16 June 2022

Submissions: *Powerco CPP-to-DPP Process and Issues*
Commerce Commission
Via email infrastructure.regulation@comcom.govt.nz

Tēnā koutou,

We encourage the Commission to adopt a pragmatic approach to setting Powerco's transition to DPP that reflects the current market and policy environment

Powerco welcomes the Commission's process and issues paper (Paper) relating to the reset of Powerco's revenues[1]. Powerco is one of Aotearoa's largest gas and electricity distributors, supplying around 340,000 (electricity) and 112,000 (gas) urban and rural homes and businesses in the North Island. These energy networks provide essential services and will be core to Aotearoa achieving a net-zero economy in 2050. This is an important decision for us and our customers.

Powerco is in the final year of a 5-year customised programme of work to meet the needs of customers on Powerco's electricity network. The Commission must now set Powerco's electricity network revenues for the two-year period April 2023 – March 2025. The Paper covers the timing and duration of engagement with stakeholders and the key issues the Commission intends to consider as part of setting Powerco's revenue. Our summary views on each of these topics are:

Process

- **Support the proposed timing** (there's realistically not much room to move)
- Keep open the option for a **webinar/workshop with stakeholders** after the draft decision – we'd be delighted to contribute if it's needed
- **Allow contingency time** for Commission/Powerco staff to work through the intricacies of the financial models to reduce the chance of drafting/modelling errors

Issues

- Set revenues using a **building-block model**. It transparently links costs and revenues, is relatively low cost, and sets the right incentives
- **Review financial model assumptions and outputs** so that allowances are matched to cost eg input cost inflators, reference periods, price changes
- **Consider the role of reporting** as part of the solution set. It maintains transparency about benefits and efficiency gains for consumers, and an incentive to innovate and invest

[1] https://comcom.govt.nz/regulated-industries/electricity-lines/projects/powercos-20232025-dpp

We are excited about the role we need to play to support customer choices to decarbonise, and to deliver that service efficiently. Powerco's most recent forecasts reflect this – they are carefully considered and reflect our view of what's needed to provide a safe and reliable network in a time of considerable change. Our "enabling customer choices" webinar[2] provides more detail to stakeholders about these forecasts and how we are responding to the challenges and opportunities of decarbonisation. So while the default price-path can be described as:

> *a relatively low-cost regulatory regime that* ***might not meet the exact needs of the lines company[3]***

it could also be described as

> *a relatively low-cost regulatory regime that* ***supports lines companies connecting communities efficiently in a decarbonising economy with a safe and reliable network***

The remainder of this submission has additional discussion about

- the issues (attachment 1)
- historical and forecast expenditure (attachment 2), and
- an independent view on the merits of updating the input cost inflators (attachment 3)

We look forward to engaging with the Commission on our revenue reset for FY24/25 and communicating the outcome with our customers in due course.

Nāku noa, nā,

Andrew Kerr
Head of Policy, Regulation, and Markets
POWERCO

[2] https://vimeo.com/715864739/f54cec7ad2
[3] https://comcom.govt.nz/news-and-media/media-releases/2022/process-for-setting-powercos-electricity-revenue-to-2025-gets-underway

Attachment 1: Commentary on key issues and a few others

Overview

The Paper outlines key issues for Powerco's DPP3 in Table 2 (para 66). Our comments on these are

Paper issue (reference)	Powerco comment
Justification for cost/suitability (52-55)	Set revenues using a BBAR approach 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 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[4].
Price changes (56-58)	We agree smoothing should be considered The impact of annual price changes is a consideration both for the Commission in setting the revenue path and for Powerco in using the revenue smoothing tools available under the revenue cap mechanisms. Although not bound by the DPP determination, Powerco elected to defer around $12.5m of revenue to FY25 to smooth revenues in FY23 (this year) by keeping the annual revenue change below 10%[5].
Historical reference period (59-61)	We agree the appropriate length of the reference period is worth reviewing The Commission has described the transition arrangements for other CPPs, and it's clear that they each have a range of circumstances which affect the relevance of historical data. The approach to transition off the CPP will reflect those circumstances. For the most part, our CPP wasn't a short-term 'one-off' catchup in investment. It was a reset to a new baseline. Attachment 2 contains additional data and commentary about Powerco's historical data and why our pre-CPP expenditure levels are not reflective of the efficient long-term average investment requirements.
IRIS scheme (62-63)	A BBAR approach would ensure IRIS incentives are maintained A BBAR approach transparently links revenues to costs. Sharing benefits with consumers can amount to a significant amount of money: our prices this year (FY23) were reduced by around $1.5m due to opex and capex IRIS incentive payments. As the Paper notes, a rollover would not explicitly provide a building blocks model (IM clause 3.3.11) to calculate the capex washup component of the capex incentive amounts. Not ideal.

[4] The FY23 revenue is potentially not a suitable basis for rolling over prices because it is impacted by the CPP's mixed WACC (2 Years of DPP WACC and 3 years of DPP3 WACC) and WACC change adjustment. We have completed some background modelling of this which we are happy to share this with the Commission as part of improving the industry knowledge-base, even though we do not support prices being set using this approach in this circumstance.

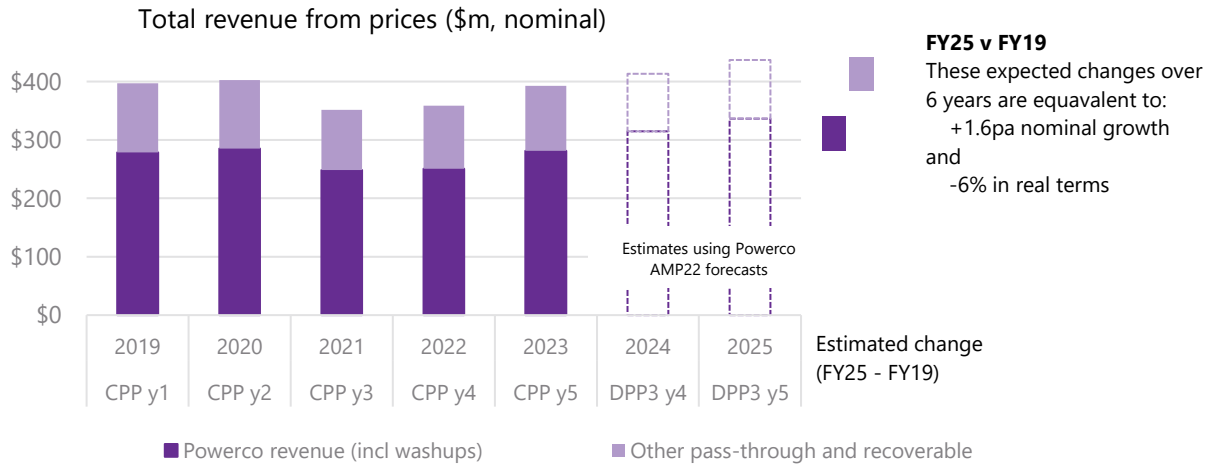
[5] See the 2023 annual price-setting statement at https://www.powerco.co.nz/who-we-are/disclosures-and-submissions/electricity-disclosures

The remainder of this section contains additional comments about the issues raised in the Paper, along with some additional discussion topics.

Price levels

We thought it could be helpful for stakeholders to get a sense of the possible price impacts to 2025 implied by our AMP forecasts in comparison to historical prices[6]. There are a range of factors affecting historical and forecast prices eg the change to WACC (2021), transmission prices expected from 2024, and the level of 'washup' amounts[7]. Looking over a long period allows these to be smoothed out. The data suggests that:

- total revenues are expected to increase by around 5% in FY24 and FY25. The direction of the prices changes in DPP3 aligns with what was anticipated when the 2018 CPP decision was made: the Commission estimated Powerco's revenues would increase by around 10%[8]
- Using year 1 of CPP (FY19) as a reference point, estimated FY25 revenue is 6% lower in real terms.



