

## Attachment F Revenue path

### Purpose of the attachment

- F1 This attachment explains the rationale for our decisions related to the revenue path. It also explains the drivers behind changes in revenue from DPP3 to DPP4 and responds to stakeholder submissions on the topic.
- F2 It covers these specific areas:
- F2.1 a brief overview of the components of the revenue path and how they relate to one another;
  - F2.2 changes to the revenue path, stepping through:
    - F2.2.1 the “building blocks” revenues that reflect our forecasts of EDBs’ costs (including the cost of capital), and the factors that drive these changes;
    - F2.2.2 the impact of previously-accrued wash-up drawdown amounts and IRIS incentives amounts on changes in revenue allowances; and
    - F2.2.3 the impact of revenue smoothing decisions;
  - F2.3 decisions about:
    - F2.3.1 net allowable revenues;
    - F2.3.2 smoothing revenue increases to mitigate price shocks to consumers while considering EDB financeability;
    - F2.3.3 implementation of amendments to the wash-up from the IM Review;<sup>1</sup> and
    - F2.3.4 implementation of amendments to the IMs to apply IRIS in real (CPI-adjusted) terms.

---

<sup>1</sup> [Commerce Commission “Input methodologies review 2023 - Final decision - Financing and incentivising efficient expenditure during the energy transition topic paper” \(13 December 2023\), Attachment D.](#)

F3 This attachment is supported by **Attachment G**, which sets out in detail the financeability analysis we have applied as a sense check to the revenue path we have set.

## Overview of the revenue path

F4 This section explains the key components of the revenue path, how they operate together to regulate the revenue EDBs can recover, and the terminology we use.

### Prices vs revenues

F5 While the term used in s 53M of the Act is “prices” (hence price-quality path), the Act defines “prices” as including revenues, and allows us to set a revenue cap as the form of control on EDB prices. Under the EDB IMs, EDBs are subject to a revenue cap, so we generally refer to revenues in this attachment for the sake of clarity. Where we refer to ‘price’ or ‘prices’, this will generally mean the prices consumers face (or the proxies we use to estimate them).

### Controls on revenue

F6 We regulate the revenue EDBs can recover from their customers using two regulatory controls:

F6.1 the (primary) revenue path that determines the total revenue an EDB may recover from its customers and that is defined in terms of “forecast allowable revenue”;<sup>2</sup> and

F6.2 the (secondary) revenue smoothing limit that can require EDBs to defer revenue recovery in a present-value neutral way in some circumstances.<sup>3</sup>

---

<sup>2</sup> [Commerce Commission "Input methodologies review 2023 - \[Final\] Electricity Distribution Services Input Methodologies \(IM Review 2023\) Amendment Determination 2023 \[2023\] NZCC 35" \(13 December 2023\)](#), clause 3.1.1(1)(a).

<sup>3</sup> [Commerce Commission "Input methodologies review 2023 - \[Final\] Electricity Distribution Services Input Methodologies \(IM Review 2023\) Amendment Determination 2023 \[2023\] NZCC 35" \(13 December 2023\)](#), clause 3.1.1(1)(b). The circumstances where the revenue smoothing limit requires deferral are not specified in the IMs and are specified in the DPP. See the *Decisions R2.1 and R2.2: Form and size of the "Revenue Smoothing Limit"* section for more detail.

## Forecast allowable revenue

- F7 The primary revenue path defined by forecast allowable revenue is made up of four parts:
- F7.1 forecast net allowable revenue, that allows EDBs to recover forecast costs over the regulatory period;<sup>4</sup>
  - F7.2 forecasts of pass-through costs, that allow EDBs to pass on certain costs beyond their control to consumers (for example industry levies or transmission charges);<sup>5</sup>
  - F7.3 forecasts of recoverable costs, that (largely) implement regulatory adjustments such as wash-ups or incentives amounts;<sup>6</sup> and
  - F7.4 forecasts of revenue received under large connection contracts.<sup>7</sup>
- F8 This attachment mainly focuses on our decisions on 'forecast net allowable revenue', because this is what we determine when setting a DPP.
- F9 Pass-through and recoverable costs are largely determined by the EDB IMs and are largely a question of fact over the course of the regulatory period, rather than a matter about which we are required to exercise judgement.<sup>8</sup>

---

<sup>4</sup> [Commerce Commission "Input methodologies review 2023 - \[Final\] Electricity Distribution Services Input Methodologies \(IM Review 2023\) Amendment Determination 2023 \[2023\] NZCC 35" \(13 December 2023\)](#), clause 3.1.1(3)(a).

<sup>5</sup> [Commerce Commission "Input methodologies review 2023 - \[Final\] Electricity Distribution Services Input Methodologies \(IM Review 2023\) Amendment Determination 2023 \[2023\] NZCC 35" \(13 December 2023\)](#), clause 3.1.1(3)(b) and clause 3.1.2.

<sup>6</sup> [Commerce Commission "Input methodologies review 2023 - \[Final\] Electricity Distribution Services Input Methodologies \(IM Review 2023\) Amendment Determination 2023 \[2023\] NZCC 35" \(13 December 2023\)](#), clause 3.1.1(3)(c) and clause 3.1.3.

<sup>7</sup> [Commerce Commission "Input methodologies review 2023 - \[Final\] Electricity Distribution Services Input Methodologies \(IM Review 2023\) Amendment Determination 2023 \[2023\] NZCC 35" \(13 December 2023\)](#), clause 3.1.1(3)(d).

<sup>8</sup> For certain recoverable costs, we have the discretion under the IMs to further specify requirements in a DPP or CPP determination, see for example [Commerce Commission "Input methodologies review 2023 - \[Final\] Electricity Distribution Services Input Methodologies \(IM Review 2023\) Amendment Determination 2023 \[2023\] NZCC 35" \(13 December 2023\)](#), clause 3.1.3(2) and DPP4 Schedule 2.2.

- F10 Similarly, large connection contract revenue is added to the revenue path subject to the connection contract meeting the requirements set out in the EDB IMs with a wash-up to avoid other consumers bearing the cost of any revenue not recovered from the connecting party.<sup>9</sup>
- F11 However, certain recoverable costs – the wash-up drawdown amount and the IRIS incentive amounts – will have a material impact on the revenue EDBs can earn, and a flow-on impact on price shocks for consumer and on EDB financeability.
- F12 We have used the term “distribution revenue” to describe the combined total of forecast net allowable revenue and recoverable costs.

### **Summary of final decisions on forecast net allowable revenue**

- F13 Under the EDB IMs and consistent with section 53P(5) of the Act, forecast net allowable revenue over the regulatory period is specified in terms of:
- F13.1 “starting prices” – forecast net allowable revenue in the first year of the regulatory period;<sup>10</sup>
  - F13.2 the annual change in forecast CPI;<sup>11</sup> and
  - F13.3 an annual rate of change relative to forecast CPI, or “X-factor”.<sup>12</sup>
- F14 The starting prices and rates for each EDB are set out in Table F1.<sup>13</sup>

---

<sup>9</sup> [Commerce Commission "Input methodologies review 2023 - \[Final\] Electricity Distribution Services Input Methodologies \(IM Review 2023\) Amendment Determination 2023 \[2023\] NZCC 35" \(13 December 2023\)](#), clause 1.1.4(2) – definition of LCC.

<sup>10</sup> Starting prices are specified in Schedule 1.1 of the EDB DPP4 determination.

<sup>11</sup> The methodology for calculating CPI is specified in Schedule 1.3(2) of the EDB DPP4 determination.

<sup>12</sup> Applicable X-factors are specified in Table 1.2.1 of Schedule 1.2 of the EDB DPP4 determination.

<sup>13</sup> As the CPI component of the change in forecast net allowable revenue is determined based on updated values each year of the regulatory period, it is not set out here. This change was made as part of the 2023 IM Review.

**Table F1 DPP4 final starting prices and rates of change<sup>14</sup>**

EDB	Starting prices – FNAR in 2026 (\$m)	X-factor – rate of change relative to CPI <sup>15</sup>
Alpine Energy	73.4	0.0%
EA Networks	44.3	(10.7%)
Electricity Invercargill	16.9	(7.7%)
Firstlight Network	34.3	(10.2%)
Horizon Energy	34.1	(2.4%)
Nelson Electricity	7.2	(7.1%)
Network Tasman	37.2	(8.3%)
Orion NZ	231.4	(9.8%)
OtagoNet	34.6	(12.3%)
Powerco	446.2	(3.9%)
The Lines Company	48.6	(6.0%)
Top Energy	51.7	(13.5%)
Unison Networks	133.4	(11.8%)
Vector Lines	579.4	(8.0%)
Wellington Electricity	118.7	(9.6%)

**Drivers of change in forecast net allowable revenue between DPP3 and DPP4**

F15 This section discusses what is driving changes in forecast net allowable revenue in our final DPP4 decision compared to forecast net allowable revenue in DPP3. It steps through:

F15.1 final changes in ‘building blocks revenue’ (before any smoothing is applied);

F15.2 the impact of wash-up drawdown amounts and IRIS incentive amounts on ‘distribution revenue’; and

F15.3 the impact of our smoothing decisions.

---

<sup>14</sup> Aurora is currently subject to a CPP until 31 March 2026. They may rejoin the DPP on 1 April 2026. As such they have been excluded from the tables in **Attachment F**. Decisions related to Aurora’s revenue path will be made prior to their return to the DPP. See **Attachment H** for details.

<sup>15</sup> Section 53P(5) of the Act and the EDB DPP4 determination expresses X-Factors in ‘CPI minus X’ terms. The X-factor values presented here are negative (by accounting convention, in brackets). As such, they will allow forecast net allowable revenue to increase at these rates.

## Overall changes in unsmoothed net allowable revenue

F16 The changes to forecast net allowable revenue we have made are driven by EDBs' current revenue allowances not covering our forecasts of their costs for the DPP4 period. Table F2 compares (on a constant \$2026 basis) our final forecast net allowable revenues over the DPP4 period to a counterfactual where current allowances for DPP3 are rolled-forward, as provided for in s 53P(3)(a).

