP. This indicated that, following a 2012 peak of more than 375 vegetation-related events causing outages over one minute, the trend was declining until 2016, and has since been steadily increasing.[39] The CPP took effect in 2017, yet vegetation-related outage events have been increasing.

3.91 Following the 2022 AMP Update being published, Powerco has obtained LiDAR survey results demonstrating it has a bigger vegetation issue than it had envisaged. The LiDAR survey results, coupled with the observed outage analysis in Powerco's 2021 AMP, lead us to conclude that vegetation opex does need to increase.

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36 Section 5.2.2, see: powerco.co.nz/-/media/project/powerco/powerco-documents/who-we-are---pricing-and-disclosures/disclosures/electricity-disclosures/2-electricity-asset-management-plans/2021-electricity-asset-management-plan.pdf

37 Section 25.1.2, ibid.

38 Section 3, page 21, ibid.

39 Section 25.1.2, ibid.

3.92 We consider that once Powerco matures its LiDAR survey analysis and integrates the results into a data-driven and risk-based cutting strategy, its vegetation management costs should reduce over time.

3.93 We did not consider Powerco's evidence that its vegetation management opex per kilometre of overhead line is lower than industry average was instructive, given vegetation densities vary across different networks. Accordingly, we have not relied on this comparative benchmarking when reaching our final decision, which is also consistent with s 53P(10).

3.94 Our decision is to not include the $1.8 million decrease in vegetation management opex as proposed in our draft decision.[40]

3.95 In our draft decision for corrective maintenance opex, we included a $475,000 (in real 2022 dollars) downward step change.

3.96 Before our draft decision, we sought additional information from Powerco about non-recurring CPP expenditure: "We would like to understand how non-recurring costs associated with the CPP and the impact of improvement initiatives such as the [Enterprise Resource Planning] tool have been reflected in your 2022 AMP Update opex forecast."

3.97 Powerco responded that:

> a. the $475,000 ($ real 2022) LV pillar box data capture programme was forecast to end after FY21 in the CPP but now forecast to continue until the end of FY24; and
>
> b. $1m ($ real 2022) of defect spend is a forecast reduction from DY26 onwards and won't affect this decision.

3.98 Powerco also stated:

> The two active recurring programmes are forecast to continue beyond the CPP period, so it may be reasonable to consider them as part of the base-year opex spend for DPP3.[41]

3.99 The LV pillar box data capture programme expenditure will end in DY24. As this expenditure is included in the base opex, our decision is to include a $475,000 opex downward adjustment in DY25.

3.100 We also note that in our opex modelling there was an error in our draft models. We had assumed that the $475,000 downwards adjustment had been expressed in real 2016 dollars, and inflated this accordingly into nominal 2025 dollars. We have amended the model to reflect the fact that the adjustment had been expressed in Powerco's information in real 2022 dollar terms.

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40 Paragraphs 3.36 to 3.37, see: comcom.govt.nz/__data/assets/pdf_file/0025/290509/PowercoE28099s-transition-to-the-2020-2025-DPP-Draft-Reasons-18-August-2022.pdf

41 Powerco response to Commission questions, 8 July 2022.

What submissions said on an opex step change for half-hourly consumption data

3.101 Powerco submitted its reasoning for requiring a step change for additional opex for half-hourly consumption data, which was not mentioned in our draft decision. This data would be used for monitoring its LV network:

> 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 and Wellington Electricity DPP3 Decision the Commission outlines the test for considering whether to accept opex step changes.[42,43] 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.[44] 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.

3.102 The ENA, with the support of its members, cross-submitted on Powerco's request for an opex step change:

> As New Zealand transitions to a net carbon zero economy, smart meter data will become a critical input to EDBs' efficient service provision, network operations, and decision-making. The procurement of smart meter data on commercial terms from retailers and non-regulated metering equipment providers is a new development for the industry, and a cost not historically present in EDBs' opex expenditures.
>
> The Powerco DPP transition and all other price-quality decisions by the Commission should reflect the value of smart meter data to EDBs and consumers by explicitly including within opex allowances expenditure for the procurement of this powerful and historically unavailable resource.

Our response to what submissions said on an opex step change for half-hourly consumption data

3.103 We sought additional information from Powerco about meter data expenditure to assist us in assessing whether an opex step change was reasonable, efficient and verifiable. This information included:

3.103.1 how the estimate was arrived at;

3.103.2 how much of Powerco's network would be covered;

3.103.3 likely future costs;

3.103.4 how the data would be used; and

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42 Paragraph A35, DPP3 Final Reasons paper: comcom.govt.nz/__data/assets/pdf_file/0020/191810/Default-price-quality-paths-for-electricity-distribution-businesses-from-1-April-2020-Final-decision-Reasons-paper-27-November-2019.pdf

43 Paragraph 3.41, Wellington Electricity's Lines Limited's transition to DPP3, available at: comcom.govt.nz/__data/assets/pdf_file/0034/228886/Wellington-ElectricityE28099s-transition-to-the-2020-2025-DPP-final-decision-Reasons-paper-26-November-2020.pdf

44 Clause 3.1.2, EDB Input Methodologies: comcom.govt.nz/__data/assets/pdf_file/0017/60542/Electricity-distribution-services-input-methodologies-determination-2012-consolidated-20-May-2020-20-May-2020.pdf

3.103.5 alternative options for obtaining the data.

3.104 Powerco responded to our questions:

3.104.1 by reiterating the confidentiality of any negotiations and providing high-level costs;

3.104.2 with more information on expected network coverage;

3.104.3 pointing out the difficulty of forecasting ongoing costs;

3.104.4 that the data would be used in planning and pricing. Powerco also noted one option in future is to obtain enhanced data so that power quality issues can be identified; and

3.104.5 by advising us of significant extra costs of some alternative options.

3.105 Low voltage networks with reticulation voltages of 400V and 230V for residential, small commercial and industrial use, constitute approximately 40% of installed EDB network, and are largely unmonitored. Given the uncertainty surrounding transport fleet electrification and domestic solar installation, LV network peak loading and loading patterns are set to become more important.

3.106 Historically, LV networks have been installed with circuit capacities based on historical loading patterns. With the uncertainty surrounding LV network loads, EDBs will need to understand network load patterns, in order that they can install network capacity upgrades in a timely manner.

3.107 The use of meter data will give Powerco the ability to understand its LV and wider network loading to a greater extent than it does at present. It will also inform its demand forecasting, which should feed into its planning process and any system growth capex it might need for dealing with load growth.

3.108 We asked Powerco to estimate how much it would cost to install its own meters for the same purpose. It indicated that it would be a significant cost, but its "strategy is to install a combination of transformer and mid-feeder monitors over 10 years which should cost around 1/3 of this," (which would still be significant). "The consumption data will complement this."[45]

3.109 The transformer and mid-feeder monitor investment signalled in Powerco's response will not expose LV network loading patterns down to the ICP level, and we expect EDBs in future will require a combination of wider network monitoring and meter data. Therefore, we expect meter data purchase will be a longer-term need.

[45] Correspondence between Powerco and Commerce Commission, 18 October 2022

3.110 While Powerco has not provided us with its contract for confidentiality reasons, we investigated whether the meter data costs were reasonable. Based on Powerco's information, we estimated a cost range, based on smart meter network penetration of a specific amount on its network.

3.111 We investigated what other meter data sources were available and at what cost. We are satisfied that the cost estimates supplied by Powerco for data provision are reasonable based on this comparison.

3.112 Having had regard to Powerco's supplied information and our own investigation, we have set an opex step change for LV monitoring for meter data for DY24 and DY25 because:

3.112.1 this expenditure appears to be prudent for the purpose of network planning and load forecasting; and

3.112.2 data cost estimates appear reasonable.