***Caveat**: This analysis is based on estimates of many moving parts that affect our revenue from prices eg transmission prices, BBAR modelling assumptions, and demand and connection trends.*

Input cost inflators

If Powerco's price path is reset based on current and projected profitability using a BBAR model (which we support), assumptions are required about the input cost inflators. These inflators translate costs between nominal and 'constant price' terms. The Paper suggests this is a "roll-over" issue (Table 2). It is also a BBAR issue. 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 (para 65), including cost inflators. While CPI and WACC are locked in by the input methodologies, the input cost inflators are not.

[6] A BBAR model has been used to estimate revenues using Powerco's 2022 Asset Management Plan forecasts, along with estimates of other inputs like transmission costs and the inputs to washup amounts.
[7] A valuable document for interested stakeholders is the Commission's excellent guidance note with worked examples https://comcom.govt.nz/__data/assets/pdf_file/0022/223753/Revenue-cap-guidance-for-electricity-lines-businesses-August-2020.PDF
[8] Powerco CPP Final decision, attachment I.

The DPP3 BBAR models includes forecast of input cost inflators from 2019. Our AMP22 forecasts are in real terms, but require assumptions about cost inflators too - these use more recent forecasts and partly explain the change to our forecast costs from the 2021 to the 2022 AMPs. This matters because the Commission's process translates between nominal and 'real' costs, and the assumptions about input cost inflators are part of the mix.

Updating the DPP3 cost indices is essential to determining cost-reflective expenditure allowances and preserving Powerco's incentives to innovate and invest because it:

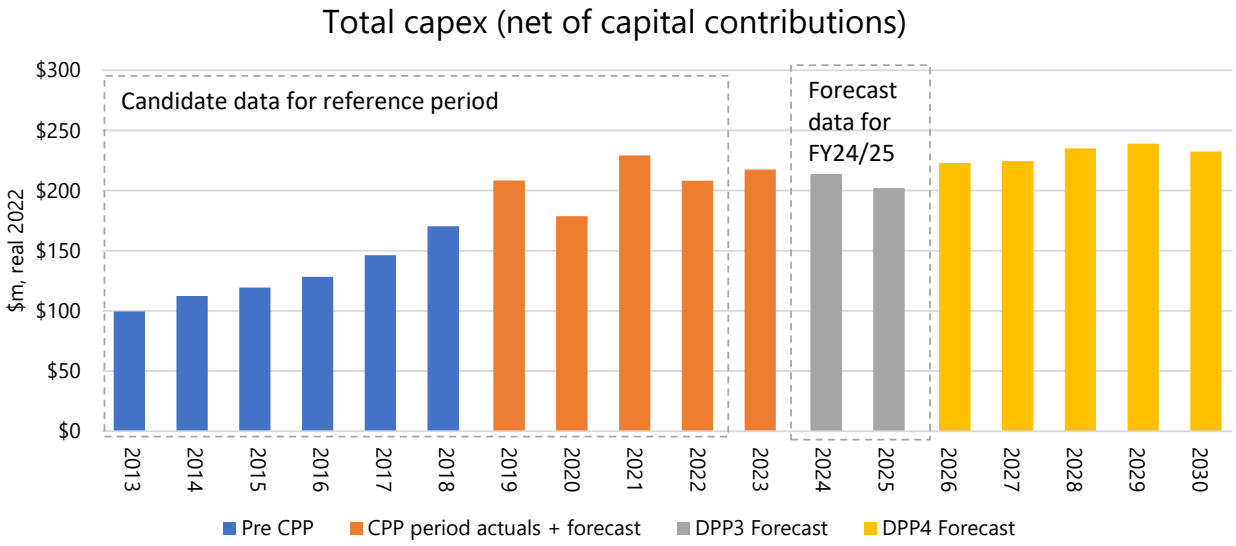
- provides an ex-ante expectation that revenues reflect estimated costs - this condition must be met for a regulated supplier to have an ex-ante expectation of earning normal returns.
- ensures IRIS expenditure allowances are appropriate - as expenditure allowances are set in nominal terms, insufficient input cost inflation will increase the risk of Powerco incurring IRIS penalties even if we spend exactly to our allowances in real terms

The task of updating the cost indices can be achieved in a relatively low-cost way using a method consistent with DPP3. Current forecasts of PPI, LCI and CGPI are readily available from independent sources, such as NZIER's quarterly projections. Attachment 3 is an independent and in-depth discussion about the rationale for updating the cost inflators. We have commissioned this work to inform the Commission's assessment of issues for Powerco, and more generally to add to the industry knowledge-base on how CPP-DPP transitions are managed.

Historical reference periods

The Commission is seeking feedback on the appropriate length of the historical reference period for capex and opex forecasts. The reference periods are used to define an average against which forecasts are assessed. 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.

For capital expenditure, the chart below summarises the level of these costs in real terms along with the reference period range (2013-22) and the forecasts for his period (FY24/25).



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 (the grey bars ■) is better represented by more recent historical data compared to earlier historical data. Attachment 2 provides commentary on historical and forecast expenditure at a cost category level to provide some context about the dynamics through time and the level of cost expected to continue in the future (para 61).

Determining an appropriate historical reference period length will require the Commission to decide what years of our past capital expenditure adequately bound our future expenditure needs while meeting the needs of the Commerce Act. In applying its discretion, we think the Commission should consider:

- 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.
- 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.
- 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.

Our 2021 and 2022 asset management plans set out the detailed basis for our investment plans for the FY24 and FY25 periods and beyond. We are aware and support the reopener mechanisms that are available to address deviations from these forecasts. We anticipate needing to use these to accommodate large and exciting growth opportunities that customers are considering that have not been factored into these forecasts and are most likely to occur beyond FY25.

Keeping customers in the loop (reporting)

For the CPP we have lifted our game on how we report on our activities and the benefits to customers (both qualitatively and quantitatively). A range of approaches are used, including quantitative reports eg out Annual Delivery Report[9] and articles on our website relating to specific programmes and projects. For example:

Improving how we manage our assets

We're working towards achieving the international standard

At Powerco, our business is asset management. Whether it's underground electricity cables and gas pipes, overhead lines, substations or transformers – we manage a vast network of assets in order to keep the lights on and the gas flowing.

We're good at managing our assets, but we know we could be better still; that's why we're working towards achieving ISO55001 accreditation by the end of 2021.

ISO55001 is recognised as the international standard for certification of asset management systems. By becoming ISO55001 certified, we can be confident that our processes, systems and capabilities are fit-for-purpose and aligned with international best practice. Meaning that you, our customers, can be confident that we're managing your network effectively and efficiently.

See https://www.powerco.co.nz/what-we-do/our-projects/improving-how-we-manage-our-assets

Pole-top photography and LiDAR

We use pole-top photography and LiDAR (Light Detection and Ranging) technology on board helicopters to regularly survey our network of 20,000km overhead lines and 264,000 poles.

Pole-top photography involves flying over our network and using GPS coordinates to take high resolution digital photographs of overhead lines, poles and associated equipment.

For LiDAR, a sensor mounted on the bottom of a helicopter measures how long it takes a laser to travel to the ground and return to the sensor, and then uses the information to render a 3D model of our network.

Both technologies allow us to assess the condition of our network, check for defects, and monitor vegetation that has the potential to grow into lines.