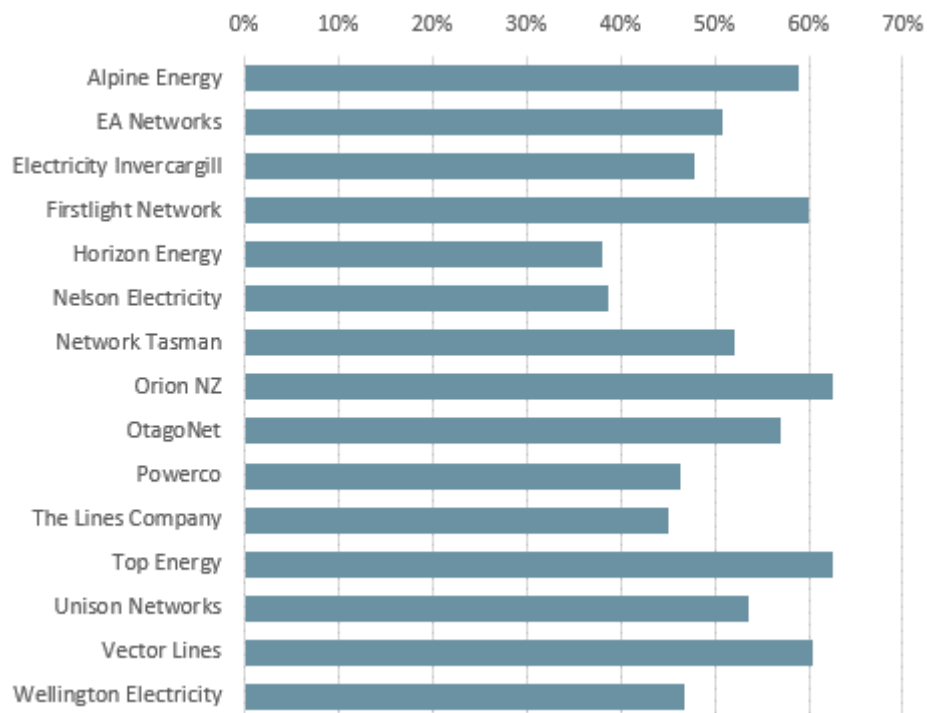
**Table F2 Final allowance compared to roll-over scenario (\$m, DPP4 Constant \$2026)**

EDB	DPP4 net allowable revenue	Roll-over scenario net allowable revenue <sup>16</sup>	% difference
Alpine Energy	333	215	-36%
EA Networks	247	167	-32%
Electricity Invercargill	89	62	-31%
Firstlight Network	189	121	-36%
Horizon Energy	162	120	-26%
Nelson Electricity	38	28	-26%
Network Tasman	198	133	-33%
Orion NZ	1,268	797	-37%
OtagoNet	199	130	-35%
Powerco	2,185	1,526	-30%
The Lines Company	248	175	-30%
Top Energy	304	191	-37%
Unison Networks	759	505	-33%
Vector Lines	3,067	1,956	-36%
Wellington Electricity	648	451	-30%

F17 Figure F1 shows the (unsmoothed) change in forecast net allowable revenue between the end of DPP3 and the beginning of DPP4 that would be necessary to make up for this shortfall. Figure F2 then illustrates the drivers of this difference at an industry-wide level.

<sup>16</sup> In this scenario, forecast net allowable revenue in the final year of DPP3 (2025) is projected forward at CPI.

**Figure F1 Unsmoothed nominal changes in final forecast net allowable revenue, 2025 to 2026**



F18 At an industry-wide level for the final decision:

F18.1 changes in DPP3 CPI and other components (that primarily reflects RAB growth over the DPP3 period) contributes 25% of the change;

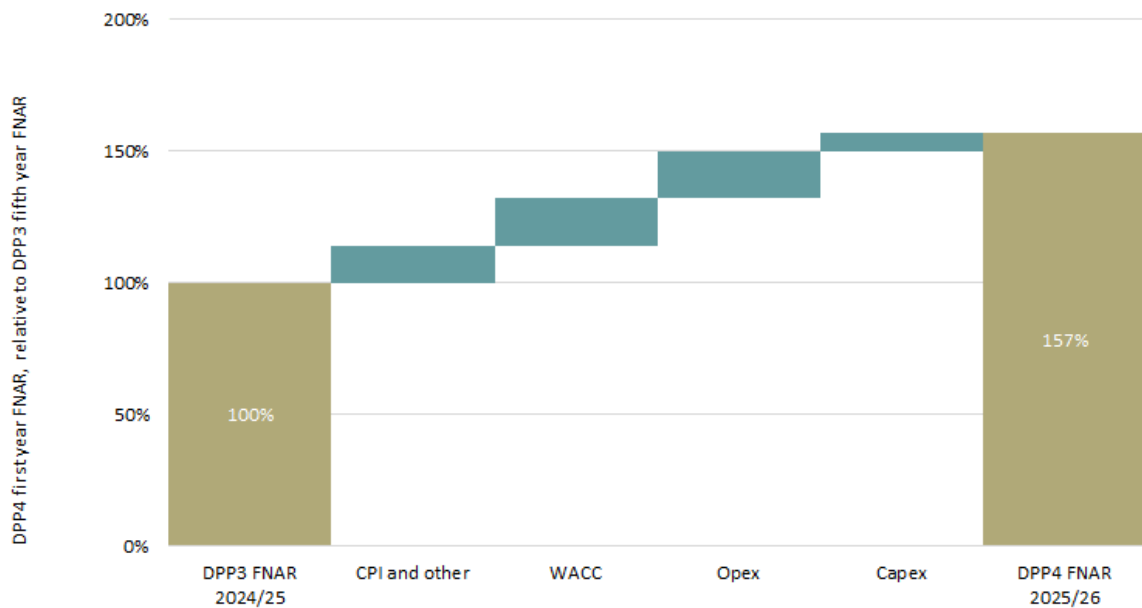
F18.2 the increase in the estimated cost of capital (WACC) contributes 32%;

F18.3 increases in opex contributes 31%; and

F18.4 increases in capex contributes 12%.

F19 The impact of these changes varies substantially across individual EDBs, both in terms of the total level of increase and the relative contributions of each major factor.

**Figure F2 Drivers of change in forecast net allowable revenues between DPP3 and DPP4**



F20 The next sections provide additional detail on the impact of DPP3 CPI and other components and the cost of capital. For details on changes in opex and capex allowances, see **Attachments B and C**.

### Effect of DPP3 CPI and other components

F21 This line item captures the financial starting point for our DPP4 financial model. Of these, the most material input is EDBs' (allocated) RABs and the growth in them over DPP3.<sup>17</sup> Drivers in RAB growth are shown in Figure F3.

F22 As this figure shows, commissioning new assets and revaluations for inflation have contributed to most of the growth in the RAB over the DPP3 period. Actual revaluations are calculated based on actual CPI,<sup>18</sup> which has been elevated (and higher than forecast) over period since 2020, as illustrated in Figure F4.

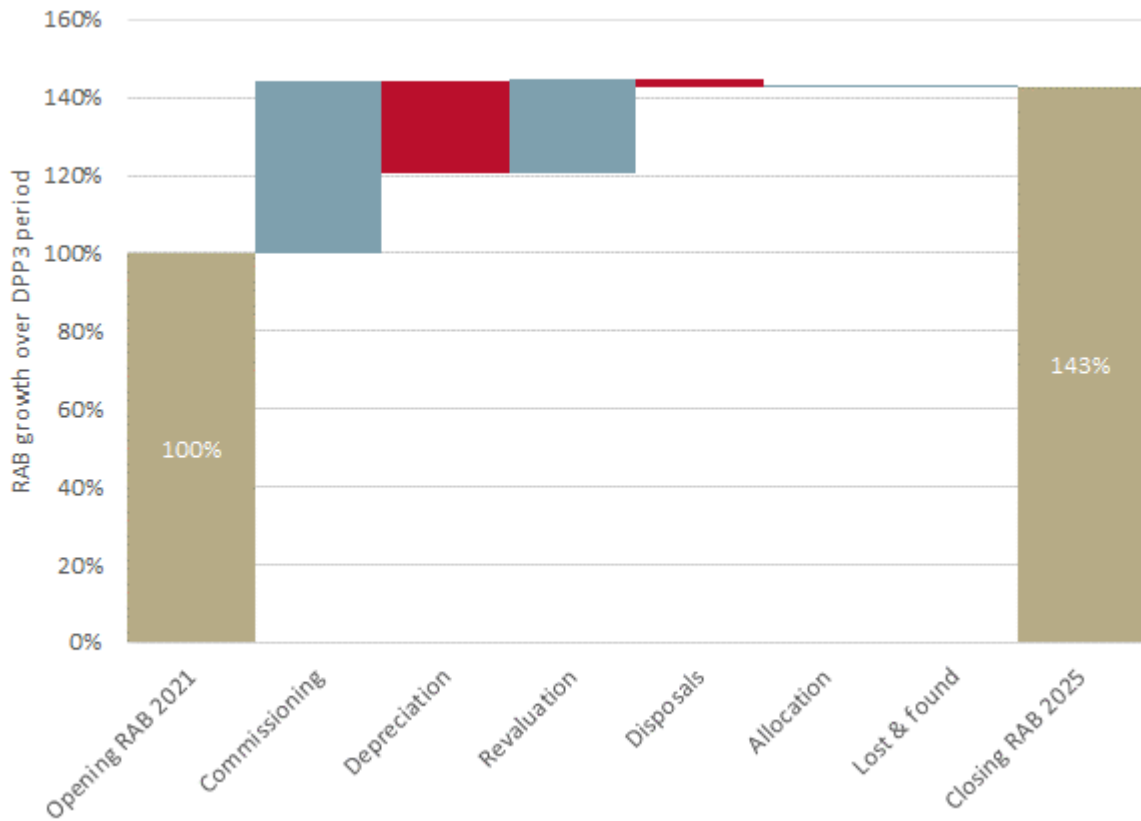
<sup>17</sup> The other initial conditions relate to: tax allowances, CPI as an element of the price path, CPI for forecast revaluations, and asset disposals.

<sup>18</sup> [Commerce Commission "Input methodologies review 2023 - \[Final\] Electricity Distribution Services Input Methodologies \(IM Review 2023\) Amendment Determination 2023 \[2023\] NZCC 35" \(13 December 2023\)](#), clause 2.2.9.