3.113 Our decision is to approve one-off costs in DY24 and meter data costs in DY24 and DY25.[46]

Our decision on setting Powerco's capital expenditure

Capital expenditure

3.114 We have taken a largely top-down approach in setting capex allowances for DY24 and DY25. This approach is largely consistent with the capex modelling approach taken in EDB DPP3, with the exception that we have:

3.114.1 considered non-network capex separately given a significant portion of this is non-recurring expenditure and using historical capex may not be a good predictor of future needs; and

3.114.2 approved asset replacement and renewals capex as forecast because Powerco asset health modelling has matured since the 2017 CPP.

3.115 Based on applying the same top-down approach taken in EDB DPP3 to set DY24 and DY25 capex allowances, we have used the Powerco 2022 AMP Update forecast and have forecast capex by:

3.115.1 relying on distributor constant-price AMP Update capex forecasts, subject to a cap based on historical expenditure;

3.115.2 forecasting network and non-network capex separately;

3.115.3 using a five-year historical reference period;

[46] These costs were provided in confidence by Powerco and are not publicly viewable.

3.115.4 applying a uniform 120% cap relative to historic average network capex (assessed net of capital contributions);

3.115.5 applying a linear 'sliding-scale' cap relative to historic average expenditure for non-network capex, with a maximum cap of 200% where non-network capex was less than 5% of total capex, and a minimum of 120% where non-network capex was more than 25% of total capex;

3.115.6 inflating constant-price capex forecasts to a nominal forecast series using NZIER's forecast of the All-Industries Capital Goods Price Index (CGPI);

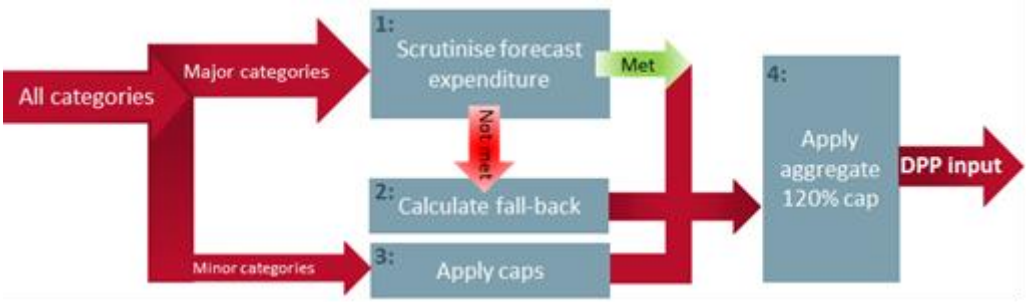
3.115.7 including an explicit allowance for forecast cost of financing, and forecast value of vested assets; and

3.115.8 assuming forecast aggregate value of commissioned assets is the same as forecast capex, as required in the IMs.[47]

General approach

3.116 In our EDB DPP3 Final Reasons paper we describe the top-down capex setting process fully in Attachment B and the process is generally represented in Figure 1:[48]

Figure 1: Top-down capex setting approach



[47] Clause 4.2.5, EDB Input Methodologies: comcom.govt.nz/__data/assets/pdf_file/0017/60542/Electricity-distribution-services-input-methodologies-determination-2012-consolidated-20-May-2020-20-May-2020.pdf

[48] Available at: comcom.govt.nz/__data/assets/pdf_file/0020/191810/Default-price-quality-paths-for-electricity-distribution-businesses-from-1-April-2020-Final-decision-Reasons-paper-27-November-2019.PDF

3.117 As shown in Figure 1, our approach consists of four main steps:

3.117.1 Step 1 is to scrutinise forecast expenditure. Our approach scrutinises categories of capex within the current AMP Update forecasts, utilising the expenditure categories within ID. We have applied scrutiny to expenditure used for meeting growth — comprising 'consumer connection' and 'system growth' capex — and expenditure used to improve existing capabilities — comprising 'reliability, safety and environment' (RS&E) capex. We have identified cost drivers for these bundled categories, and have assessed whether the expenditure for each category appears consistent with those cost drivers, within a tolerance commensurate with the high-level nature of the analysis.

3.117.2 Step 2 is to calculate fall-back expenditure where necessary. Where we concluded that forecasts for the capex categories we have scrutinised do not reflect their cost drivers, we calculated an expenditure allowance for that category that is more consistent with those cost drivers.

3.117.3 Step 3 is to cap 'other' expenditure. We have capped the remaining, minor categories of expenditure, being asset relocations and non-network expenditure. We have used the higher of a dollar-cap and a percent-based cap on growth over historic average expenditure. The percent-based cap uses the same 'sliding scale' that was used for expenditure on non-network assets in DPP2.

3.117.4 Step 4 is to apply an aggregate cap. As a final step, we have capped our aggregate capex forecasts for Powerco at 120% of its historical average expenditure. This is similar to DPP2 where we capped expenditure for network assets at 120% of historical average levels. This overall cap is intended to reflect the point at which we consider the cost impact on consumers justifies further scrutiny of expenditure.

3.118 We have used historical capex to calculate average capex projections to limit forecast capex. Similar to EDB DPP3 we have used the most recent five years of historical capex data (2018 – 2022 for Powerco) to create the average capex projections.

Non-network capex

3.119 Due to the non-recurring nature of some non-network capex, using historical expenditure might not be a good predictor of future expenditure. We scrutinised Powerco's forecast non-network capex using its 2021 AMP and 2022 AMP Update.

3.120 In our review of Powerco's non-network capex forecasts we observed a significant uplift in routine and atypical expenditure, due to Information, Communications and Technology (**ICT**) capex in DY24 and DY25 and Facilities capex in DY23, DY24 and DY25. See last two rows of Table 4.

Table 4: Comparison of Powerco 2021 AMP and 2022 AMP Update non-network capex forecasts – uplift between 2021 AMP and 2022 AMP Update

Non-network capex All values 2022 $000s	DY23		DY24		DY25	
	2021 AMP	2022 AMP	2021 AMP	2022 AMP	2021 AMP	2022 AMP
Routine expenditure						
ICT capex	5,197	4,742	6,436	9,608	4,983	4,615
Facilities capex	905	963	281	254	426	254
Leases	1,812	1,268	1,812	1,268	1,812	1,268
Subtotal	**7,915**	**6,973**	**8,528**	**11,130**	**7,221**	**6,137**
Atypical expenditure						
ICT capex	7,880	4,676	4,085	2,778	1,196	2,318
Facilities	113	1,438	253	4,354	507	4,608
Subtotal	**7,994**	**6,114**	**4,338**	**7,132**	**1,703**	**6,926**
Non-network capex total	**15,908**	**13,087**	**12,867**	**18,262**	**8,924**	**13,063**
ICT uplift			**3,172**		**1,122**	
Facilities uplift	**1,382**		**4,101**		**4,101**	

3.121 In testing Powerco's 2022 AMP Update we stated in our draft decision that we could find no explanation of the expenditure increases we have highlighted in Table 4 above, so decided to not include them in the capex modelling.

3.122 Powerco submitted further evidence in its submission on our draft decision. We discuss this further below from paragraph 3.140. As indicated in Table 4 above, both ICT capex and Facilities capex have been separated into routine and atypical expenditure categories for consideration. In our capex allowance modelling, our decision is to:

3.122.1 use the ICT capex forecast amounts from Powerco's 2022 AMP Update for DY23, DY24 and DY25 where, at a category level (i.e. routine vs atypical), the expenditure has not increased. Where the category level expenditure has increased, we have not found sufficient evidence to justify accepting the increase and we have used the 2021 AMP forecast for that category. However, we have included the Advanced Distribution Management System (**ADMS**) expenditure for DY25 from Powerco's 2022 AMP Update; and

3.122.2 use the Facilities capex forecast amounts from Powerco's 2022 AMP Update for DY23, DY24 and DY25 where, at a category level, the expenditure has not increased. Where the category level expenditure has increased, we have not found sufficient evidence to justify accepting the increase and we have used the 2021 AMP forecast for that category.