It's an efficient and effective way to monitor the condition of our assets, identify potential issues and resolve them before they cause harm or outages.

See https://www.powerco.co.nz/what-we-do/our-projects/pole-top-photography-and-lidar

We welcome a discussion with the Commission and stakeholders about potential reporting initiatives that could be included in our DPP3 transition decision to demonstrate the benefits of delivering our asset management plan (and aligned with meeting the purpose of the Commerce Act). These could be voluntary or prescribed – whichever is best for our customers.

Other technical issues

There are a range of technical issues involved in merging the CPP and DPP financial models which could be considered as part of modelling the final Determination. The purpose of this section is simply to note issues of this nature – we are happy to engage with the Commission, probably with the help of a whiteboard or spreadsheet model, to get to a common understanding.

[9] https://www.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-delivery-report-1-april-2020-31-march-2021.pdf

Incorporating the 'sign' error in the pass-through balance definition in the CPP determination	Powerco's CPP determination expressed the pass-through balance calculation is expressed as an incorrect written definition. **Actual pass-through costs and recoverable costs** means: (a) 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**); and The impact 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. 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. **pass-through balance allowance** means— (a) for the first **assessment period** of the **DPP regulatory period**, the amount calculated in accordance with the formula— (-1) × *ePTB* × (1 + ***67th percentile estimate of post-tax WACC***) where- '*ePTB*' means a demonstrably reasonable estimate amount of the **pass-through balance** as of 31 March 2020 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.
IRIS settings	The paper discusses the potential of an 'intermediate' retention rate for capex IRIS. We agree that the retention factor should align with DPP3 capex IRIS settings. Our understanding of the capex IRIS mechanics (IM clause 3.3.12) is that no special adjustment is required: we would expect the CPP retention factor to apply to the capex from FY21-23, and the DPP3 retention factor to apply for FY24-25. We are happy to discuss this with the Commission.
Year 1 price settings (P0)	We're keen to understand the treatment of inflation for starting prices. In particular, the impact of a mid-period starting price reset on the inflation hedge implicit in the Part 4 regime. This is technical - we are happy to discuss with the Commission modelling team.

Attachment 2 Commentary on historical and forecast expenditure

Overview

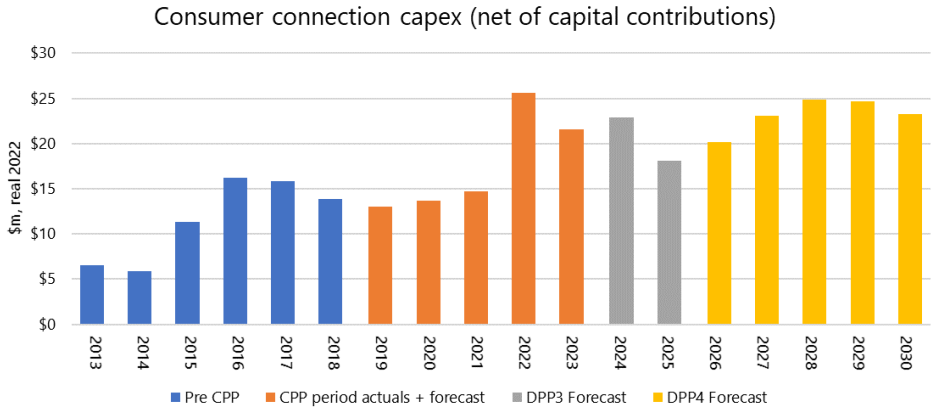
Powerco's expenditure forecasts are an important input to the Commission's models for setting revenues. The Commission has invited Powerco to provide evidence such as expected costs, to explain how it's preferred approach for the next two years would be consistent with the Commerce Act requirements (para 67). Our most recent forecasts are published in our 2022 Asset Management Plan published in March 2022[10]. Section 4 of that document summarises the drivers of changes to our forecasts from our 2021 AMP which has detail about the composition and drivers for forecasts.

The purpose of this attachment is to provide the nature and scale of differences though time to inform the Commission's assessment of the relevance of historical data to our forecasts. Para 59-61 in the Paper raises the issue of how far back the appropriate length of the historical reference period is, particularly for capital expenditure. In addition to this information we are happy to walk through the evolution of these forecasts, and comparisons to allowances, over the CPP period – it's not something easily or effectively done via a submission. The Commission's Performance Accessibility Tool is also a really useful way to engage with some of this information[11].

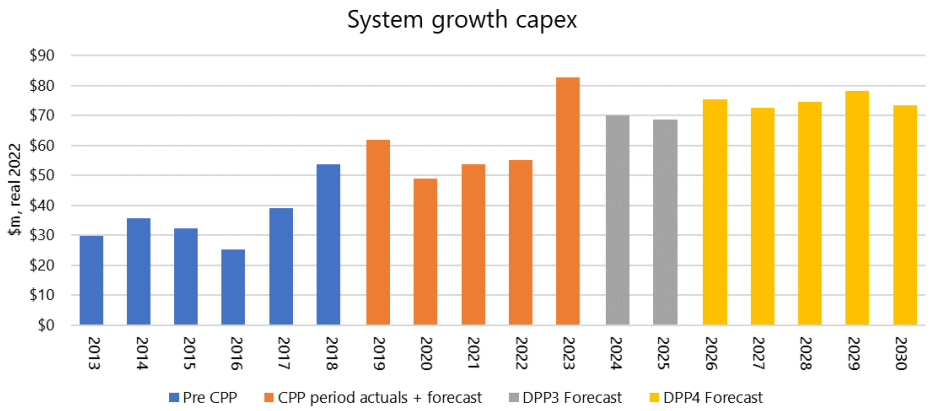
Capital expenditure forecasts[12]

The section steps through the categories of capital expenditure (capex). All figures in the charts below are in constant $2022 (using historical and the NZIER Q2 2022 forecast CPI).

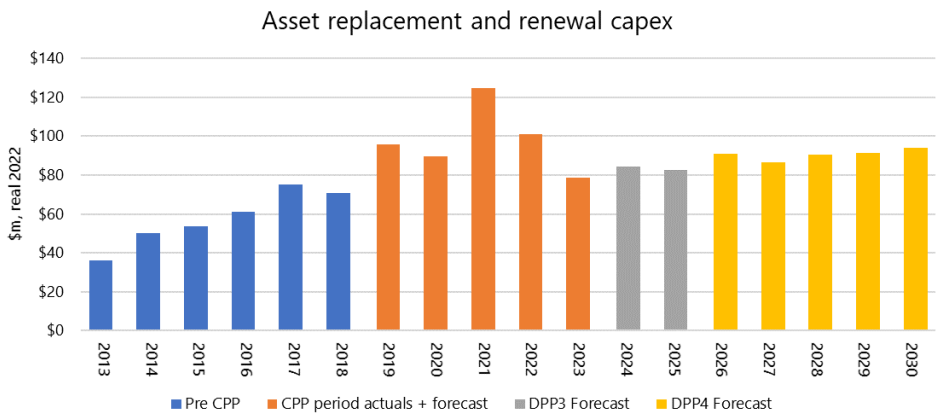
[10] https://www.powerco.co.nz/-/media/project/powerco/powerco-documents/who-we-are---pricing-and-disclosures/disclosures/electricity-disclosures/2-electricity-asset-management-plans/2022-electricity-asset-management-plan.pdf
[11] https://comcom.govt.nz/regulated-industries/electricity-lines/electricity-distributor-performance-and-data/performance-accessibility-tool-for-electricity-distributors
[12] 2013-2021 figures sourced from Powerco Information disclosures, 2022-2030 figures sourced from Powerco AMP2022, with 2022 an estimate based on unaudited data.