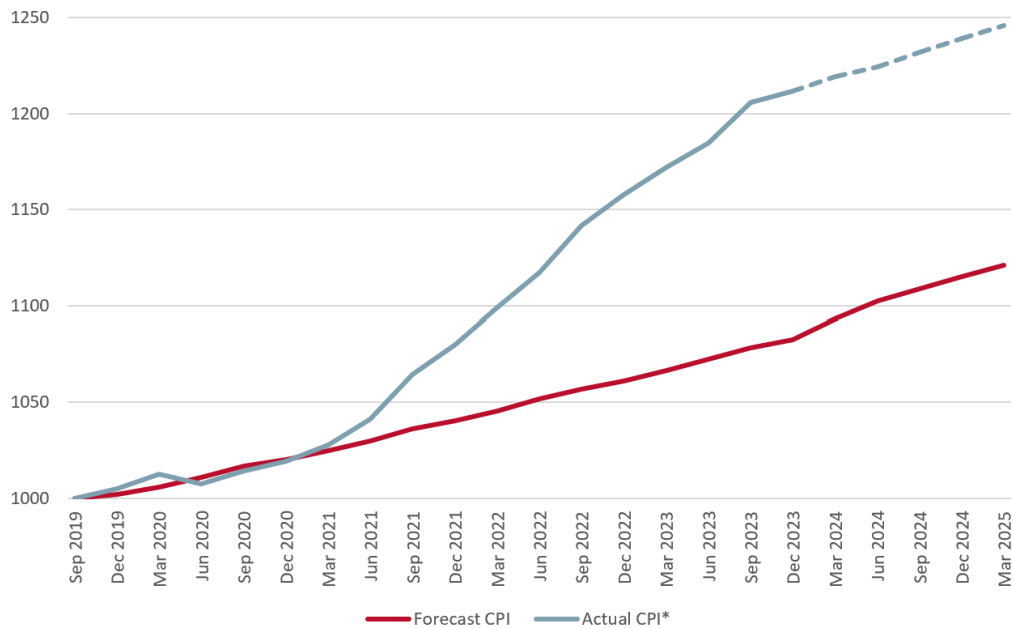


F23 Commissioning new assets reflects both an increase in real terms of the level of capex EDBs have undertaken (see **Attachment B** for analysis of capex) but is also influenced by higher capital goods input prices.

**Figure F3 Industry wide RAB growth over the DPP3 period (2021-2025)**



**Figure F4 Cumulative CPI over DPP3, forecast versus actual**



\* Actual CPI includes updated RBNZ forecasts as of the August MPS for the quarters where Stats NZ actual data is not available.

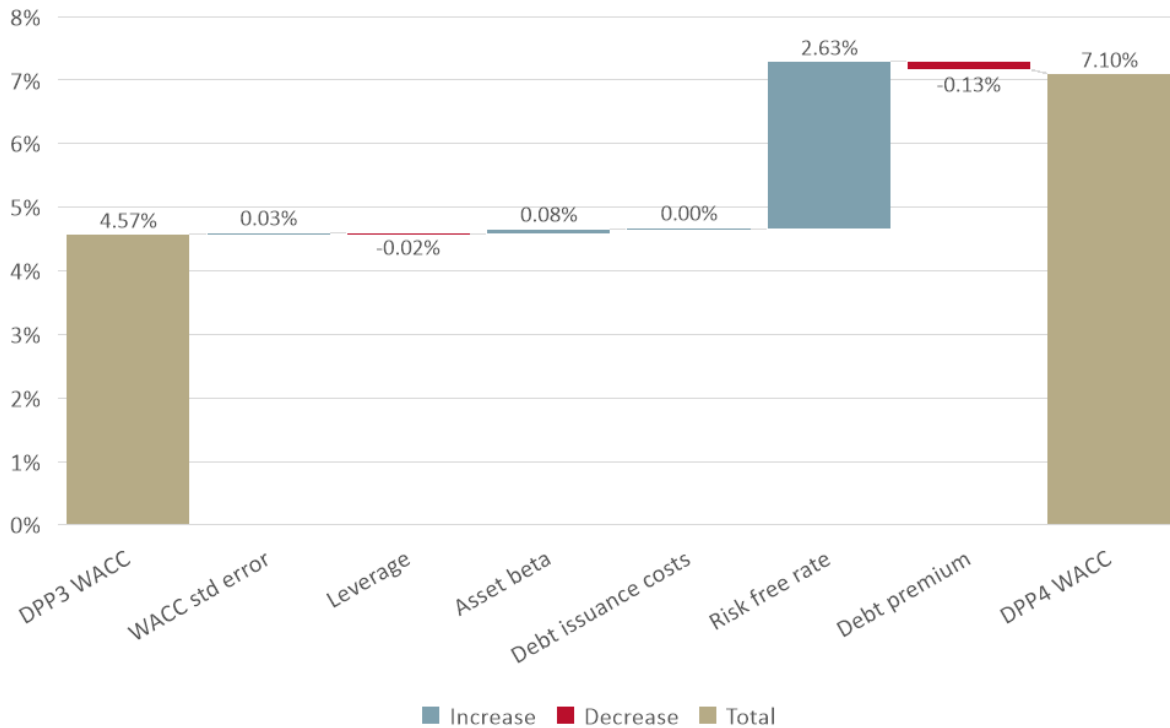
### Changes in the cost of capital

- F24 Changes in the estimated WACC we use to calculate the return on capital EDBs can earn is the most material driver of changes in net allowable revenue. As shown in Figure F5, this change has been driven primarily by increases in the risk-free rate. Given we determine a nominal WACC, the higher risk-free rate is also affected by higher (implicit) forward inflation assumptions.
- F25 Changes to other parameters (that were reviewed and amended as part of our 2023 IM Review) have had a less material effect.<sup>19</sup>

---

<sup>19</sup> [Commerce Commission "Input methodologies review 2023 - Final decision - Cost of capital topic paper" \(13 December 2023\)](#)

**Figure F5 Drivers of the change in WACC**



**Impact of wash-up drawdown and IRIS incentive amounts**

F26 While what we determine when setting a DPP is the forecast net allowable revenue each EDB can recover, recoverable costs – predominantly IRIS incentive amounts and wash-up drawdown amounts – can have a material impact on the revenues EDBs can earn and in turn on the distribution prices consumers face.

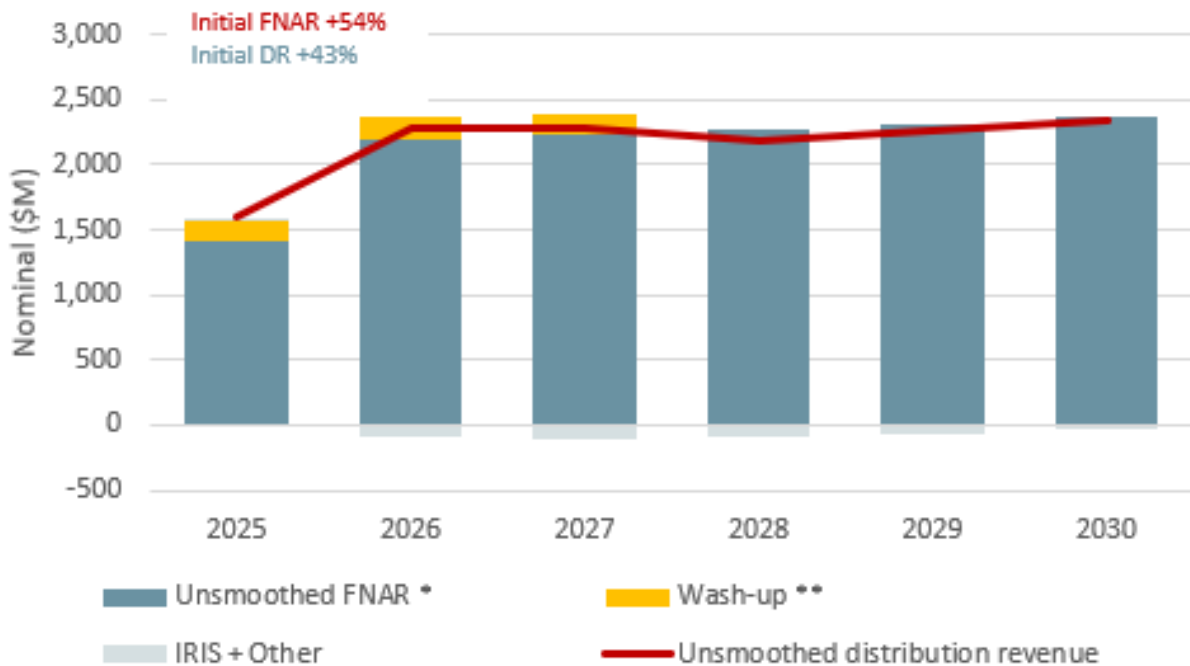
F27 We use the term “distribution revenue” for this combined total. This is because the main component of revenue it excludes from total forecast allowable revenue is the revenue needed to cover the transmission charges paid to Transpower and other pass-through costs.

F28 This section explains the effect this has on EDB revenues and the change in those revenues between the end of DPP3 and the beginning of DPP4.

**Changes in distribution revenue**

F29 The impact that wash-ups and IRIS will have on changes in distribution revenue are illustrated at an industry-wide level in Figure F6.

**Figure F6 Unsmoothed distribution revenue – all DPP EDBs (excludes Aurora)**



\* Forecast net allowable revenue as presented here is based on current forecasts of inflation, and without any smoothing. As discussed further below, we are smoothing FNAR via alternate X-factors to mitigate price shocks. Over the regulatory period, it will increase in line with annual updates of inflation.

\*\* In 2025 this is the “opening wash-up account balance”, for 2026 and 2027 it is the “wash-up drawdown amount” assuming EDBs recover the full amount of outstanding balances that year. EDBs may choose to recover less than the full amount.

F30 Looked at in isolation, the change in unsmoothed forecast net allowable revenue would amount to a 54% nominal increase at a sector-wide level. However, once the net effect of estimated wash-ups, IRIS, and other recoverable costs are accounted for this change is only a nominal 43% increase.

F31 These effects vary significantly on an EDB-by-EDB basis. The estimates we have used for each parameter are set out in Table F3. The overall impact that accounting for distribution revenue has on the change in revenue between 2025 and 2026 is shown in Figure F7.