Asset replacement and renewals capex

3.123 One key driver of the CPP for Powerco was to improve its data processes and asset health modelling. Mature asset health models make it much more likely than not that asset replacement and renewals capex forecasts can be relied upon, rather than using historical expenditure to predict future expenditure needs.

3.124 We reviewed Powerco's 2021 AMP and 2022 AMP Update to test the maturity of its asset health modelling to assess whether we could approve this category of expenditure outside of the top-down approach we propose to take for other categories of expenditure.

3.125 In its most recent full AMP in 2021, Powerco stated it has been refining Condition Based Risk Management (CBRM) asset models since 2016. This is a method that:

> "…uses a combination of asset condition and risk to predict failure cost, helping to prioritise renewal expenditure."[49]

3.126 Powerco further states:

> With the development of our new Copperleaf C55 system, these models, along with a majority of our asset types are now integrated in to it for a total of 9 Asset models, covering 50 different asset types – now including linear assets (cables and conductor) as well as our high volume fleets such as poles and crossarms. This greatly refines our modelling approach for these asset categories.
>
> This methodology differs from other forecasting methods that we use in that it develops a bottom up estimate of current and future asset health, probability of failure and risk for each individual asset in the fleet. Information used to produce these estimates includes the asset's characteristics (what the asset is), the asset's condition (how the asset is) and the asset's operational context (how failure could affect safety, network performance, operational and environmental objectives).[50]

3.127 Our view is that taking a bottom-up condition-based failure risk approach to forecasting means we can have confidence in those forecasts. Our decision is that the forecasts are reasonable and we can approve these.

Revised non-network capex forecast due to SaaS costs treated as opex

3.128 Due to the IFRS accounting change in 2021, which requires that Software-as-a-Service (SaaS) costs be treated as opex, we asked Powerco to supply us with a revised non-network capex forecast with SaaS costs removed from its 2022 AMP Update forecast.

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[49] Section 10.4.2.2, Powerco 2021 Asset Management Plan, available at: powerco.co.nz/-/media/project/powerco/powerco-documents/who-we-are---pricing-and-disclosures/disclosures/electricity-disclosures/2-electricity-asset-management-plans/2021-electricity-asset-management-plan.pdf

[50] Ibid

3.129 Powerco provided this revised forecast and we have used this to set capex allowances for DY24 and DY25. Once audited actual capex information from Information Disclosure (ID) became available for the final DPP transition decision, we confirmed the appropriate adjustment was made. This involved, as mentioned above in paragraph 3.66, seeking further assurance from Powerco about the estimated capex impact.

3.130 Our decision for step-change adjustments (note, these are not cumulative) to non-network capex (nominal, 000s) is for:

3.130.1 a reduction of $2,134 in DY23;

3.130.2 a reduction of $2,655 in DY24; and

3.130.3 a reduction of $3,481 in DY25.

CPP capital expenditure and projections

3.131 Powerco commented in its Process and Issues paper submission that its CPP capex spending was not a short-term catchup:

> For the most part, our CPP wasn't a short-term 'one-off' catchup in investment. It was a reset to a new baseline. This is reflected by the trace of historical and forecast capital expenditure – the level of forecast costs in FY24/25 is better represented by more recent historical data compared to earlier historical data.

3.132 Regarding capex so far, Powerco's annual delivery reports shows it has been exceeding its allowances.[51]

3.133 Powerco commented in its Process and Issues paper submission that:

> Our pre-CPP expenditure was constrained because allowance levels did not reflect our long-term investment requirements. The CPP approval process provided evidence of this.

3.134 We agree that pre-CPP capex does not represent a suitable baseline for projected capex and is lower than long-term requirements. However, we do not necessarily agree that the CPP approval process in itself demonstrates CPP capex to be a suitable baseline.

3.135 Powerco further commented:

> Our pre-CPP expenditure levels for customer connections and asset relocations are not a fair reflection of our ongoing investment requirements in these areas. Noting that we have little to no control over the level of these investment requirements.
>
> The asset replacement and renewal models used in the CPP approval process demonstrated that expenditure in this area needed to be at CPP approved levels for longer than the CPP period. A reduction in expenditure in this area post-CPP would negatively impact asset health.

[51] Latest report (for year ended March 2021) available at: powerco.co.nz/news/media/annual-delivery-report-2021-now-available

and

Our pre-CPP investment in system growth was constrained and did not represent our long-term investment requirements. The CPP approval process provided evidence of this, and our AMP22 update suggests there is no let-up in demand growth which reflects more recent trends.

3.136 We agree that capex on customer connections and asset relocations are less controllable factors for Powerco's capex. There is also a risk that a reduction in capex allowance in this area risks reallocation of capex away from maintenance of assets.

Our pre-CPP investment in system growth was constrained and did not represent our long-term investment requirements. The CPP approval process provided evidence of this, and our AMP22 update suggests there is no let-up in demand growth which reflects more recent trends.

3.137 We agree that pre-CPP system growth capex does not reflect projected capex. We explain further below how we propose to address this issue.

Our decision for capex

3.138 Our decision for capex is to:

3.138.1 approve the Asset Replacement & Renewal capex forecast for DY2024 and DY2025 provided in Powerco's 2022 AMP Update;

3.138.2 use the ICT capex forecast amounts in the way we describe in paragraph 3.122.1 above;

3.138.3 use the Facilities capex forecast amounts in the way we describe in paragraph 3.122.2 above;

3.138.4 apply a top-down business-as-usual threshold type analysis with no margin added to the remaining capex categories noting there are re-opener possibilities for selected capex categories (System Growth, Consumer Connections and Asset Replacement & Renewal); and

3.138.5 apply an aggregate 120% cap to capex as a whole, consistent with the treatment applied for other EDBs on DPP3.

3.139 We have decided to set a capex allowance of $241.313 million in 2024 and $242.290 million in 2025. See Table 5.

Table 5: capex, DY2024-2025, ($000, nominal)

Capex Allowances, $000s, nominal	DY24	DY25
Consumer connections	26,575	26,263
System growth	82,969	83,660
Asset replacement and renewal	99,897	100,455
Asset relocation	1,507	1,550
Total reliability, safety and environment	20,052	22,216
Non-network	10,314	8,147
Total	**241,313**	**242,290**

What submissions said on our draft decision on capex

3.140 In its submission, Powerco provided further evidence on its increased Facilities capex needs:

> 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.

3.141 Powerco also commented on how its ICT capex needs related to its 2022 AMP Update:

> 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 […] 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.

3.142 Powerco also detailed a downwards adjustment of $4.3 million in its forecast Facilities capex needs, due to a portion of its forecast expenditure no longer being eligible as a RAB asset due to a lease arrangement.

3.143 Powerco supplied additional explanation for its 2022 AMP Update forecast increase in Facilities capex in DY23:

3.143.1 an increase of $8.5 million for development of a depot and offices to support business requirements. This partly reflects the timing change from the 2021 AMP where expenditure was included in DY26. This affects its DY24 and DY25 allowance settings; and

3.143.2 an increase of $0.9 million in the forecast spend on its Tauranga office expansion, affecting its DY23 allowance setting; and

3.143.3 an increase of $0.4 million for continued development at its Junction Street offices, affecting DY23 allowance setting.[52]

3.144 Regarding the DY24/25 Facilities capex uplift, Powerco explain that this new office and depot development is expenditure that was forecast to occur from DY26 and that had been brought forward in its 2022 AMP Update forecast.