Pre CPP	Reflects growth in our customer connection investment requirement
CPP	Actual investment requirement was above CPP approved levels
Forecasts	Increase in the number, size and complexity of new connections, supporting our customers' increasing electrification. *Pre-CPP expenditure levels don't reflect our customers' long-term or near-term customer connection investment requirements*

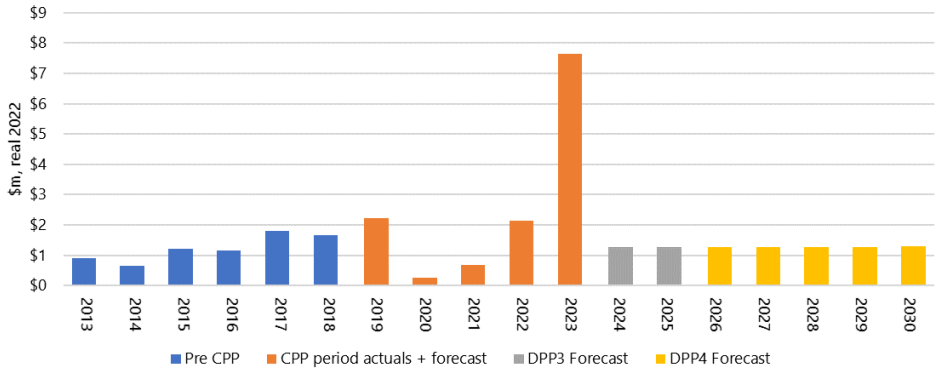


Pre CPP	Regulatory allowances constrained our ability to invest relative to our long-term requirements.
CPP	CPP approved uplift in investment to address capacity and security constraints, with electrification driving demand in later years
Forecasts	Continued investment required to address on-going capacity constraints plus changing customer demands as further electrification occurs. *Pre-CPP expenditure levels don't reflect our long-term or near-term system growth investment requirements*

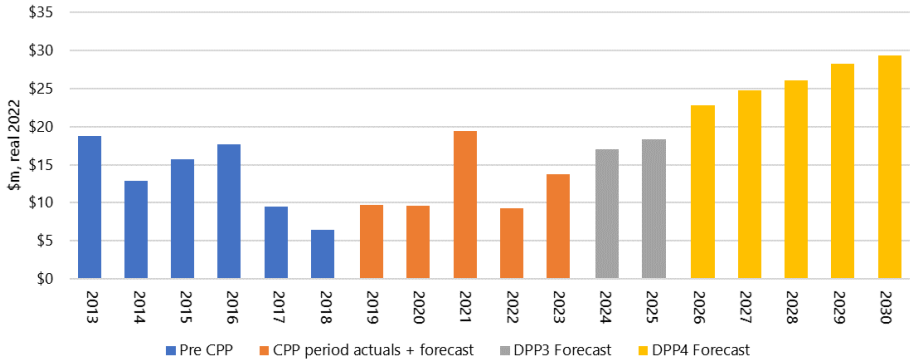


Pre CPP	Regulatory allowances constrained our ability to invest relative to our long-term requirements
CPP	CPP approved uplift in investment to allow renewal of assets to address safety and reliability risks and secure better long term outcomes for our customers Models used in the CPP approval process demonstrated that the approved elevated expenditure would be required beyond the CPP period
Forecasts	Need for continued investment in our existing network as set out in our CPP proposal. Current forecasts are largely aligned to forecasts set out in our CPP Proposal. *CPP expenditure reflects our near-term asset replacement and renewal investment requirements as scrutinized as part of the CPP approval process. Pre-CPP expenditure levels don't reflect investment requirements*

Asset relocations capex (net of capital contributions)



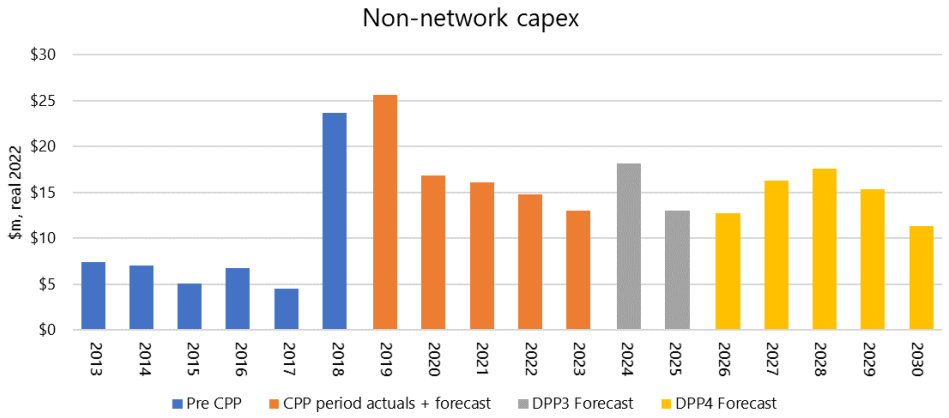
Total reliability, safety and environment capex



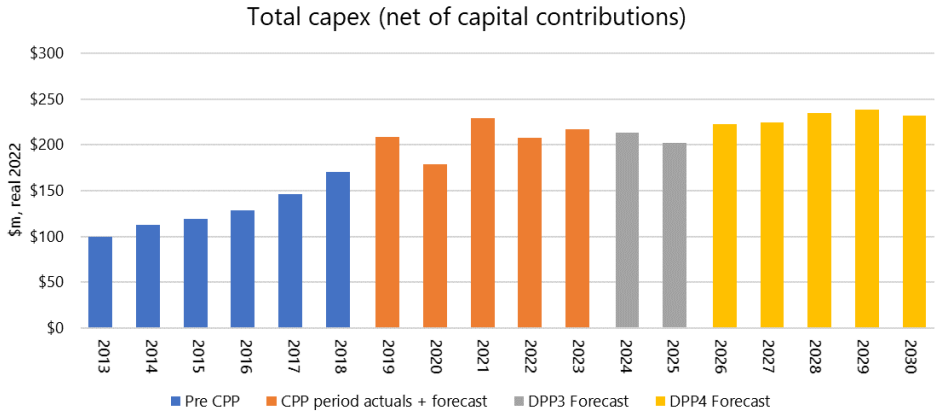
Pre CPP	Reflected our customers' asset relocation requirements
CPP	Actual investment requirement is above approved levels
Forecasts	Based on historical average adjusted to account for any known large projects including Waka Kotahi's Takitimu North Link in 2023[13]. *Average historical expenditure is a reasonable forecast of known future investment requirements*

Pre CPP	Constrained investment due to renewal and growth expenditure being prioritised
CPP	Continued historical investment levels with a change in focus to the western part of our network
Forecasts	Increased investment required to facilitate our Advanced Distribution Management System (ADMS) strategy, make use of new technology to improve customer reliability outcomes, and to transition us to an open-access network . *Neither pre-CPP nor CPP investment levels reflect our long-term or near-term investment requirements*

[13] https://www.nzta.govt.nz/projects/sh2-waihi-to-tauranga-corridor/takitimu-north-link/



Pre CPP	Constrained investment resulting in continued use of a complex environment of bespoke applications linked with legacy core systems
CPP	Approved increased investment to support Enterprise Resource Planning (ERP) implementation and expanded office facilities
Forecasts	On-going investment requirement in ERP and ADMS as well as office upgrades to support larger workforce and growth in regional offices. *Pre-CPP expenditure levels do not reflect long-term or near-term investment requirements. Late CPP expenditure is more reflective*