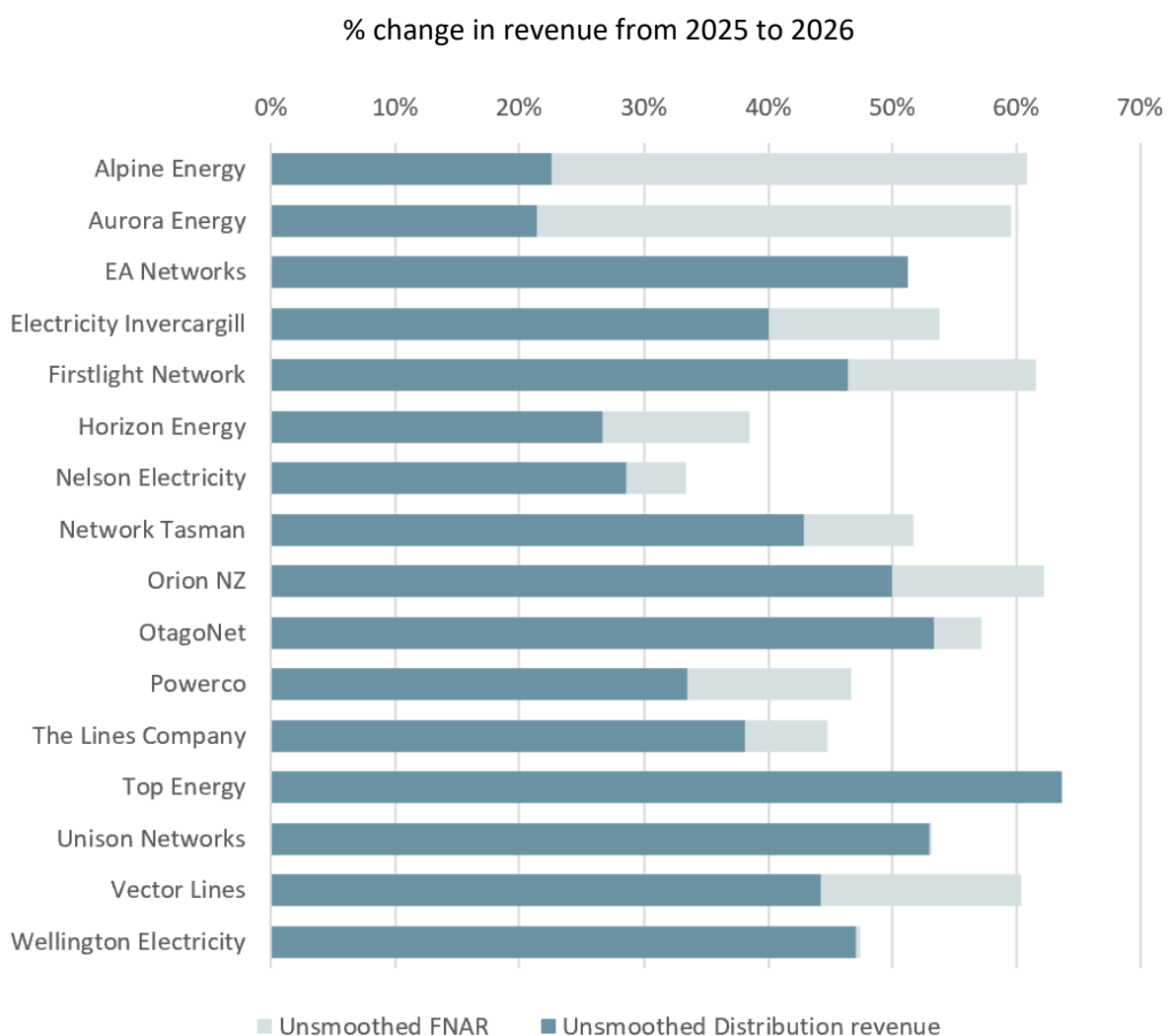
**Table F3 Estimated components of distribution revenue (nominal \$m, unsmoothed)**

Regulatory Year	2025				2026				
	EDB	FNAR	Wash-ups	IRIS and other*	Dist. revenue	FNAR	Wash-ups	IRIS and other*	Dist. revenue
<b>Alpine Energy<sup>20</sup></b>		46	5	11	62	73	11	-9	75
<b>EA Networks</b>		36	3	0	39	54	7	-2	59
<b>Electricity Invercargill</b>		13	2	0	15	20	2	-1	21
<b>Firstlight Network</b>		26	2	0	28	42	3	-4	41
<b>Horizon Energy</b>		26	3	1	30	36	4	-2	38
<b>Nelson Electricity</b>		6	1	0	7	8	1	0	9
<b>Network Tasman</b>		29	6	0	35	44	9	-3	50
<b>Orion NZ</b>		172	14	2	188	279	13	-10	282
<b>OtagoNet</b>		28	2	0	30	44	3	-1	46
<b>Powerco</b>		328	35	-1	362	481	19	-17	483
<b>The Lines Company</b>		38	5	-1	42	55	5	-2	58
<b>Top Energy</b>		41	4	-1	44	67	11	-6	72
<b>Unison Networks</b>		109	4	4	117	167	17	-5	179
<b>Vector Lines</b>		421	69	3	493	675	63	-27	711
<b>Wellington Electricity</b>		97	2	3	102	143	9	-2	150

\* Includes rounding adjustment

<sup>20</sup> Alpine is currently the subject of a compliance investigation following historical depreciation errors. For the purposes of DPP4 we have not considered the potential enforcement outcomes that may arise from this investigation.

**Figure F7 Impact of IRIS and wash-ups on 2025 to 2026 change in distribution revenue**



**Changes in wash-up drawdown amounts**

- F32 Wash-up amounts are a regulatory mechanism to make EDBs or consumers whole for past under- or over-recovery of revenue caused by defined factors (such as forecasts of demand or inflation differing from actuals).
- F33 The “opening wash-up account balance” (the DPP3 equivalent of a wash-up drawdown amount) for 2025 has been taken from EDBs’ annual compliance statements.

- F34 For wash-up drawdown amounts for 2026, we have taken information from EDBs' compliance statements, submitted in August 2024. Our assessment of the 2026 wash-up amounts is based the IM amendments, published alongside the DPP4 final decision on 20 November 2024,<sup>21</sup> which allows EDBs to drawdown on 2024 wash-up balance accruals in 2026 as intended.
- F35 To estimate the wash-up drawdown amounts for 2027 we have:
- F35.1 estimated wash-up accruals for 2025, based on:
    - F35.1.1 “forecast revenue from prices” as disclosed in price-setting compliance statements as a proxy for “actual revenue from prices”; and
    - F35.1.2 estimates of “actual allowable revenue” starting with "actual allowable revenue for 2023 then applying the latest available CPI inflation information to estimate the 2025 values, and assuming actual pass-through and recoverable costs are equal to forecast pass-through and recoverable costs; and
  - F35.2 applied a time-value of money adjustment to the accrual to carry it forward to the year it is available to be drawn down.
- F36 This approach does not account for any wash-up balance accrued due to differences between forecast and actual quantities, so will not be a complete reflection of the wash-up accruals EDBs. Despite this assumption, as the CPI component of the wash-up accrual is the most significant element (and its value is reasonably certain), we consider this is a reasonable reflection of balances EDBs will have accrued.
- F37 The changes made to the wash-up mechanism in the 2023 IM Review provide EDBs with more flexibility in drawing down washup amounts than they had previously. By not fully drawing down available wash-up balances, EDBs are able to voluntarily defer revenue in a present value neutral way should they wish to smooth their price path to mitigate price shocks to their consumers without risk of losing this deferred amount under the limits on under-charging.

---

<sup>21</sup> Commerce Commission "Amendments to input methodologies for electricity distribution businesses - wash-up amounts - Final decision reasons paper" (20 November 2024)

### **Changes in IRIS incentive amounts and other recoverable costs**

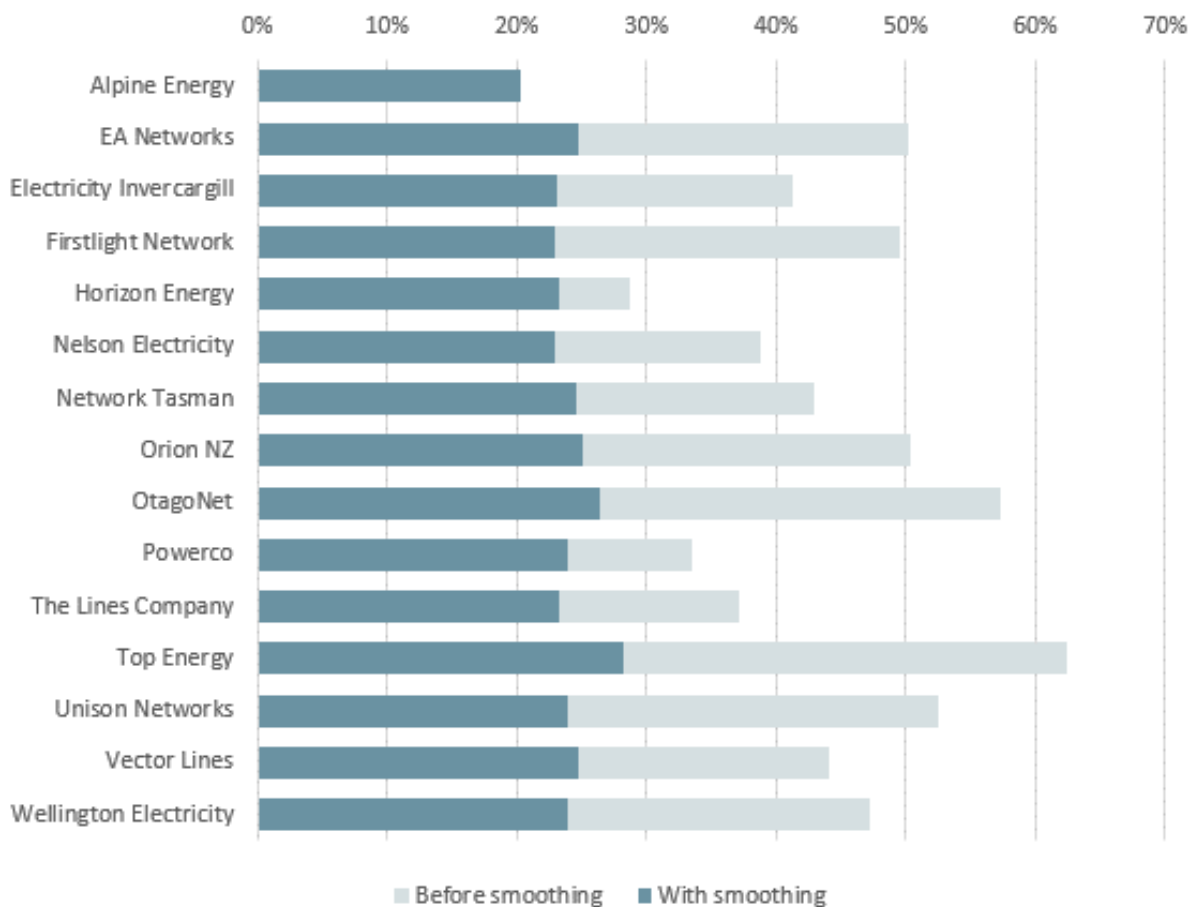
- F38 IRIS incentive amounts and other recoverable costs for 2025 are based on values disclosed in 2025 price-setting compliance statements.
- F39 For values over DPP4, IRIS estimates are based on actual expenditure data from ID up to 2024, and AMP forecasts for 2025. Other recoverable costs are assumed to be zero as they are either not able to be forecast with any accuracy (quality incentives) or are not significant enough to materially affect the results.
- F40 We have excluded transmission changes from both 2025 and values over DPP4, as following the 2023 IM Review these will be pass-through costs, and not subject to smoothing decisions.