3.145 Powerco also appears to have revised its 2022 Facilities capex forecast:

> 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 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).[53]

3.146 Powerco provided additional information and explanations for its 2022 AMP Update forecast increase in ICT capex in DY24 and DY25:[54]

3.146.1 the 2022 AMP Update forecasts reflect the 'best estimate of Powerco's ICT requirements;

3.146.2 "ICT capex can vary from year on year as seen in comparison… 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.";

3.146.3 an additional $2.5 million in DY24 is required for Project BIRD (an overhaul of Powerco's business intelligence, reporting and data management systems);

3.146.4 increase in ADMS expenditure of $1.7 million (from $1.8 million to $3.5 million) included in DY25; and

3.146.5 reductions in other ICT areas of $1.6 million.

3.147 Powerco also provided us with more information around how SaaS capex has been accounted for now in opex (due to an IFRS16 rule change). This was briefly referred to in its submission, but Powerco provided us with more detail in its correspondence with us.

3.148 Powerco submitted on depreciation and that this would lower its 2024 MAR:

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52 See page 11 of Powerco's draft decision submission, available at: comcom.govt.nz/__data/assets/pdf_file/0027/293085/Powerco-Submission-on-Powerco-transition-to-DPP3-draft-decision-15-September-2022.pdf

53 Page 12, ibid.

54 Page 12, ibid.

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.[55]

3.149 Aurora submitted that it supported our choice of a five-year historical reference period for setting capex. Aurora said that it:

…agrees with Powerco's view that the CPP allowed it to reset its expenditure levels, rather than to catch up on historic investment.

and that the previous DPP's use of a:

…7-year reference period could supress Powerco's capex allowance below its needed level.[56]

3.150 Aurora referred to the historical reference period regarding when its own CPP ends in 2026:

When we ultimately transition off our CPP, we consider that similar discretion as to the appropriate length of the capex reference period will likely be needed.

3.151 Powerco supported the five-year historical reference period for capex discussed in our process and issues paper and had nothing further to add in its submission on our draft reasons paper.

3.152 Aurora also submitted on our draft decision for Powerco's non-network capex and that it could be refined to be more robust and reasoned, because in our draft decision:

…2022 forecast reductions relative to Powerco's 2021 AMP are accepted, seemingly without question (that we can see from the reasons paper), and that forecast increases are excluded by preferring Powerco's 2021 forecast. In our view, this is not a reasoned or evidence-based outcome.[57]

3.153 Aurora submitted that we should engage with Powerco to obtain further evidence and explanation on its capex increases to be consistent with normal DPP reset processes:

We consider that there is merit in the Commission engaging with Powerco to require an explanation and evidence of the increase in forecast expenditure levels between DY2021 and DY2022. The Commission does not set DPPs in complete isolation and at each previous reset has issued information requests to support its deliberations. Requesting that Powerco explain and evidence its DY2022 nonnetwork capex forecast would be consistent with normal DPP reset processes.

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55 See: comcom.govt.nz/__data/assets/pdf_file/0027/293085/Powerco-Submission-on-Powerco-transition-to-DPP3-draft-decision-15-September-2022.pdf

56 See: comcom.govt.nz/__data/assets/pdf_file/0026/293084/Aurora-Submission-on-Powerco-transition-to-DPP3-draft-decision-12-September-2022.pdf

57 Pages 2-3, Ibid

3.154 Aurora also submitted that it agreed with Powerco's view that the CPP set a new baseline of expenditure:

> Aurora agrees with Powerco's view that the CPP allowed it to reset its expenditure levels, rather than to catch up on historic investment.

Our response to what submissions said on capex

3.155 In our draft decision on Facilities capex, we took a largely top-down approach to setting capex allowances for DY24 and DY25, which is consistent with the approach we took in the EDB DPP3. However, we departed from the top-down approach in our consideration of asset replacement and renewals capex and non-network capex.

3.156 We have used Powerco's forecast of its asset replacement and renewals capex from its AMP 2021, as this was the most recent AMP that explained this. See from paragraph 3.123 above for more detail.

3.157 We separated out non-network capex from our top-down approach, because this category of expenditure is observably inconsistent over time and historical expenditure might not be a good predictor of future needs.[58]

3.158 Regarding an uplift in Powerco's ICT capex from its 2021 AMP to its 2022 AMP Update, we have reviewed the additional information provided by Powerco in its submission. A comparison of the 2021 AMP and 2022 AMP Update ICT forecasts shows that the quantum of ICT expenditure between DY23 and DY25 is almost the same. The expenditure profiles are different due to investment timing:

3.158.1 2021 AMP ICT forecast (DY23-DY25) is $27.6 million (real 2021 dollars)

3.158.2 2022 AMP Update ICT forecast (DY23-DY25) is $28.7million (real 2021 dollars)

3.159 We also reviewed the 2021 AMP and 2022 AMP Update descriptive material to see how the ADMS and Project BIRD initiatives had been described. While ADMS expenditure requirements have been extensively described, we could find no justification or description of Project BIRD. On this basis, our decision is to use the ICT capex forecast amounts as we describe in paragraph 3.122.1.

3.160 Powerco references its 2022 AMP Update for its forecast DY23 Facilities capex uplift as an explanation, but doesn't explain why its costs have increased.

3.161 Regarding expenditure brought forward from DY26 (see paragraph 3.144 above), we found no description of this project, why it was required, or whether alternative arrangements had been considered, such as leasing property.

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[58] See paragraphs 3.63 to 3.65 of our draft decision: comcom.govt.nz/__data/assets/pdf_file/0025/290509/PowercoE28099s-transition-to-the-2020-2025-DPP-Draft-Reasons-18-August-2022.pdf

3.162 Powerco notes that the expenditure effect of moving to a leasing arrangement for its proposed new office and depot (see paragraph 3.145) is to reduce the 2022 AMP Update forecast amounts of Facilities capex by $2.14 million in DY24 and DY25.

3.163 We do not believe that Powerco has made the case for its new depot and office, or cost increases for its other facilities in Tauranga and Junction Street. There is no description of the need identified for the new depot and office, or why present arrangements are not suitable. We found no descriptions or justifications about why costs have increased for the other facilities.

3.164 On the basis of the information we have received, we do not consider the uplift in Facilities capex between the 2021 AMP and the 2022 AMP Update forecasts has been sufficiently explained.

3.165 Our decision is to use the Facilities capex forecast amounts as described in paragraph 3.122.2.

3.166 We are satisfied with Powerco's explanation of how it accounted for SaaS expenditure correctly in opex now. We have updated our financial models to reflect the changes to SaaS, which affect the capex (decrease) and opex (increase) models.

3.167 We appreciate Powerco proactively bringing the correction to RAB and depreciation from its DY22 ID to our attention. We have implemented this adjustment to our financial model in our decision. It will have the effect of reducing the model inputs for RAB in 2022 by $4.579 million and reducing its depreciation by $4.579 million in 2022.

3.168 As Aurora noted, we used our discretion to set a five-year historical reference period for capex. Aurora will be the next EDB to transition to a DPP, in 2026. We note that each CPP is a unique, individually-tailored exercise. As such, we retain the flexibility to respond as appropriate to fulfil our main s 52A purpose when making a decision on Aurora's transition from its CPP to the DPP.

3.169 In response to Aurora's submission that we should engage with Powerco to make sure Powerco has an opportunity to explain its expenditure requirements, we believe the process we followed allows for this outcome. We published our process and issues paper, allowing time for submissions. We then published our draft decision after considering information supplied by Powerco. Time for submissions was then available for Powerco to provide further evidence if it chose to.