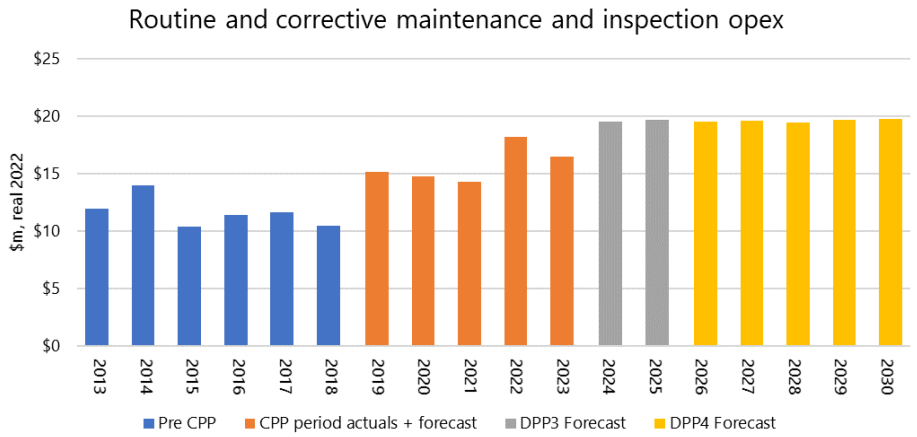


Summary

- Total capex reflects the aggregation of all the components discussed at a category level.
- Forecast investment levels are more closely aligned with the CPP than the pre-CPP period.

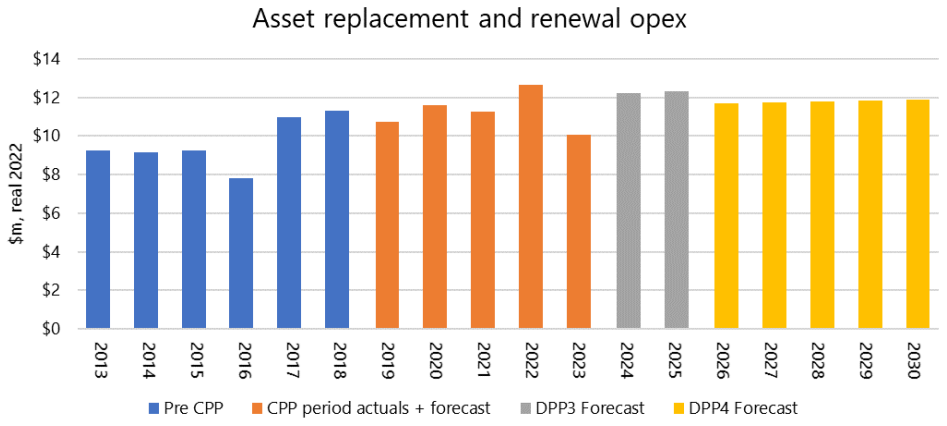
Operational expenditure forecasts[14]

The section steps through the categories of operational expenditure (opex). All figures in the charts below are in constant $2022 (using historical and the NZIER Q2 2022 forecast CPI).

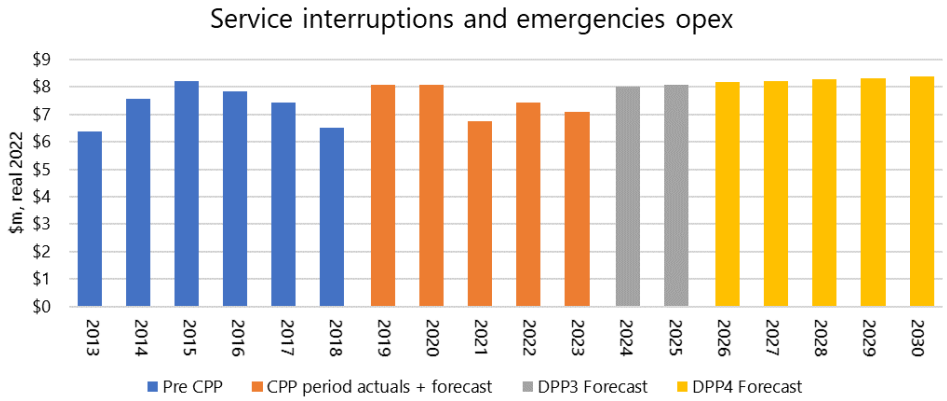


Pre CPP	Largely time-based maintenance
CPP	Increased range and scope of asset inspections, condition assessments and servicing activities.
Forecasts	Continued elevated levels of expenditure reflecting CPP approved efficient inspection activities. Expenditure also impacted by renewal of major field services contracts . *Recent investment levels reflect future expenditure requirements.*

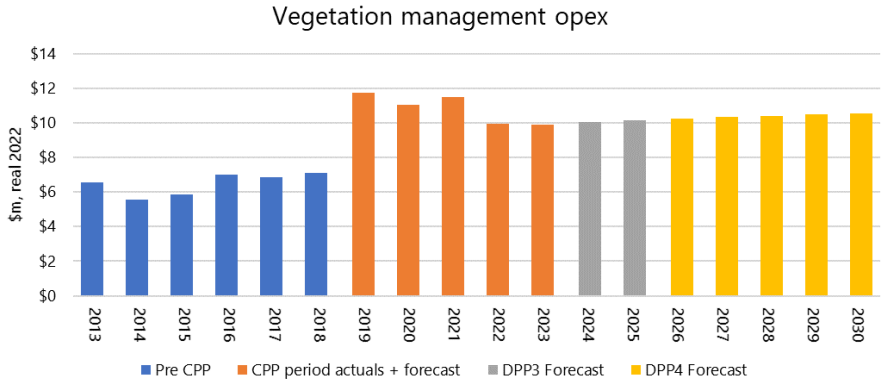
[14] 2013-2021 figures sourced from Powerco Information disclosures, 2022-2030 figures sourced from Powerco AMP2022, with 2022 being an estimate based on unaudited data



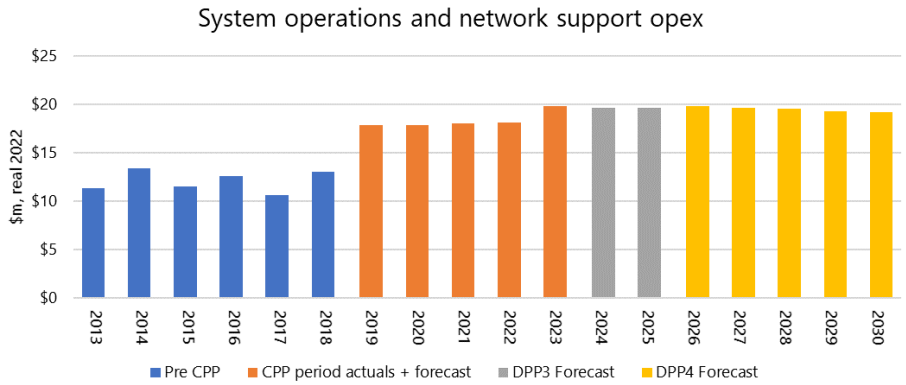
Pre CPP	Constrained expenditure levels resulted in increased backlog of defects
CPP	Increased expenditure to address defect backlog
Forecasts	Increased levels of expenditure to address additional defects identified through Improved inspection practices. Expenditure also impacted by renewal of major field services contracts *Recent investment levels reflect future expenditure requirements.*