### **Effect of revenue smoothing decisions**

- F41 As discussed in relation to **decisions P3-P5**, we are smoothing revenue over the DPP4 period to mitigate price shocks for consumers. We do this via the use of “alternate X-factors”. These allow forecast net allowable revenue to increase year-on-year at a rate greater than CPI over the regulatory period, trading off initial price shocks for on-going increases later in the period and deferring revenue recovery.
- F42 The effect of these smoothing decisions on the change in total distribution revenue from 2025 to 2026 is shown in Figure F8.
- F43 This figure best represents the overall change in EDB revenues that would result from our final decision and is used as the basis for our analysis of consumer bill impacts.



**Figure F8 Nominal change in smoothed distribution revenue from 2025 to 2026**



F44 As Figure F8 shows, the smoothed figures average around 24% in nominal terms. This is consistent with our decision to:

F44.1 cap real per ICP increases at 20% in most cases;

F44.2 forecast CPI of 2.27%; and

F44.3 average ICP growth (across 15 EDBs) of 1.1%.

F45 Variations between EDBs are explained by:

F45.1 variations in forecast ICP growth (between 0.2% to 3.0%); and

F45.2 for Top Energy, our decision to allow higher than 20% real per ICP initial increase to avoid on-going price shocks over the regulatory period.

F46 In Alpine’s case, there is no difference between the unsmoothed and smoothed change. This is because its initial real per ICP increase was already below 20%.

F47 In its submission on the draft decision, Powerco identified some modelling errors due to its transition from a CPP at the end of DY2023.<sup>22</sup> With these errors corrected, Powerco's estimated price increase in year 1 is above 20% meaning we have specified an alternate X-factor for them.

## **Final decisions on net allowable revenue**

F48 Section 53P(1) of the Act requires us to specify the revenue path by:

F48.1 specifying a 'starting price' for the first year of the regulatory period;<sup>23</sup>

F48.2 determining a 'rate of change' over the course of the regulatory period.

F49 The Act requires the Commission to set one rate of change for electricity distribution services for the regulatory period.<sup>24</sup> This 'default' rate of change (or default 'X-factor') is expressed relative to CPI, in the form 'CPI-X', and is used to determine revenue for each subsequent year of the regulatory period.

F50 As we noted above, we may also set 'alternative rates of change' for a particular supplier(s) if we consider this is necessary or desirable to minimise any undue financial hardship to the supplier or to minimise price shock to consumers.<sup>25</sup>

### **Decision P1: Set starting prices based on the current and projected profitability of each supplier using a BBAR model**

#### *Nature of the decision*

F51 As we noted above, a key component of the revenue path is the "starting price" for the first year of the regulatory period.

---

<sup>22</sup> Powerco "Submission on EDB DPP4 draft decisions" (12 July 2024), pp. 22-24.

<sup>23</sup> As noted at paragraph F5, the term used in the Act is "starting prices" but given we apply a revenue cap to EDBs, this is in effect a starting revenue.

<sup>24</sup> Section 53P(5) of the Act.

<sup>25</sup> Section 53P(8)(a) of the Act.

- F52 In our DPP4 draft decision paper,<sup>26</sup> we proposed determining revenue in the first year of the DPP4 period based on the “current and projected profitability” of each distributor using a building blocks model – in other words based on forecast costs.<sup>27</sup> This is the same approach taken at past DPP resets.
- F53 As an alternative, the Act allows revenue to be set by “rolling over” the revenues which apply at the end of the preceding regulatory period.<sup>28</sup>

#### *Final decision*

- F54 Our final decision is to determine the starting price for each non-exempt EDB using a building blocks model, with no deferral into DPP5 of building blocks allowable revenue (BBAR). This confirms our draft decision. Combined with our decisions on the “revenue smoothing limit” (see the *Decisions R2.1 and R2.2: Form and size of the “Revenue Smoothing Limit”* section for more detail), this provides EDBs a reasonable expectation that they will be able to recover both their underlying “building blocks” revenue and any wash-up amounts accrued during DPP3.<sup>29</sup>

#### *What we heard from stakeholders*

- F55 In submissions on the issues paper, multiple submitters noted the substantial increase in EDBs’ costs since the last reset, and the challenges this presents. ENA submitted that it was likely that both a starting price adjustment and “inter-period smoothing” would be required to manage price shocks to consumers.<sup>30</sup>
- F56 While sympathetic to the need to smooth revenue to mitigate the price shock, multiple submitters reiterated that full recovery of allowed revenue within the regulatory period should be the goal.<sup>31</sup>

---

<sup>26</sup> [Commerce Commission “Default price-quality paths for electricity distribution businesses from 1 April 2025 – Issues paper” \(2 November 2023\)](#), paragraph 5.22

<sup>27</sup> See s 53P(3)(b) of the Act.

<sup>28</sup> See s 53P(3)(a) of the Act.

<sup>29</sup> Given wash-ups accrued over the DPP4 period cannot be forecast with any certainty, and drawdowns necessarily operate on at least a two-year lag, there may still be some deferral of DPP4 revenue into DPP5. Additionally, within the undercharging limit discussed in *Decision R1.3: Level of the undercharging limit*, EDBs may choose to defer recovery of some revenue.

<sup>30</sup> [Electricity Networks Aotearoa \(ENA\) “DPP4 Issues paper submission” \(19 December 2023\)](#), p. 63.

<sup>31</sup> [Alpine Energy “DPP4 Issues paper submission” \(19 December 2023\)](#), p. 12; [Electricity Networks Aotearoa \(ENA\) “DPP4 Issues paper submission” \(19 December 2023\)](#), p. 3.

- F57 Submitters also identified the impact that medium-term (longer than a DPP regulatory period) revenue deferrals could have on the ability of EDBs to attract capital on reasonable terms to finance their investments (or the “financeability” of EDB’s revenue paths).<sup>32</sup> We consider financeability in **Attachment G**.
- F58 In response to our draft decision, submitters universally supported the decision to allow full in-period recovery of BBAR revenue.<sup>33</sup> They considered that alongside the financeability sense check (detailed from paragraph F118) that full in-period recovery would remove most of the concern from EDBs regarding financeability.<sup>34</sup>

### *Analysis*

- F59 Were current net allowable revenues rolled over, EDBs’ revenues for the DPP4 period would not reflect their costs. As set out in Figure F2, EDBs’ costs have grown over the DPP3 period, primarily due to high inflation but also reflecting growth in the size of their networks and customer bases. Rolling over current prices would fail to account for this and would not reflect changes in the cost of capital since the last reset (as reflected in the WACC). This would hinder EDBs’ ability and incentives to invest in their networks, and their ability to provide services at a quality which reflects consumer demand (contrary to s 52A(1)(a) and (b) of the Act). At the same time, allowing an increase in revenue would not represent excess profitability, so is consistent with (s 52A(1)(d)).
- F60 Between our final decisions on starting revenues and our decisions on revenue smoothing during the regulatory period, we intend for EDBs to have a reasonable prospect of recovering their entire building-blocks revenue over the DPP4 period.
- F61 Extended and significant revenue deferral could lead to financeability constraints on EDBs, reducing incentives to invest, which would be inconsistent with s 52A(1)(a) of the Act.

---

<sup>32</sup> [Electricity Networks Aotearoa \(ENA\) “DPP4 Issues paper submission” \(19 December 2023\)](#), p. 7.

<sup>33</sup> [Submissions](#) by EA Networks, Electricity Networks Aotearoa (ENA), Entrust, Firstlight Network, Horizon Networks, Orion, Powerco, Vector and Wellington Electricity “EDB DPP4 draft decision” (12 July 2024).

<sup>34</sup> [Unison Networks “Submission on EDB DPP4 draft decisions” \(12 July 2024\)](#), p. 19; [Big Six EDBs “Cross-submission on EDB DPP4 draft decisions” \(2 August 2024\)](#), p. 2.

F62 While deferral of revenue would reduce price shocks for current consumers, it would create the potential for compounding price shocks leading into DPP5, disadvantaging future consumers. Even though such a deferral would be present-value neutral and consistent with the FCM principle (because under the wash-up mechanism EDBs accrue a time-value of money adjustment), consumers would pay more overall in nominal terms.<sup>35</sup>

### *Conclusions*

F63 Our final decision is to set starting prices based on the current and projected profitability of each supplier using a BBAR model, allowing for full in-period recovery. On balance, we consider allowing EDBs to fully recover BBAR and any accrued wash-up amounts within the DPP4 regulatory period, with no deferral into DPP5, better promotes the purpose of Part 4 than the alternatives.

F64 Deferral of revenue increases over the short term (within a regulatory period) has less of an effect on the outcomes in the Part 4 purpose described above and are discussed below in relation to alternative rates of change.

### **Decision P2: Set the default X-factor at 0%**

#### *Nature of the decision*

F65 Section 53P(1) of the Act requires us to determine a “rate of change”, which is used to determine net revenue for each year after year 1 of the regulatory period. The rate of change comprises:

F65.1 the rate of increase in forecast CPI, the treatment of which is determined in the specification of price IMs;<sup>36</sup> and

F65.2 a default rate of change relative to forecast CPI (ie, the default X-factor).<sup>37</sup>

---

<sup>35</sup> [Commerce Commission "Input methodologies review 2023 - \[Final\] Electricity Distribution Services Input Methodologies \(IM Review 2023\) Amendment Determination 2023 \[2023\] NZCC 35" \(13 December 2023\)](#), clause 3.1.4(1)(b).

<sup>36</sup> [Commerce Commission "Input methodologies review 2023 - \[Final\] Electricity Distribution Services Input Methodologies \(IM Review 2023\) Amendment Determination 2023 \[2023\] NZCC 35" \(13 December 2023\)](#), clause 3.1.1(5)(b).