3.170 We note Aurora's view that Powerco's CPP set a new baseline, rather than being a temporary lift, in expenditure. We disagree with Aurora's view. The CPP framework recognises that the generic DPP might not suit the needs of all EDBs all the time. Given that Powerco forecast various efficiencies, as explained in the opex section in paragraphs 3.54 to 3.61 above, we took this information into account for determining allowances for Powerco that are for the long-term benefit of consumers. In general, we understand that circumstances and assumptions change over time, but we may still take historical information and justifications for expenditure into account where relevant.

3.171 An EDB's CPP proposal can be shorter than five years, and be applied for because of an event outside an EDB's control. Our approval of a CPP does not mean we are approving a higher (or lower) allowable revenue for an EDB following the end of a CPP and transition back to the DPP.[59]

Our decision on cost escalators for opex and capex

3.172 We have decided to apply the same choice of opex and capex cost escalators series for Powerco as we applied for other EDBs on DPP3, and to use the most recently available NZIER forecasts of these series. The indices (forecasts of which are shown in Table 6) we have applied are:

3.172.1 for opex, a weighted average of the all-industries LCI (60% weighting) and producer price index (40% weighting); and

3.172.2 for capex, the all-industries capital goods price index (CGPI).

Table 6: Forecast cost escalators (base year 2022 = 1.0000)

Series	2023	2024	2025
LCI	1.0349	1.0375	1.0334
PPI	1.1019	1.0743	1.0489
Total o**pex escalator**	1.0617	1.1172	1.1614
CGPI	1.1092	1.0559	1.0336

3.173 Powerco commented in its process and issues paper submission that cost inflators should be updated where appropriate:

> The Commission has discretion in how expenditure allowances are set and we think they should be based on the most up-to-date information available to allow for appropriate cost recovery… including cost inflators. While CPI and WACC are locked in by the input methodologies, the input cost inflators are not.[60]

3.174 It further notes that updating DPP3 indices is important for preserving its incentives to innovate and invest, because updating:

> provides an ex-ante expectation that revenues reflect estimated costs; and
>
> ensures IRIS expenditure allowances are appropriate - as expenditure allowances are set in nominal terms, insufficient input cost inflation will increase the risk of Powerco incurring IRIS penalties even if we spend exactly to our allowances in real terms.[61]

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59 See our CPP factsheet, available at: comcom.govt.nz/__data/assets/pdf_file/0020/61283/Customised-price-quality-regulation-factsheet-September-2017.pdf

60 See: https://www.comcom.govt.nz/__data/assets/pdf_file/0028/286426/Powerco-Submission-on-Powerco-transition-to-DPP3-Process-and-Issues-Paper-16-June-2022.pdf

61 Ibid

3.175 Powerco also made the following points about cost inflators:

3.175.1 DPP should be a low-cost regime. Updating PPI, LCI, CGPI would still fit with this.

3.175.2 There should be an expectation of normal returns. A revenue allowance set too low for expected expenditure is likely to result in IRIS penalties.

3.175.3 Capex re-openers and the innovation allowance do not address inflation. As such, remedies for inadequate expenditure allowances are limited.

3.175.4 Powerco faces different circumstances to Wellington Electricity (which did not have updated cost inflators for PPI, LCI and CGPI in its 2021 DPP3 transition). Cost inflators are further out-of-date, as they were set in 2018.

3.175.5 CPI provides an inadequate hedge for Powerco. The wash-up balance only applies for one year, but cost inflators apply for three years; and

3.175.6 Updating cost inflators for Powerco will maintain consistency with other EDBs on DPP3, because there are different macroeconomic conditions, and the wash-up has a limited hedge effect due to a shorter DPP3 period for Powerco.

3.176 We agree that the DPP transition decision should provide the prior expectation of a normal return, and that the choice of escalators has an effect on this.

3.177 During the DPP period, allowable revenue from one year to the next (in this case 2024 to 2025) will increase at outturn CPI, and the prices Powerco will pay for its inputs will also be subject to inflation. Because of this, using a set of consistent, up-to-date forecasts of the inflation components of the revenue path and of nominal expenditure increases helps create the expectation of a normal return.

3.178 As Powerco notes in its process and issues paper submission, macroeconomic conditions have changed significantly since 2019 when the DPP was determined. Under current settings in the IMs and our approach to DPPs, regulated suppliers are exposed to real price effects (increases in input costs relative to inflation). Using up-to-date and independent forecasts (such as those produced by NZIER) means this risk is symmetric.[62]

3.179 In accordance with s 53X, when Powerco's CPP ends we are required to ensure it is subject to the same DPP3 that is 'generally applicable' to other EDBs on the DPP3. As we explain in paragraph 2.11, some amendments may be necessary to ensure that the 'generally applicable' DPP3 is workable for Powerco and, as such, we have some discretion in how cost inflators are taken into account.

[62] Reconsideration of the overall treatment of inflation under the CPP-DPP system goes beyond the scope of this project.

What submissions said on our draft decision on cost escalators

3.180 Powerco noted that it agreed with our draft decision, as did Aurora.

3.181 We already explain our reasoning above on applying the same choice of opex and capex cost escalators series for Powerco as we applied for other EDBs on DPP3, and to use the most recently available NZIER forecasts of these series.

Our decision on the treatment of IRIS

3.182 For the DPP3 IRIS retention factor for financial years 2024 and 2025, we do not consider a special adjustment is required, which is consistent with Powerco's own view.

3.183 Therefore, a retention factor of 23.5% will apply to Powerco for capex and opex. This is the same retention factor as for other EDBs on the DPP3.

What submissions said on our draft decision on IRIS

3.184 Powerco agreed with our draft decision. We already explain above our reasoning for decision to use the same retention factor as for other EDBs on the DPP3.

Our decision to not smooth the price path

3.185 As explained above in paragraph 2.20, the Act allows us to smooth an EDB's price path to minimise price shocks to consumers. However, as the estimated gross allowable revenue change is a 9.51% nominal increase and therefore less than a 10% real increase, our decision is not to smooth the price path.

3.186 As we state in paragraph 6.23 of our DPP3 decision:

> We have applied a +10% limit on the annual increase in a distributor's gross 'forecast revenue from prices' (revenue including pass-through and recoverable costs). This limit will apply when distributors are setting prices in every year of the DPP period, except for the 2020/21 year.[63]

What submissions said on our draft decision on the price path

3.187 Powerco calculated its expected percentage change in total revenue, based on our draft decision:

> 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.

[63] See comcom.govt.nz/__data/assets/pdf_file/0020/191810/Default-price-quality-paths-for-electricity-distribution-businesses-from-1-April-2020-Final-decision-Reasons-paper-27-November-2019.PDF

Our response to what submissions said on the price path

3.188 As noted by Powerco, our draft decision used an incorrect value for the comparison of the 2024 MAR to the 2023 MAR. The correct comparison of values is shown below in paragraph 3.198.

3.189 Powerco's WACC for its CPP changed in 2020, due to the WACC reset for all price-quality regulated EDBs. This reduced the value of Powerco's 2023 MAR by $51.874 million from the forecast value in Powerco's 2017 CPP Determination. The corrected percentage change in the draft determination between the 2023 MAR and 2024 MAR is 27.4%. Our final decision has resulted in a slightly higher value for the 2024 MAR. This represents an increase (compared to the 2023 MAR) of 28.22%. This is explained further from paragraph 3.196 below.

3.190 However, as we explain in paragraphs 3.203 to 3.204 below, the MAR does not reflect the total revenue charged to consumers. As noted above in paragraph 3.185, the estimated change in gross allowable revenue is a 9.51% increase, and our decision is not to smooth the price path.