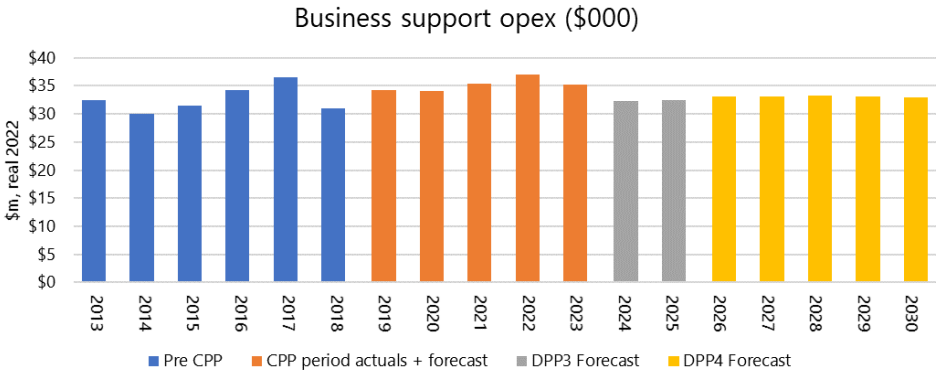
Pre CPP	Annual expenditure on reactive work is driven by the frequency and severity of network faults.
CPP	Similar to pre-CPP levels, with a small increase for additional fault personnel.
Forecasts	Increase in labour rates and fault staff partially offset by efficiencies from improved network asset condition due to CPP renewals investment. *CPP investment levels reflect future expenditure requirements*



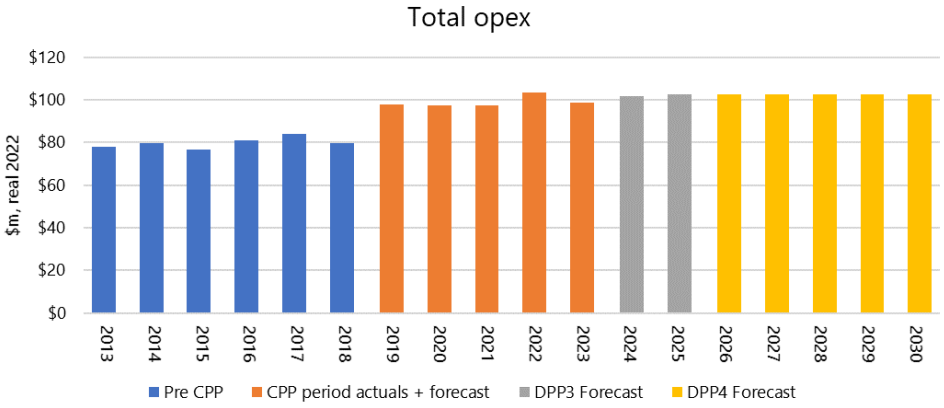
Pre CPP	Reactive response where vegetation issues resolved as we became aware of them via line inspections, notifications or following faults. Vegetation related faults increasing over time.
CPP	Adopted a proactive response through cyclical trimming with higher volumes in the first cycle to catch-up and establish a sustainable regime.
Forecasts	Maintain at current levels (end CPP) with slight upward trend due to increasing network size. *Recent expenditure levels reflect future expenditure requirements*



Pre CPP	Aligned with lower capex requirements
CPP	Increase in internal capacity and capability to plan, design and manage uplift in network investment for CPP delivery, and improve our asset management maturity.
Forecasts	Continued investment required to support elevated capex programme and maintain internal capacity and skills, and address increased complexity and scale of solutions (including distributed generation and supporting customer decarbonisation and expansion) *Pre-CPP investment levels do not reflect current or future expenditure needs. Recent expenditure levels best reflect future investment needs*



Pre CPP	Constrained expenditure
CPP	Increased expenditure on corporate FTEs. Higher ICT opex a direct correlation with increasing headcount
Forecasts	Continued investment to transition to cloud-based services, increases cyber security and .focus on efficiencies *Recent expenditure levels reflect near-term investment needs*



Summary

- Total opex reflects the aggregation of all the components discussed at a category level.
- Forecast opex levels are more closely aligned with our most recent expenditure.

Attachment 3 PWC report on Default Price-Quality Path Cost indices

[redacted]

Andrew Kerr
Head of Policy Regulation and Markets
Powerco Limited
PO Box 62
Wellington 6011

16 June 2022

Default Price-Quality Path Cost Indices

Dear Andrew

1. This report considers whether cost indices should be updated for the Default Price-Quality Path (DPP) to apply to Powerco Limited (Powerco) from 1 April 2023. It refers to regulatory precedents and determinations. Relevant extracts from these are replicated in the Attachments.
2. This report is provided in accordance with our letter of engagement dated 24 August 2018 and your instructions of 3 February 2022 and is subject to the Important Notice attached.

Background

3. The current Electricity Distribution Business (EDB) Default Price-Quality Path[1] (DPP3) was set in RY20[2] using a forecast of the consumer price index (CPI) for the price path and forecast cost indices for the expenditure allowances. Recently, actual and forecast CPI and input cost inflation have increased above those forecasts. The Input Methodologies[3] (IMs) specify that a RY20 CPI forecast must be used in the DPP3 price path[4]. There is discretion in how the expenditure allowances are set.

4. The purpose of input cost inflation for the expenditure allowances is to provide for changes in the real price of inputs that are outside the control of EDBs. Input cost inflation reflects macroeconomic factors. This is not a risk which EDBs can effectively manage.

5. The DPP is set in a relatively low cost way. At the beginning of a DPP regulatory period, the DPP is determined using a common method for all EDBs subject to the determination. However, there are some additional considerations for those EDBs which transition from a Customised Price-Quality Path (CPP) to the DPP, during a DPP regulatory period. Section 53X of Part 4 of the Commerce Act specifies certain requirements including that at the end of a CPP the DPP that is generally applicable

[1] NZCC, Electricity distribution services default price quality path determination 2020, 27 November 2019
[2] RY refers to the 12 month period ending 31 March
[3] NZCC, Electricity Distribution Services Input Methodologies Determination 2012, incorporating all amendments to 29 January 2020, 29 January 2020
[4] IMs, clause 3.1.1(7)(b) and (8)

to other EDBs applies, and that starting prices may be either rolled over from the CPP or reset by the Commerce Commission.

6. Powerco's CPP[5] ends in RY23 and Powerco will transition to DPP3 from the beginning of RY24. Assuming Powerco's price path is reset based on current and projected profitability[6], new expenditure allowances will be determined for RY24 and RY25. Accordingly, there is an opportunity to update the DPP3 cost indices to better reflect the current economic conditions facing Powerco and derive realistic expenditure allowances.

DPP is to be set in a relatively low cost way

7. Consistent with a relatively low cost method, DPP3 was set using economy wide forecasts of the Producers Price Index (PPI), Labour Cost Index (LCI) and Capital Goods Price Index (CGPI). These forecasts were used to convert each EDB's constant price expenditure forecasts to nominal terms.

8. This method can be maintained for Powerco's DPP as updated forecasts of PPI, LCI and CGPI can be applied to the constant price expenditure forecasts to be determined for Powerco during RY23. Updating the cost indices is consistent with the s53X(1) requirement to apply the DPP that is generally applicable, ie: DPP3. It ensures consistency with the approach adopted for the other EDBs subject to DPP3 because it:

    a) reflects the economic conditions facing Powerco at the time their DPP3 starting prices are determined

    b) is consistent with Powerco's constant price expenditure forecasts to be determined in RY23

    c) is consistent with the DPP3 method for setting expenditure allowances.

9. As current forecasts of PPI, LCI and CGPI are readily available from independent sources, such as NZIER's quarterly projections, the same relatively low cost approach to DPP3 can be retained.

Ex-ante expectation of earning normal returns

10. Where starting prices are reset, they are based on current and projected profitability. Thus, DPP price paths provide a regulated supplier with an ex-ante expectation of earning normal returns. In order for this to be true, revenue allowances reflect estimated costs. If expenditure allowances are set unrealistically low due to factors beyond an EDB's control, this condition will not be met.