<sup>37</sup> [Commerce Commission "Input methodologies review 2023 - \[Final\] Electricity Distribution Services Input Methodologies \(IM Review 2023\) Amendment Determination 2023 \[2023\] NZCC 35" \(13 December 2023\)](#), clause 3.1.1(5)(c).

### *Final decision*

F66 Our final decision is to determine a default X-factor of 0% (before considering the desirability of alternative rates of change for particular suppliers, which we discuss in the following section). This confirms our draft decision.

### *What we heard from stakeholders*

F67 In the DPP4 Issues paper, we proposed retaining our approach under DPP3 of setting a default X-factor of 0%. Submissions on the issues paper supported this approach.<sup>38</sup>

F68 Following the draft decision, submitters continued to support the use of a 0% default rate of change.<sup>39</sup>

### *Analysis*

F69 Because our final decision is to set starting prices using a building blocks model, the starting price already incorporates forecast changes in productivity, so the rate of change in productivity in the EDB sector relative to the economy as a whole will be 0%.<sup>40</sup> Our final decision is therefore to set a default X-factor of 0%. This view was supported by submissions on the DPP4 Issues paper and following our draft decision.<sup>41</sup>

F70 Together with **decision P1** which is to set starting prices based on the current and projected profitability of each supplier using a BBAR model, and before considering the desirability of alternative rates of change for particular suppliers, a default X-factor of 0% promotes incentives for EDBs to innovate and invest, while limiting their ability to extract excessive profits (consistent with s 52A(1)(a) and (d)). Retaining a default X-factor of 0% is also consistent with our framework intention of retaining approaches from DPP3 where they remain fit for purpose.

---

<sup>38</sup> [Powerco "DPP4 Issues paper submission" \(19 December 2023\)](#), p. 30; [Unison Networks "DPP4 Issues paper submission" \(19 December 2023\)](#), p. 24; [Wellington Electricity "DPP4 Issues paper submission" \(19 December 2023\)](#), p. 72.

<sup>39</sup> [Aurora Energy "Submission on EDB DPP4 draft decisions" \(12 July 2024\)](#), p. 19; [Wellington Electricity "Submission on EDB DPP4 draft decisions" \(12 July 2024\)](#), p. 49.

<sup>40</sup> For more detail, see [Commerce Commission "Default price-quality paths for electricity distribution businesses from 1 April 2025 – Issues paper" \(2 November 2023\)](#), p. 55 and Attachment H.

<sup>41</sup> [Submissions](#) by Aurora Energy, Horizon Networks, Orion, Unison and Wellington Electricity on the Commerce Commission "DPP4 Issues paper" (19 December 2023).

F71 We have the discretion under s 53P(8) of the Act to set alternative rates of change for a particular supplier, or suppliers, where we consider this is necessary or desirable to minimise undue financial hardship to suppliers or to minimise price shock to consumers. We discuss our decisions on alternative rates of change below.

### **Decisions P3, P4, and P5: Approach to determining alternative rates of change**

#### *Nature of the decisions*

F72 As we discussed in Chapter 2 of this paper, due to a combination of factors EDBs' costs have increased substantially since the last DPP reset. At the same time, there is broad consensus that EDBs will need to make significant new investments, as well as make better use of existing assets, to meet the challenges related to the energy transition.

F73 Submitters have identified the inherent tension between mitigating price shocks to consumers and avoiding undue financial hardship for suppliers; some EDBs have told us that they may face financeability challenges over the next regulatory period.<sup>42</sup>

F74 In addition, based on the most recently available information in EDB compliance statements, most EDBs will have substantial accrued wash-up amounts leading into DPP4. While these balances are necessary to preserve ex ante FCM and help to mitigate financeability concerns raised by EDBs, they exacerbate the potential price shock consumers face.

F75 Section 53P(8) of the Act gives us a discretion when resetting a DPP for a particular regulatory period to set "alternative rates of change" for a particular supplier(s). This is a tool that can be used where necessary or desirable to manage the challenge of minimising price shocks to consumers and undue financial hardship to a supplier.

#### *Final decision*

F76 Our approach on smoothing via alternative rates of change is made up of three interlocking final decisions, all of which are unchanged from the draft decision. These are:

---

<sup>42</sup> Financeability refers to the ability of firms to raise and repay debt and raise equity in financial markets readily and on reasonable terms. **Attachment G** presents our approach to financeability at threset, following our financeability issues paper, [Commerce Commission "DPP4 reset – Financeability of electricity distribution services in the default price-quality path – Issues paper" \(22 February 2024\)](#).

- F76.1 **decision P4:** to consider consumer price shocks:
- F76.1.1 on a distribution revenue basis – that is including forecast net allowable revenues and major recoverable costs;
  - F76.1.2 in real terms (net of forecast CPI); and
  - F76.1.3 on a per ICP basis, as a proxy for end consumer price impact.
- F76.2 **decision P3:** where possible (while still allowing for full in-period recovery) to limit price shocks to:
- F76.2.1 20% (or approximately 6% on a household retail bill) between regulatory periods; and
  - F76.2.2 10% per year on average across the remaining years of the regulatory period.
- F76.3 **decision P5:** to apply a financeability ‘sense check’ to assess notional financeability drawing on metrics from the Standard & Poor’s (S&P) methodology. We focus on the core S&P ratios FFO/Debt and Debt/EBITDA with reference levels consistent with a BBB+ credit rating, and also consider leverage and FFO interest cover ratio. We have considered allowing a greater initial level of revenue uplift where we were satisfied that doing so would better promote the Part 4 purpose or where not doing so would result in undue financial hardship.
- F77 Where limiting the initial and on-going price shocks to the levels described in F76.2 would result in deferral of building blocks allowable revenue into DPP5, our final decision is to allow an initial increase in estimated prices greater than 20%.
- F78 This applies to one EDB, Top Energy. For Top, the initial change in real distribution revenue per ICP we have allowed is 24%, the amount necessary to limit on-going increases to 10% without deferral into DPP5.
- F79 This approach is consistent with our final **decision P1** to determine the starting price for each non-exempt EDB using a building blocks model, with no deferral into DPP5 of building blocks allowable revenue (BBAR).
- F80 Beyond the price shock limits and alternate X-factors set as above, we have not additionally adjusted any alternative rates of change due to financeability considerations. We discuss our approach to financeability further below (from paragraph F119), and in **Attachment G**.



## *What we heard from stakeholders*

F81 Submissions on the DPP4 Issues paper recognised that this DPP reset will have a substantial impact on consumers' electricity bills.

F82 Stakeholders highlighted:

F82.1 the need to make significant investments during the DPP4 regulatory period, including to support electrification; and

F82.2 the challenge of balancing consumer price shocks against financeability considerations and EDBs' ability to invest in their networks.

F83 ENA submitted that smoothing within the DPP4 period be applied, to mitigate the upfront impact on consumer bill increases from the jump in allowable revenues between DPP3 and DPP4.<sup>43</sup>

F84 Several stakeholders noted that any assessment of consumer price shock should take account of changes in quantities, for example:<sup>44</sup>

Quantity increases are not a price shock. ... When a customer increases the quantity of service they purchase, they will not view the higher charge as a price shock. ... Another contribution to higher quantities is new customers, and while the addition of new customers contributes to a revenue increase, existing customers will not view this as a price shock regardless of the magnitude of the increase caused by new customers.

F85 We received multiple submissions on our draft decision relating to our approach to setting alternate X-factors. Submitters, who ranged from EDBs and their owners to consumer groups, were generally supportive of the approach.<sup>45</sup> There were two main areas of disagreement with the draft decision, the balance between initial step and ongoing price increases, and the best measure of growth to use.

---

<sup>43</sup> [Electricity Networks Aotearoa \(ENA\) "DPP4 Issues paper submission" \(19 December 2023\)](#), p. 3.

<sup>44</sup> [EA Networks "DPP4 Issues paper submission" \(19 December 2023\)](#), p. 1.

<sup>45</sup> [Business Energy Council \(BEC\) "Submission on EDB DPP4 draft decisions" \(12 July 2024\)](#), p. 2; [Electricity Networks Aotearoa \(ENA\) "Submission on EDB DPP4 draft decisions" \(12 July 2024\)](#), p. 25; [Entrust "Submission on EDB DPP4 draft decisions" \(3 July 2024\)](#), p. 1.

## Balance of the initial step

F86 Most submitters were broadly supportive of the decision to moderate the price shock between DPP3 and DPP4.<sup>46</sup> ENA submitted that "Setting the p0 at a real 20% strikes the right balance between upfront price shocks and ongoing increases throughout the period."<sup>47</sup> Entrust, majority owners of Vector, considered "the Commission's proposal to partially delay price increases until after 2025 will help smooth prices and protect consumers from price shock."<sup>48</sup> These sentiments were shared by submitters representing both suppliers and consumer groups.

F87 Not all submitters were supportive of the decision to moderate the initial price shock to the level we proposed in the draft decision. ETNZ considered that "A focus on the avoidance of price shocks may inadvertently flow into reducing network investment."<sup>49</sup> while Orion submitted:<sup>50</sup>

The current proposed approach of lower starting revenue and higher X-factor will also have negative implications for EDBs in the first few years of the period, after already having to carry additional costs due to the higher than expected inflation in the latter years of DPP3.

F88 There were multiple submissions suggesting that we should increase the initial price rise to allow for lower year-on-year price increases.<sup>51</sup> Orion submitted that consumers may prefer a larger initial price shock, followed by lower year-on-year increases, submitting:<sup>52</sup>

With a higher P0 and lower X-factors, customers will face a bigger initial shock, but lower shocks in subsequent years. This would also avoid the higher allowance revenue in the final years, reducing the risk of needing a more significant step change in revenues between DPP4 and DPP5. Such an approach is supported by economic research by Nobel Prize winning economist, Richard Thaler, who found that where possible, customers would prefer to integrate their losses into a singular payment. This research shows that when faced with a large cost increase, customers will have temporarily inelastic demand for additional costs. Smoothing

---

<sup>46</sup> [Submissions](#) by Business Energy Council (BEC), Major electricity Users Group and Aurora Energy on the Commerce Commission "EDB DPP4 draft decision" (12 July 2024).

<sup>47</sup> [Electricity Networks Aotearoa \(ENA\) "Submission on EDB DPP4 draft decisions" \(12 July 2024\)](#), p. 25

<sup>48</sup> [Entrust "Submission on EDB DPP4 draft decisions" \(3 July 2024\)](#), p. 1.

<sup>49</sup> [Energy Trusts of New Zealand \(ETNZ\) "Submission on EDB DPP4 draft decisions" \(11 July 2024\)](#), p. 2.