Modelling methodology and results

3.191 To set Powerco's starting prices we have used models that were used in 2019 to set the DPP3 price paths.

3.192 We have revised seven of the models that were used in 2019 to set the DPP3: the financial model; the capex projections model; the opex projections model; the disposals model; the household growth model; the circuit length model; and the input cost inflators model.

3.193 The purpose of the revisions is to:

3.193.1 modify the financial model to change the BBAR and MAR modelling to set a two-year price path for Powerco, rather than the five-year price path for the other EDBs;

3.193.2 modify the capex projections and opex projections models to project costs for a two-year price path rather than a five-year price path and to implement expenditure projection policy changes from DPP3;

3.193.3 incorporate Powerco's most recent annual information disclosures of historical opex and capex;[64]

[64] Available at: powerco.co.nz/-/media/project/powerco/powerco-documents/who-we-are---pricing-and-disclosures/disclosures/electricity-disclosures/5-electricity-information-disclosure-financial-and-technical/fy21-electricity-disclosure-1-april-2020-31-march-2021.pdf

3.193.4 incorporate Powerco's 2022 AMP Update forecast of capital expenditure, rather than its 2019 AMP forecast in our determination of capex allowances;[65]

3.193.5 calculate opex and capex cost allowances using updated cost inflators from NZIER;[66]

3.193.6 incorporate the most recent annual information disclosures of circuit length and level of disposed assets;

3.193.7 incorporate the most recent NZIER indices used in the cost inflators model; and

3.193.8 incorporate the most recent Statistics NZ forecasts on household growth.

3.194 Information about the modifications made to each model is available in the 'Description' sheet of the model. The models can be downloaded from the Commission's website.[67]

3.195 There are a number of feeder models that provide inputs to these seven models. These feeder models have not been updated for the reasons set out in the table below:

Model	Reason for not updating
Econometric	The elasticities determined with the econometric model are expected to be relatively stable, so we do not consider the resource requirements for updating this model justify an update in the relatively low-cost DPP context.
CPI	The input methodologies specify which Reserve Bank forecast we must use in establishing 'forecast CPI'. This results in 'forecast CPI' not being updated since the DPP3 CPI model was prepared and published. CPI is an input to the capex model, and this use is not constrained by the input methodologies. Updating this CPI forecast would have no impact on the capex projection.[68]
Operating lease	An operating lease model was prepared for the DPP3 decision, based on s 53ZD information. We have not repeated the s 53ZD information request as we did not consider the significant effort by and cost on Powerco and us to be justified, as the projections made in the DPP3 process were likely to be adequate for the transition to the DPP3.

65 Available at: powerco.co.nz/-/media/project/powerco/powerco-documents/who-we-are---pricing-and-disclosures/disclosures/electricity-disclosures/2-electricity-asset-management-plans/2022-electricity-asset-management-plan.pdf

66 These are the September 2022 forecast indices, available from 12 September 2022.

67 Available at: comcom.govt.nz/regulated-industries/electricity-lines/projects/powercos-20232025-dpp

68 The CPI is used to determine whether an EDB passes one of the capex scrutiny tests: "Gate 3 – Asset replacement and renewals". Powerco passes this gate by a wide margin, and any CPI update would not change its pass result for this gate.

Modelling results

3.196 The starting price is calculated in the models as the 2024 MAR. It appears in the DPP3 amendment determination as the 2024 FNAR. The model calculates Powerco's FNAR in 2024 to be $321.696 million.[69]

3.197 We can compare this value to the 2023 MAR set for Powerco's CPP in the WACC change amendment to its CPP determination.

3.198 The values are compared in this table:

All values $'000	2023	2024	2025
CPP final year to MAR (2020 WACC reset)	250,901		
CPP to DPP decision: year to MAR		321,696	328,130

3.199 The decision value reflects a nominal 28.22% increase in net allowable revenue relative to the current year's CPP value.

3.200 We identified two specific drivers behind this significant percentage change:

3.200.1 the growth in Powerco's RAB during its CPP. The RAB impacts the Regulatory Investment Value (**RIV**), which refers to the RAB plus a deferred tax balance. The average RIV is 26% higher in our Powerco-transition-to-DPP3 model (for DY24 and DY25) than in our 2020 WACC change model.[70] This explains – in absolute percentage terms – approximately 17.5% of the MAR increase.

3.200.2 the impact of a 2020 WACC decrease. The last three years of Powerco's CPP used a lower rate of WACC compared to the first two years of its CPP. This meant the five-year CPP price path was not a smooth path, as can be seen in Figure 2. This explains – in absolute percentage terms – approximately 10.0% of the MAR increase.

3.201 The combined impact of the two drivers mentioned results in an increase of about 27.5% in the MAR.

3.202 Figure 2 below charts the gross and net allowable revenue for Powerco for disclosure years 2019 to 2025 inclusive.

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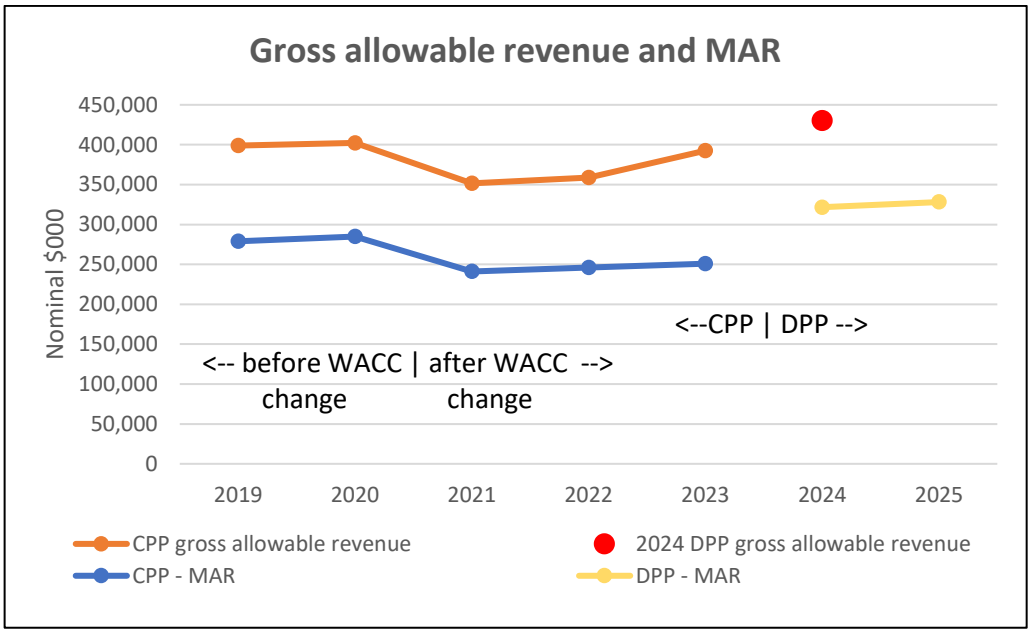
69 MAR is the forecast value from the financial model. FNAR is the amount specified in the determination, and is updated each year for changes in inflation. In the first year of the regulatory period – or after a transition – these values are the same.

70 For more details on RIV, refer to clause 5.3.2(2) of our EDB IMs, available at comcom.govt.nz/__data/assets/pdf_file/0017/60542/Electricity-distribution-services-input-methodologies-determination-2012-consolidated-20-May-2020-20-May-2020.pdf. In our financial model, we have previously used the term Opening Investment Value.

3.203 Gross allowable revenue refers to the revenue that Powerco may charge to fund its network operation. Pass-through and recoverable costs may be recovered from consumers, as well as the net revenues. Recoverable costs include Transpower's charges and IRIS amounts, which can be significant.