11. The Incremental Rolling Incentive Scheme[7] (IRIS) generates financial penalties or rewards, depending on whether an EDB overspends or underspends their DPP expenditure allowances. As expenditure allowances are set in nominal terms, insufficient input cost inflation will increase the risk of an EDB incurring IRIS penalties even if they spend exactly to their allowances in real terms.

[5] NZCC, Powerco Limited Electricity Distribution Customised Price Quality Path Determination 2018, 28 March 2018
[6] As per s53P(3)(b) of Part 4 of the Commerce Act, 1986
[7] IMs, Part 3, subpart 3

12. This outcome would be inconsistent with the overarching regulatory purpose to promote the long term benefit of consumers[8]. Specifically, it would compromise the objective of promoting competitive market outcomes, including:

    a) incentives to innovate and invest in regulated infrastructure assets (s52A(1)(a))

    b) incentives to meet customer demand for quality of service (s52A(1)(b))

    c) an ex-ante expectation of earning normal returns, while limiting the ability to extract excessive profits (s52A(1)(d)).

Remedies for inadequate expenditure allowances

13. There are limited remedies for Powerco if the DPP price path does not provide an ex-ante expectation of a normal return due to inadequate expenditure allowances.

14. Current provisions for seeking additional expenditure allowances under a DPP include the major capex project reopeners[9] and the innovation project allowance[10]. However, neither of these provisions are able to address input cost inflation.

15. More substantive changes to price-quality paths can be made through a CPP application. DPP quality paths can also be modified following an application for a quality standard variation[11]. However, neither of these options is practical in Powerco's case given the relatively short two year DPP regulatory period that will apply. In addition, both options are complex and resource intensive processes, and neither seems appropriate for addressing a mechanical issue such as input cost inflation.

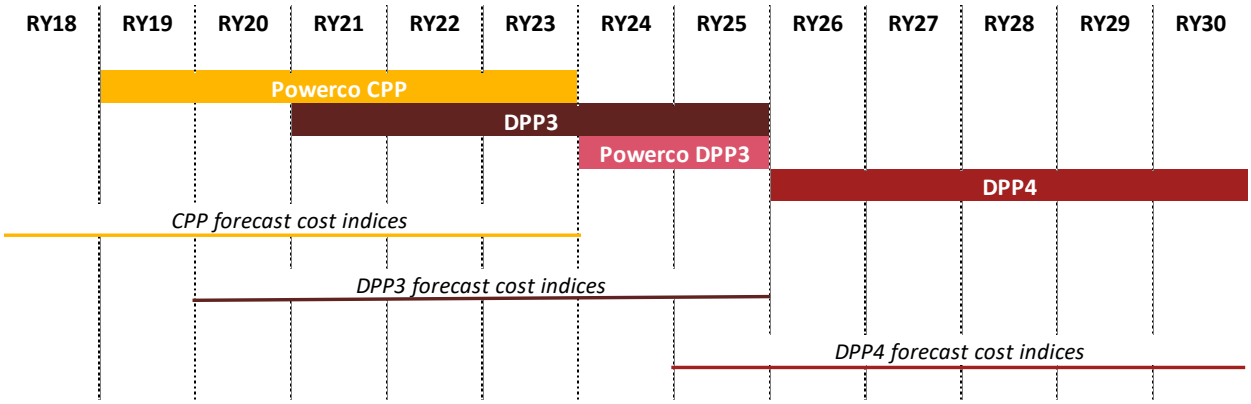
Powerco faces different circumstances to Wellington Electricity

16. Powerco was last subject to DPP2 in RY18. Powerco's 5 year CPP which commenced in RY19, involved a comprehensive process for establishing forecast expenditure allowances consistent with the CPP IMs.

17. Powerco's CPP cost indices were determined in RY18. If the DPP3 cost indices are applied to Powerco's DPP3, Powerco will need to wait until DPP4 (a seven year period) before input cost indices are updated to reflect current economic conditions, as illustrated below.

[8] Section 52(A)(1) of Part 4 of the Commerce Act
[9] IMs clause 4.5.6(1)(a)(vi) and (vii)
[10] IMs clause 3.1.3(1)(x))
[11] IMs clause 4.5.6(1)(b)

Figure 1: Forecasting cost indices for Powerco



18. At the beginning of RY22, one year into the current DPP regulatory period, Wellington Electricity (WE) transitioned from its 3 year CPP to DPP3. The DPP3 forecast cost indices were adopted for WE's price path.

19. The DPP3 forecasts were determined in RY20, and the WE decision was made in RY21. We note that WE's 3 year CPP[12] reflected a roll-over of the DPP2 price path, with incremental allowances based on simplified IMs and limited forecasting of inputs. Input cost indices were not updated at the beginning of WE's CPP. Thus, in practice WE's DPP3 is a reset of DPP2, albeit deferred one year, not unlike the process for other EDBs subject to the DPP.

20. During RY21 there was widespread uncertainty about the economic impacts of the pandemic and the general election. This was reflected in reduced certainty about macroeconomic forecasts and the impacts on the electricity distribution sector, which was a factor in the WE DPP3 decision[13]. For example, in explaining why updated input cost inflators were not adopted for WE's DPP, the final decision reasons paper[14] stated:

> *3.35 While we would prefer to reflect information about current economic conditions in our decision, we recognise the considerable uncertainty inherent in current forecasts and, in particular, the extent to which they may reflect temporary differences in conditions in different sectors.*

21. Updated macroeconomic forecasts are now available, which are not subject to the same level of uncertainty and the caveats expressed in RY21. Accordingly, current economic conditions can be reflected in Powerco's DPP price path with updated cost indices, consistent with the Commerce Commission's preference for WE, as noted above.

[12] NZCC, Wellington Electricity Lines Limited Electricity Distribution Customised Price-Quality Path Determination, 28 March 2018
[13] NZCC, Wellington Electricity Lines Limited's transition to the 2020-2025 Default Price-Quality Path, Reasons paper, 26 November 2020, discussion at paragraphs 3.15 – 3.38
[14] Ibid, page 19

22. The economic conditions which existed at the start of DPP3 are less relevant for Powerco than WE. This is because Powerco's price path will be reset at the start of year 4 of the regulatory period. WE's price path was reset at the start of year 2, 12 months after the initial economic forecasts took effect.

23. The decision to retain the DPP3 cost indices for WE was made after consideration of the change in economic conditions over that 12 month period. For Powerco, it is now appropriate to consider the change in economic conditions over the 36 month period since the DPP3 was set.

CPI is an inadequate hedge for Powerco

24. The DPP price path is determined using forecast CPI and is adjusted through the wash-up mechanism for actual CPI[15]. In principle, the CPI wash-up acts as a hedge against unforeseen input cost inflation during a DPP regulatory period.

25. Because Powerco's transition to the DPP occurs in year 4 of DPP3, applying actual CPI to Powerco's DPP price path does not, however, adequately hedge against input price inflation error. This is because the substitution of actual inflation into Powerco's DPP3 revenue allowance has limited impact. The CPI wash-up will only apply for one year for Powerco, but the forecast cost indices will apply for three years, as follows:

    a) forecasts of CPI for the price path are required from the second year onwards of the DPP regulatory period. This is because the starting price, which is determined in year 1 of a DPP regulatory period, is adjusted in subsequent years by CPI[16]. For Powerco, the CPI adjustment will apply in RY25

    b) forecast cost indices are required for the regulatory period and the year preceding the regulatory period. This is because the forecast cost base is derived from data from the penultimate year of the preceding regulatory period. For Powerco, forecast cost indices are required for RY23 to RY25.