<sup>50</sup> [Orion "Submission on EDB DPP4 draft decisions" \(11 July 2024\)](#), p. 19.

<sup>51</sup> [EA Networks "Submission on EDB DPP4 draft decisions" \(12 July 2024\)](#), pp. 1-2; [Orion "Submission on EDB DPP4 draft decisions" \(11 July 2024\)](#), p. 19; [Big Six EDBs "Cross-submission on EDB DPP4 draft decisions" \(2 August 2024\)](#), p. 2; [Vector "Cross-submission on EDB DPP4 draft decisions" \(2 August 2024\)](#), p. 1.

<sup>52</sup> [Orion "Submission on EDB DPP4 draft decisions" \(11 July 2024\)](#), p. 19.

more of the cost to latter years, when the customers demand elasticity has been restored creates increased perceived pain for customers, even when the total cost impact does not change.

F89 Other submitters took the opposite view and submitted that we should backload more revenue into the out years of DPP4, with MEUG submitting that:<sup>53</sup>

as noted in our submission on Transpower's draft decision,[..] we would prefer a smoothing profile that weighted a higher proportion of funding to be recovered in the later years, enabling EDBs to address deliverability concerns and demand uncertainty first, while acknowledging the compounding cost pressures facing electricity consumers.

F90 Suppliers disagreed with MEUG and ERANZ in cross-submissions,<sup>54</sup> with Wellington Electricity cross submitting that:<sup>55</sup>

We disagree as it will create further customer bill shocks. As highlighted in the Draft Decision, 'backloading' the revenue smoothing creates larger bill increases in the later years because of the time value of money adjustment. It's also likely to result in a large decrease in the transition from DPP4 to DPP5.

## Measures of growth

F91 The use of ICP growth as the measure of growth used to assess "real price increases" was more contentious. Wellington Electricity tentatively agreed with the use of ICP growth over alternative measures of growth, submitting:<sup>56</sup>

However, it is important to note the 'real revenue per ICP' measure is not a correct measure of affordability. The measure will not capture volume increases as consumers shift from using fossil fuels to electricity. Electrification will increase electricity bills but those customers will see a comparable or greater decrease in their other energy bills. The Boston Consulting 'Future is Electric' study shows that while electricity bills are expected to increase, household affordability will improve as customers use electricity that is less expensive than other fuels.

However, we agree that in the early stages of the energy transition, a less volatile measure will be more appropriate. So, whilst the Draft Decision could be improved to better capture affordability, we think it does provide the right outcome.

---

<sup>53</sup> [Major Electricity Users Group \(MEUG\) "Submission on EDB DPP4 draft decisions" \(12 July 2024\)](#), p. 6.

<sup>54</sup> [Wellington Electricity "Cross-submission on EDB DPP4 draft decisions" \(2 August 2024\)](#), p. 4; [Vector "Cross-submission on EDB DPP4 draft decisions" \(2 August 2024\)](#), p. 1; [Alpine Energy "Cross-submission on EDB DPP4 draft decisions" \(2 August 2024\)](#), p. 4.

<sup>55</sup> [Wellington Electricity "Cross-submission on EDB DPP4 draft decisions" \(2 August 2024\)](#), p. 4.

<sup>56</sup> [Wellington Electricity "Submission on EDB DPP4 draft decisions" \(12 July 2024\)](#), p. 46.

F92 Other submitters considered that, given electrification is likely to lead to not only more ICPs, but existing ICPs using more power, that other measures of growth were more appropriate.<sup>57</sup> Multiple submitters considered that MWh was a more appropriate measure to use as it would capture not only the increases from ICP growth, but also capture existing ICPs using more electricity as the economy electrifies.<sup>58</sup>

#### *Analysis conducted*

F93 In arriving at our final decisions on alternative rates of change, we have considered:

F93.1 how to assess consumer price shocks within the relatively low cost DPP framework, taking into account the impact of changes in quantities, inflation, and regulatory factors that contribute to revenue volatility – in particular IRIS amounts and wash-up drawdowns;

F93.2 the need to mitigate any increase in estimated initial prices versus the potential for large year-on-year increases over the period; and

F93.3 financeability, to the extent this is consistent with the overall Part 4 purpose.<sup>59</sup>

#### Approach to assessing consumer price shocks

F94 While the Act allows us to consider price shocks for consumers when considering alternative rates of change, it does not require any specific assessment or threshold. The discretion under s 53P(8)(a) is framed broadly, in terms of whether “in the Commission’s opinion, [an alternative rate of change] is necessary or desirable to minimise any undue financial hardship to the supplier or to minimise price shock to consumers”.<sup>60</sup>

F95 Our final decision is to assess price shocks for consumers using the real change in distribution revenue both at the start of the regulatory period (between DPP3 and DPP4) and over the course of the DPP4 period, measured on a per ICP basis.

---

<sup>57</sup> [Alpine Energy “Submission on EDB DPP4 draft decisions” \(12 July 2024\)](#), pp. 4-5.

<sup>58</sup> [Aurora Energy “Submission on EDB DPP4 draft decisions” \(12 July 2024\)](#), pp. 5-6; [Electricity Networks Aotearoa \(ENA\) “Submission on EDB DPP4 draft decisions” \(12 July 2024\)](#), p. 6.

<sup>59</sup> **Attachment G** discusses our approach to considering financeability at this reset and provides details on the financeability sense check we have completed.

<sup>60</sup> Section 53P(8)(a) of the Act.

F96 We have decided to assess potential price shocks based on distribution revenue, that is the sum of:<sup>61</sup>

F96.1 forecast net allowable revenue;

F96.2 IRIS incentive amounts; and

F96.3 forecast wash-up drawdowns.

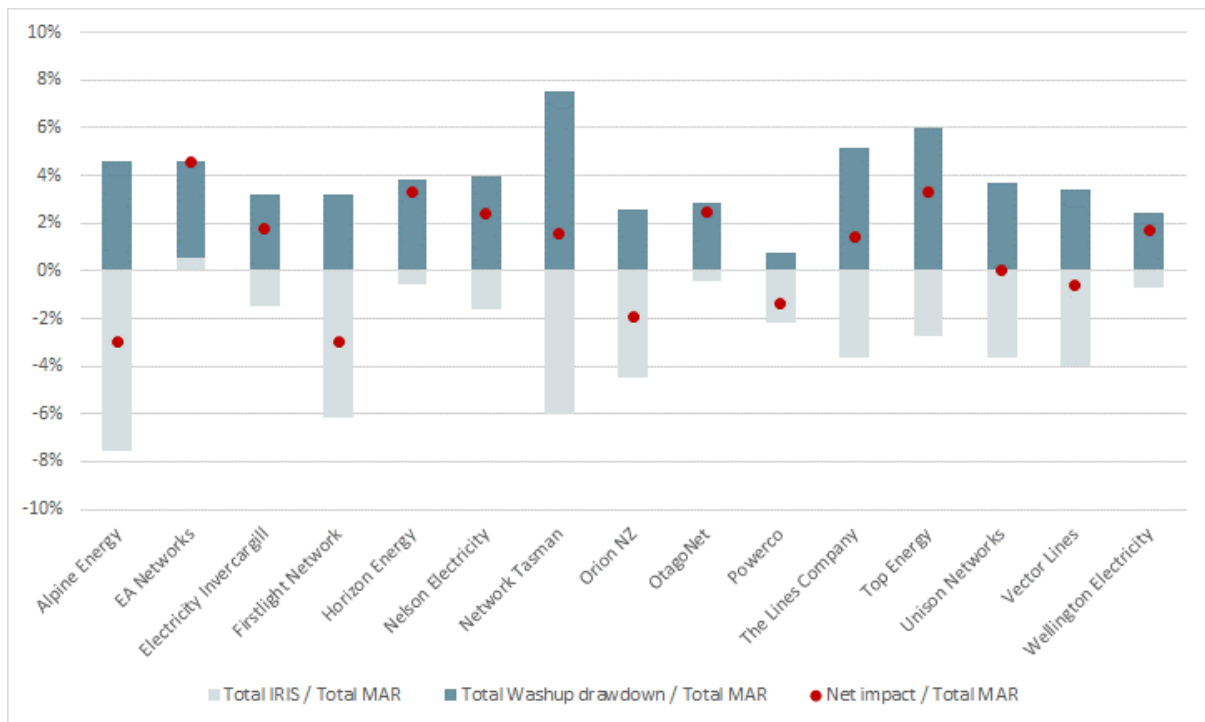
F97 IRIS amounts and wash-up drawdowns can have a substantial impact on distribution revenues in any given year, and so contribute to the potential for consumer price shocks. Our estimates indicate most EDBs have substantial accumulated wash-up amounts over the course of DPP3 that will be available to draw down in DPP4. Conversely, most EDBs will see negative IRIS incentive amounts over DPP4. The combined impact of these is shown in Figure F9.<sup>62</sup>

---

<sup>61</sup> Our approach to estimating wash-up drawdown amounts and IRIS incentive amounts is described in the section *Impact of wash-up drawdown and IRIS incentive amounts*.

<sup>62</sup> Our decision on the “revenue smoothing limit” (discussed below) will help to reduce significant swings in incentive payments and wash-up amounts. However, this does not apply in the first year of the regulatory period.

**Figure F9 Estimated impact of wash-ups and IRIS on distribution revenue over DPP4<sup>63</sup>**



F98 Our final decision is to assess consumer price shock in real terms (net of forecast CPI). Assessing price shock in nominal terms risks suppressing EDBs’ real revenues which could lead to substantial future wash-up balances (as has been the case over DPP3), resulting in price shocks in the future. While this would be present-value neutral to EDBs consistent with the FCM principle,<sup>64</sup> substantially deferring the timing of cashflows in this way may cause financeability concerns in the future.

<sup>63</sup> IRIS amounts are estimated based on actual expenditure data where available (2021-2024), and on EDB AMP forecasts for the remainder of the period (2025). Wash-up amounts only account for the difference between forecast net allowable revenue and actual net allowable revenue (the inflation-driven aspects of the DPP3 revenue wash-up) for accruals in 2025.

<sup>64</sup> As we have noted elsewhere because the wash-up mechanism for EDBs includes a time-value of money adjustment ([Commerce Commission "Input methodologies review 2023 - \[Final\] Electricity Distribution Services Input Methodologies \(IM Review 2023\) Amendment Determination 2023 \[2023\] NZCC 35" \(13 December 2023\)](#), clause 3.1.4(1)(b)).