3.204 In Powerco's price-setting compliance statement for disclosure year 2023 (the last year of its CPP), for example, the gross allowable revenue (which includes forecast pass-through and recoverable costs) was $392.7 million while the FNAR was $250.9 million, so the FNAR was 64% of gross forecast allowable revenue.[71]

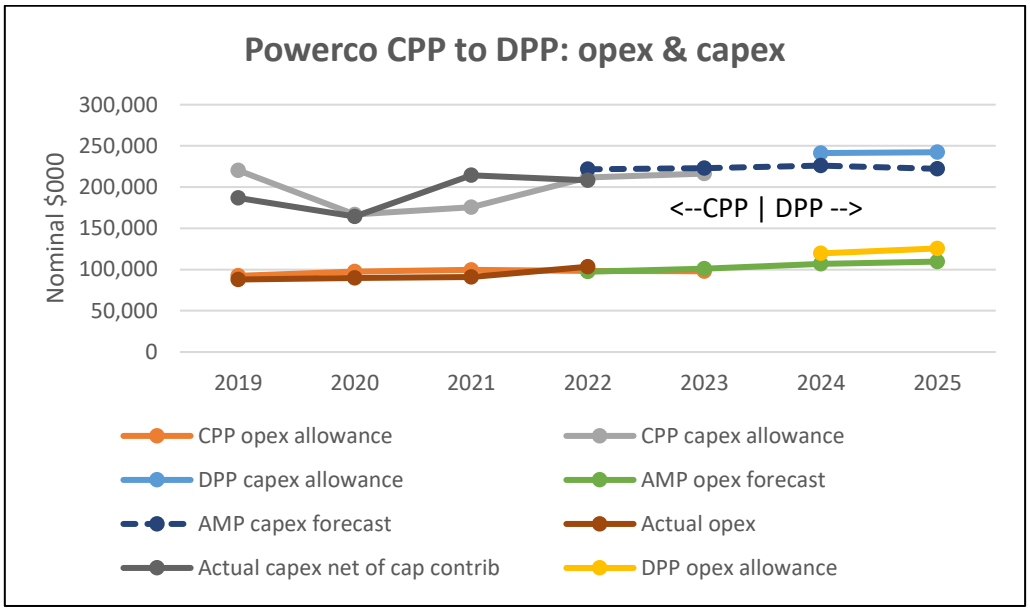
Figure 2: Powerco CPP to DPP, maximum allowable revenue and gross allowable revenue



[71] Available at: powerco.co.nz/-/media/project/powerco/powerco-documents/who-we-are---pricing-and-disclosures/disclosures/electricity-disclosures/3-electricity-customised-price-quality-path/2023/fy23-annual-pricesetting-compliance-statement-1-april-2022-31-march-2023.pdf

3.205 Figure 3 below charts the opex and capex amounts for Powerco for disclosure years 2019 to 2025 inclusive. The DPP capex allowance is above the AMP capex forecasts for 2024 and 2025, and the DPP opex allowance is above the AMP opex forecasts for 2024 and 2025. There are various reasons for these differences including higher cost inflators and opex step change adjustments which were not included in Powerco's AMP forecasts.

Figure 3: Powerco CPP to DPP, opex & capex



Chapter 4 Implementation

Purpose of this chapter

4.1 The DPP3 amendment determination, published alongside this reasons paper, implements Powerco's starting prices for 2023.[72]

Pass-through balance allowance

4.2 Paragraph 5 of schedule 1.5 of the DPP3 determination provides a formula for EDBs to calculate their forecast allowable revenue.[73] It includes the term 'pass-through balance allowance' (PTBA) which is defined in clause 4.2 of the DPP3 determination.

4.3 That definition relies on the values of the pass-through balance and estimate of the pass-through balance (ePTB). These are also defined in clause 4.2.

4.4 For the year ended 31 March 2020, Powerco was not subject to the DPP3 determination that is referred to in the clause 4.2 definition of 'pass-through balance' (PTB). Unlike the other EDBs, Powerco will therefore not have values for pass-through balance and ePTB.

4.5 The DPP3 amendment determination provides formulas for actual allowable revenue for 2024 and 2025 in schedules 1.6(9) and 1.6(10) for Powerco.

Error in the sign of the compensation for the DPP2 pass-through balance

4.6 Powerco identified an error in the text of the definition of 'Actual pass-through costs and recoverable costs' in clause 4.2 of the Powerco CPP Determination 2018. This was regarding how Powerco's pass-through balance is accounted for:

> "…for the first assessment period, the sum of all pass-through costs and recoverable costs that were incurred in the assessment period ***plus*** the pass-through balance multiplied by (1 + 67th percentile estimate of post-tax WACC)"[74]

4.7 The word 'plus' should have read 'minus'. Powerco explained the unintended effect of the error in its submission on our Process and Issues paper:

> "The impact [of the incorrect definition] is that under-recovery of costs is *deducted* from revenue (should be added) and over-recovery of costs is *added* to revenue (should be deducted).
>
> For example, if Powerco had over recovered $1m of revenue at the end of DPP2, this ought to be *subtracted* from future revenues. But instead, the formula adds it (the "plus") which would mean consumers essentially paid twice. And the opposite holds.

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72 DPP3 Amendment Determination available at: comcom.govt.nz/regulated-industries/electricity-lines/projects/powercos-20232025-dpp

73 DPP3 Determination available at: comcom.govt.nz/__data/assets/pdf_file/0023/61358/2014-NZCC-33-Electricity-Distribution-Services-Default-Price-Quality-Path-Determination-2015-28-November-2014.pdf

74 Emphasis added. See: comcom.govt.nz/__data/assets/pdf_file/0029/78716/2018-NZCC-5-Powerco-customised-price-quality-path-determination-with-IM-variations-28-March-2018.pdf

We and Commission staff recognised this error prior to the DPP3 determination. In that context, it was defined correctly and as a mathematical formula rather than a written formula. The specific change was to include a (-1) in the formula to ensure under-recovery of costs is added to revenue, and over-recovery of costs is deducted from revenue.

This error is technical and non-controversial. So, its correction should be applied retrospectively to Powerco's CPP pass-through balance calculations, and the Commission should remedy the unintended revenue impacts in Powerco's FY24 and FY25 allowable revenue."[75]

Determination of compensation to Powerco for the DPP2 Pass-through balance

4.8 At the end of the DPP2 period, Powerco had a negative Pass-Through Balance. Table 6 of the 2017/18 Default Price-Quality Compliance Statement indicates the pass-through balance was negative $520k. That this was a negative value indicates Powerco had under-recovered revenue by $520k in the 2017/18 assessment period.

4.9 In its 2021 Price Setting Compliance Statement, the following table and footnote indicates that the 2019 wash-up amount of $7,179k disclosed in its 2019 annual compliance statement had been "corrected" by reducing it to $6,622k . This adjustment was in the wrong direction, as the correction should have been an increase.[76]

Table 7: Calculating the closing wash-up account balance for the second assessment period ($000s)

Description	Amount
Wash-up amount for the second assessment period	6,622[3]
+ adjustment for 67th percentile estimate of post-tax WACC	986
= Closing wash-up balance 2020	7,608

4.10 Footnote 3 in Powerco's statement on page 10 reads:

Our 2019 annual compliance statement incorrectly disclosed the wash-up amount$_{2019}$ as $7,179k. It should have been disclosed as $6,622k.[77] The $557k difference follows the correct inclusion of $520k actual pass-through balance 2019 (adjusted for the time-value-of-money) required to calculate actual allowable revenue$_{2019}$.