26. We note that the CPI wash-up does not hedge against IRIS penalties.

Concluding comments

27. Updating the cost indices for Powerco's DPP maintains consistency with the DPP which is generally applicable to other distributors because it:

    a) provides an ex-ante expectation that revenues will reflect costs

    b) ensures that the expenditure allowances reflect the conditions facing Powerco at the time their DPP3 price path is set

    c) can be achieved in a relatively low cost way, using a consistent method to DPP3.

28. This differs to WE's DPP reset circumstances because:

[15] DPP3, Schedule 1.6
[16] IMs clause 3.1.1 (7)

a) macroeconomic conditions have changed since RY21

b) the CPI wash-up has limited actual impact as a hedge against input cost inflation due to Powerco's shorter DPP3 regulatory period.

29. We trust this letter assists Powerco in preparing for the transition to DPP3. If you have any questions, please contact us using the details below.

Yours sincerely

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Important Notice

This report has been prepared for Powerco to consider whether cost indices should be updated for the Default Price-Quality Path. This report has been prepared solely for this purpose and should not be relied upon for any other purpose. We accept no liability to any party should it used for any purpose other than that for which it was prepared.

This report has been prepared solely for use by Powerco and may not be copied or distributed to third parties without our prior written consent.

To the fullest extent permitted by law, PwC accepts no duty of care to any third party in connection with the provision of this report and/or any related information or explanation (together, the "Information"). Accordingly, regardless of the form of action, whether in contract, tort (including without limitation, negligence) or otherwise, and to the extent permitted by applicable law, PwC accepts no liability of any kind to any third party and disclaims all responsibility for the consequences of any third party acting or refraining to act in reliance on the Information.

We have not independently verified the accuracy of information provided to us, and have not conducted any form of audit in respect of Powerco. Accordingly, we express no opinion on the reliability, accuracy, or completeness of the information provided to us and upon which we have relied.

The statements and opinions expressed herein have been made in good faith, and on the basis that all information relied upon is true and accurate in all material respects, and not misleading by reason of omission or otherwise.

The statements and opinions expressed in this report are based on information available as at the date of the report.

We reserve the right, but will be under no obligation, to review or amend our report, if any additional information, which was in existence on the date of this report, was not brought to our attention, or subsequently comes to light.

This report is issued pursuant to the terms and conditions set out in our letter of engagement dated 24 August 2018 and your instructions of 3 February 2022.

Attachment A - Relevant clauses from the IMs

PART 3 INPUT METHODOLOGIES FOR BOTH DEFAULT AND CUSTOMISED PRICE-QUALITY PATHS

SUBPART 1 Specification of price

3.1.1 Specification and definition of prices

(7) For each **disclosure year** of the **DPP** or **CPP regulatory period** after the first **disclosure year**, 'forecast net allowable revenue' is calculated by applying-

(a) the **forecast net allowable revenue** for the preceding **disclosure year**;

(b) the **forecast CPI**, as specified in subclause (8); and

(c) any X factor applicable to the **EDB**.

(8) 'Forecast CPI' means-

(a) for a quarter prior to the quarter for which the vanilla **WACC** applicable to the relevant **DPP regulatory period** or **CPP regulatory period** was determined, **CPI** as per paragraph (a) of the 'CPI' definition and excluding any adjustments made under paragraph (b) of the **CPI** definition arising as a result of an event that occurs after the issue of the Monetary Policy Statement referred to in paragraph (b) below;

(b) for each later quarter for which a forecast of the change in headline **CPI** has been included in the Monetary Policy Statement last issued by the Reserve Bank of New Zealand prior to the date for which the vanilla **WACC** applicable to the relevant **DPP regulatory period** or **CPP regulatory period** was determined, the **CPI** last applying under paragraph (a) extended by the forecast change; and

(c) in respect of later quarters, the forecast last applying under paragraph (b) adjusted such that an equal increment or decrement made to that forecast for each of the following three years results in the forecast for the last of those years being equal to the target midpoint for the change in headline **CPI** set out in the Monetary Policy Statement referred to in paragraph (b).

3.1.3 Recoverable costs

(1) A recoverable cost is a cost that is-

(x) an amount drawn down by an **EDB** from its **innovation project allowance**

SUBPART 3 Incremental rolling incentive scheme

SECTION 1 Annual IRIS incentive adjustments

3.3.1 Calculation of annual IRIS incentive adjustment as recoverable cost

(1) A **non-exempt EDB** must calculate an **IRIS incentive adjustment** for each **disclosure year** of each **regulatory period**.

(2) The 'IRIS incentive adjustment' is the amount determined in accordance with the formula–

opex incentive amount + **capex incentive amount**.

PART 4 INPUT METHODOLOGIES FOR DEFAULT PRICE-QUALITY PATHS

SUBPART 5 Reconsideration of the default price-quality path

4.5.6 When price-quality paths may be reconsidered

(1) A **DPP** may be reconsidered by the **Commission** if-

(a) the **Commission** considers, or the **EDB** applies to the **Commission** and satisfies the **Commission**, that-

(i) subject to subclause (2), a **catastrophic event** has occurred;

(ii) a **change event** has occurred;

(iii) there has been an **error event**;

(iv) a **major transaction** has occurred;

(v) **false or misleading information** has been provided;

(vi) a **project** or **programme** of that **EDB** is an **unforeseeable major capex project**; or

(vii) a **project** or **programme** of that **EDB** is a **foreseeable major capex project**; or

(b) the Commission receives a quality standard variation proposal from an EDB and is satisfied that it complies with clause 4.5.5(2).

Attachment B - Relevant clauses from Part 4 of the Commerce Act

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.

53P Resetting starting prices, rates of change, and quality standards

(1) Before the end of the first and every subsequent regulatory period, the Commission must amend the section 52P determination by setting out the starting prices (as referred to in section 53O(a)), rates of change (as referred to in section 53O(b)), and quality standards (as referred to in section 53O(c)) that apply for the following regulatory period.

(2) In resetting starting prices, rates of change, and quality standards, the Commission must consult with interested parties.

(3) The starting prices must be either—

(a) the prices that applied at the end of the preceding regulatory period; or

(b) prices, determined by the Commission, that are based on the current and projected profitability of each supplier.

(4) Starting prices set in accordance with subsection (3)(b) must not seek to recover any excessive profits made during any earlier period.

53X What happens when a 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.

Attachment C - Relevant clauses from DPP3

Schedule 1.6: Calculation of wash-up amount for an assessment period

(3) For the purposes of paragraphs (2)(b)-(c) of Schedule 1.6, 'actual net allowable revenue' for the second to fifth **assessment periods** of the **DPP regulatory period** means the amount calculated using the following formula—

$$ANAR_{previous} * (1 + \Delta CPI_t) * (1 - X)$$

where—

$ANAR_{previous}$	is the 'actual net allowable revenue' of the previous **assessment period**;
X	is the annual rate of change as specified in Schedule 1.2; and
ΔCPI	is the derived change in the **CPI** to be applied for the **assessment period**, calculated in accordance with the formula— $\Delta CPI = \frac{CPI_{Jun,t-1} + CPI_{Sep,t-1} + CPI_{Dec,t-1} + CPI_{Mar,t}}{CPI_{Jun,t-2} + CPI_{Sep,t-2} + CPI_{Dec,t-2} + CPI_{Mar,t-1}} - 1$ where—
$CPIq,t\text{-}n$	is the **CPI** for the quarter year ending q in the 12-month period n years prior to year t; and
t	is the year in which the **assessment period** ends.