4.11 We have made an adjustment in the Powerco CPP to DPP determination to the definition of the actual allowable revenue for 2024 and 2025 to compensate Powerco for their revenue under-recovery. This compensation is in two parts:

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75 See page 8, available at comcom.govt.nz/__data/assets/pdf_file/0028/286426/Powerco-Submission-on-Powerco-transition-to-DPP3-Process-and-Issues-Paper-16-June-2022.pdf

76 A positive wash-up amount indicates an under-recovery of revenue.

77 See page 8, available at: powerco.co.nz/-/media/project/powerco/powerco-documents/who-we-are---pricing-and-disclosures/disclosures/electricity-disclosures/3-electricity-customised-price-quality-path/2021/fy21-annual-compliance-statement-1-april-2020-31-march-2021.pdf

4.11.1 Part 1: We have compensated Powerco for the $520k under-recovery in 2017/18.

4.11.2 Part 2: We have reversed out the $557k reduction in wash-up amount$_{2019}$ that is described above.

4.12 For the compensation for each of Part 1 and Part 2, we have determined the increase in each of 2024 and 2025 actual allowable revenue that together would fully compensate Powerco for the Part. The CPP determination indicates that the 67th percentile of the post-tax WACC should be used as the discount rate for time-value-of-money (TVOM) calculations relating to a wash-up balance. The 67th percentile of the post-tax WACC is specified in schedule 1.7 of the 2020 consolidated CPP determination as 7.19% for assessment periods ending 2019 and 2020 and 6.78% for 2021 to 2023.[78] The DPP3 determination also uses the 67th percentile of the post-tax WACC for wash-up balance time-value-of money calculations, with a value of 4.23% specified in clause 4.2.

Part 1 Compensation

4.13 We have set compensation by an increment in 2024 actual allowable revenue for half of the 2018 $520k amount, to be adjusted for the 6 years between 2018 and 2024 by applying two years of TVOM at 7.19%, three years at 6.78% and one year at 4.23%. The 2024 amount (rounded to the nearest 000s) of this component of compensation is therefore:

$$\frac{\$520{,}000}{2} \times \left((1 + 7.19\%)^2 \times (1 + 6.78\%)^3 \times (1 + 4.23\%)\right) = \$379{,}000$$

4.14 We have set compensation by an increment in 2025 actual allowable revenue for half of the 2018 $520k amount, using the same approach as for the 2024 compensation, except that there is an extra year of discounting at 4.23% to be accounted for. The 2025 amount (rounded to the nearest 000s) of this component of compensation is therefore:

$$\frac{\$520{,}000}{2} \times ((1 + 7.19\%)^2 \times (1 + 6.78\%)^3 \times (1 + 4.23\%)^2) = \$395{,}000$$

Part 2 Compensation

4.15 We have set compensation by an increment in 2024 actual allowable revenue for half of the 2019 $557k amount, to be adjusted for the 5 years between 2019 and 2024 by applying one year of TVOM at 7.19%, three years at 6.78% and one year at 4.23%. The 2024 amount (rounded to the nearest 000s) of this component of compensation is therefore:

[78] Consolidated CPP Determination from 20 May 2020 available at: comcom.govt.nz/__data/assets/pdf_file/0026/216863/Powerco-Limited-electricity-distribution-customised-price-quality-path-determination-2018-consolidated-20-May-2020-20-May-2020.pdf

$$\frac{\$557{,}000}{2} \times \big((1 + 7.19\%) \times (1 + 6.78\%)^3 \times (1 + 4.23\%)\big) = \$379{,}000$$

4.16 We have set compensation by an increment in 2025 actual allowable revenue for half of the 2019 $557k amount, using the same approach as for the 2024 Part 2 compensation, except that there is an extra year of discounting at 4.23% to be accounted for. The 2025 amount (rounded to the nearest 000s) of this component of compensation is therefore, in $000:

$$\frac{\$557{,}000}{2} \times ((1 + 7.19\%) \times (1 + 6.78\%)^3 \times (1 + 4.23\%)^2) = \$395{,}000$$

Total Compensation

4.17 The total 2024 compensation (rounded to the nearest 000s) is therefore $379,000 + $379,000 = $758,000.

4.18 The total 2025 compensation (rounded to the nearest 000s) is therefore $395,000 + $395,000 = $790,000.

Other amendments to the Powerco Determination

Ensuring the 2018/19 and 2019/20 wash-up amounts are taken into account

4.19 For EDBs other than Wellington Electricity and Powerco, 2019 and 2020 was before the revenue cap applied and no wash-up amount applied in those years. However, for Wellington Electricity and Powerco, 2019 and 2020 wash-up amounts do apply as the revenue cap applied during those assessment periods, and they need to be taken into account.

4.20 The calculation of 'actual allowable revenue' in the DPP3 determination does not provide for taking 2019 or 2020 wash-up amounts into account, so in the DPP3 amendment determination we have added a new paragraph (9) to schedule 1.6 to set out the methodology for Powerco.

4.21 The DPP3 amendment determination schedule 1.7 has been amended from the DPP3 text to achieve the policy intent.

Actual net allowable revenue for 2024

4.22 The financial model for the CPP to DPP3 transition produces a value of $321.696 million that is both the 2024 FNAR ($FNAR_{2024}$) and the 2024 actual net allowable revenue ($ANAR_{2024}$).

4.23 However, IM clause 3.1.3(13)(i) requires the $ANAR_{2024}$ value to be the previous year's value (i.e. $ANAR_{2023}$) increased by CPI–X. To be IM compliant, we must show a calculation that follows this IM approach, and have done so via the calculation methodology set out in schedule 1.6.

4.24 To comply with the IM requirement, and to also apply a known numerical value to the 2024 ANAR, we have updated the DPP3 determination to back-calculate a 2021 ANAR. The back-calculation is such that, when it is rolled forward at CPI–X to a 2024 value, the calculated result is equal to the known numerical value.

4.25 We used a similar approach earlier in 2020 for Wellington Electricity and Powerco, which were both on CPPs and were subject to a 'WACC change'.[79]

4.26 A complication arises with the CPI values for the CPI–X adjustment not being available until after the end of the 2024 year. This complication has been resolved in the DPP3 amendment determination by using a formula, instead of numerical values, to specify the 2023 FNAR.

4.27 To comply with IM 3.1.1(13)(h), the 2021 ANAR is specified through a reference to the 2021 FNAR. The reason for this is that IM 3.1.1(13)(h) defines the actual value in terms of the forecast value.

IRIS amounts and Innovation allowance

4.28 Schedule 2.2 of the DPP3 amendment determination contains tables of specified amounts for the IRIS. The amounts are sourced directly from the opex projections model and the capex projections model.

4.29 For consistency with the amendments made in 2019 to the opex IRIS to account for the change in accounting treatment of operating leases under IFRS16, we have specified a separate opex forecast for IRIS purposes, that excludes operating lease amounts.[80]

4.30 Schedule 5.3 of the DPP3 amendment determination contains a table showing the innovation project allowance for the DPP regulatory period. As for the other EDBs in the DPP3 amendment determination, Powerco's allowance is based on the total annual FNAR.

Correction of non-material typographical errors in determination

4.31 A non-material typographical error had occurred in several places throughout the determination meaning that 'non-exempt EDBs' did not appear in bold font. This text has now been corrected to appear in bold in the definition of 'pass-through balance allowance', paragraph 2 of schedule 1.6, and in paragraph 1 of schedule 1.7.

4.32 A correction of a non-material typographical error has also occurred in paragraph 10.5 of the determination to change "net forecast allowable revenue" to "forecast net allowable revenue."

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79 Further information on the WACC change decision is available on our Wellington Electricity CPP webpage: comcom.govt.nz/regulated-industries/electricity-lines/electricity-lines-price-quality-paths/electricity-lines-customised-price-quality-path/wellington-electricitys-20182021-cpp.

80 See chapter 4, comcom.govt.nz/__data/assets/pdf_file/0029/188525/Treatment-of-operating-leases-Final-decision-13-November-2019.pdf