- F99 Our risk allocation principle was also relevant to our final decision. Under that principle, we ideally allocate risks to suppliers or consumers depending on who is best placed to manage them.<sup>65</sup> Inflation is outside the control of EDBs, and it is not clear that they are better placed to manage inflation risk than consumers of electricity distribution services.
- F100 Stakeholders suggested several options for assessing consumer price shocks:
- F100.1 adjusting for changes in energy volumes (kWh), using either forecast or historic data;<sup>66</sup>
  - F100.2 adjusting for network growth, i.e. the number of connections (ICPs);<sup>67</sup> or
  - F100.3 analysing retail customer-switching behaviour.<sup>68</sup>
- F101 Retail customer-switching behaviour is driven by a number of other factors, such as electricity retailers' pricing and marketing decisions. Further, this is not a practical option within the DPP framework, as reliable annual data for each EDB is not readily available.
- F102 Historical data on energy volumes and the number of connections are both available from annual information disclosures.<sup>69</sup> Of the two, our preference is to use growth in connections as a proxy for consumer demand, as this will allow for a smoother and more predictable revenue path.
- F103 Energy volumes tend to be more volatile year-on-year due to exogenous factors (for example due to weather patterns). There is a risk that should we use energy volumes to set alternate X-factors, and actual growth is less than expected, that consumers will see an even larger price shock between periods. We consider that using a blend of MWh and ICP growth as suggested by some submissions on our draft decision, would increase complexity for limited benefit.

---

<sup>65</sup> [Commerce Commission "Default price-quality paths for electricity distribution businesses from 1 April 2025 – Issues paper" \(2 November 2023\)](#), paragraph A21.2.

<sup>66</sup> [Electricity Networks Aotearoa \(ENA\) "DPP4 Issues paper submission" \(19 December 2023\)](#), p. 6.

<sup>67</sup> [Wellington Electricity "DPP4 Issues paper submission" \(19 December 2023\)](#), pp. 72-73.

<sup>68</sup> [Contact Energy "DPP4 Issues paper submission" \(15 December 2023\)](#), p. 2. Contact Energy cited research on New Zealand residential bill-payers from 2019, suggesting that 40% of customers would switch energy retailers if they could save 6% (or more) of their total customer bill.

<sup>69</sup> Our decision-making framework for DPP4 provides that, where possible, we will use existing information disclosed under ID regulation in this reset see [Commerce Commission "Default price-quality paths for electricity distribution businesses from 1 April 2025 – Issues paper" \(2 November 2023\)](#), paragraph A13.

F104 For these reasons, our final decision is to consider price shocks on a "per ICP" basis. We consider this approach better reflects the intent of s 53P(8) of the Act, while maintaining a relatively low-cost regulatory regime, compared to the alternatives.<sup>70</sup>

F105 We note that where there is an increase in per-consumer energy volumes – as may be the case where we see increased electrification – and EDBs price in per-unit terms, this may see prices rise more slowly on a per-unit basis than is implied by our analysis.

#### Balancing estimated initial price increases versus year-on-year increases

F106 Our decision for our approach to setting alternative rates of change (**decision P4**) is to:

F106.1 attempt to limit revenue changes between regulatory periods to 20% (roughly 6% on a household retail bill) (real \$ per ICP).

F106.2 attempt to limit revenue changes between years within the regulatory period to 10% (real \$ per ICP).

F107 We considered three options for minimising price shocks to consumers in the transition from DPP3 to DPP4. These profiles are based on estimated changes in consumer distribution prices, in accordance with our approach to assessing price shock (above):

F107.1 no smoothing: allow the full price shock between periods, then growth at CPI (illustrated by the red line in Figure F10);

F107.2 uniform smoothing: entirely smooth the revenue path so that the initial price shock matches the average year-on-year growth rate (illustrated by the orange line in Figure F10); and

F107.3 medium smoothing: a combination of an initial step followed by smaller year-on-year growth (illustrated by the blue-grey line in Figure F10).

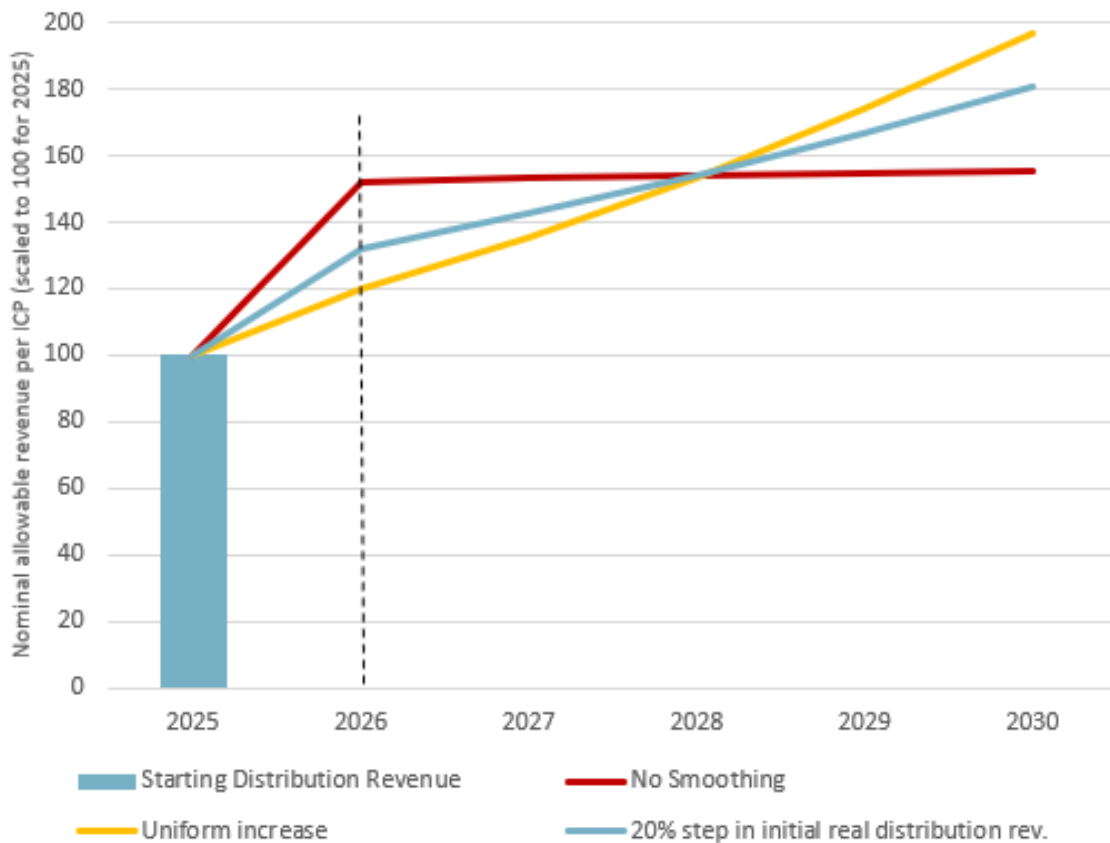
F108 Figure F10 provides an illustrative comparison of the impact of these three options on EDBs' revenue profiles.

---

<sup>70</sup> As noted elsewhere, eg at paragraph F98, our decisions on consumer price shock and alternative rates of change are net present-value neutral to EDBs, and consistent with the FCM principle.



**Figure F10 Illustration of options considered for alternative rates of change<sup>71</sup>**



F109 Of these available options, we consider the medium smoothing option ("20% step...") best gives effect to s 53P(8) while still promoting the overall purpose of Part 4, because it:

F109.1 best balances the desirability of mitigating the initial price shocks in the transition from year 5 of DPP3 to year 1 of DPP4, and the potential for large year-on-year growth rates;

F109.2 is likely to mitigate the size of the inter-period step into DPP5 compared to the uniform smoothing option;

F109.3 provides some room for growth in year-on-year revenue in the out years should reopeners be allowed; and

<sup>71</sup> Illustrative comparison of the options we considered for price changes to consumers from DPP3 year 5 (2025) to DPP4 year 1 (2026). Values are nominal revenue per ICP, scaled to 100 for 2025. All scenarios are equal in present-value terms; the difference is in the timing of the revenue profile. Note that the decision-making considered real \$ values and also included the estimated wash-up and IRIS amounts even though they are not included in this chart illustration.

- F109.4 provides room for EDBs to do their own discretionary smoothing should they wish to (subject to the revenue smoothing limit and undercharging limit, which we discuss below).
- F110 The “no smoothing” option would lead to an estimated initial price shock in year 1 of DPP4 ranging between 17% and 57% for each EDB, with a weighted average of 38% across EDBs.
- F111 The “uniform smoothing” option would lead to a lower initial price shock, but would give rise to annual increases in estimated prices of 10% on average, and as high as 14% for one EDB. As well as deferring EDBs’ revenue recovery and potentially detrimentally affecting financeability, the uniform smoothing option provides less room to adjust in the out-years (ie, years 2-5 in the regulatory period) should revenue grow from reopeners.
- F112 Submissions on our draft decision considered that we should reconsider the balance between the initial price increase and the ongoing year-on-year increases. We received submissions advocating for both decreased deferral, and further deferral within the regulatory period.<sup>72</sup> Regarding further deferral, we consider that given the financeability constraints that may apply to some EDBs, and the likelihood of reopeners in the later years of the period, lowering the initial step and deferring more revenue into the out years is not appropriate.
- F113 Some suppliers considered that we should increase the size of the initial step to:
- F113.1 bring revenue forward for EDBs;<sup>73</sup>
- F113.2 mitigate the step off into DPP5;<sup>74</sup> and
- F113.3 be more in line with what they considered to be consumer preferences.<sup>75</sup>

---

<sup>72</sup> For example: [Alpine Energy “Submission on EDB DPP4 draft decisions” \(12 July 2024\)](#), p. 4 and [Major Electricity Users Group \(MEUG\) “Submission on EDB DPP4 draft decisions” \(12 July 2024\)](#), p. 6.

<sup>73</sup> [Orion “Cross-submission on EDB DPP4 draft decisions” \(2 August 2024\)](#), p. 6.

<sup>74</sup> [EA Networks “Submission on EDB DPP4 draft decisions” \(12 July 2024\)](#), pp. 1-2.

<sup>75</sup> [Orion “Submission on EDB DPP4 draft decisions” \(11 July 2024\)](#), p. 19.

- F114 Section 53P(8) of the Act enables us to consider price shocks to consumers, and where necessary or desirable specify alternative rates of change. We consider that an initial price increase above 20% constitutes a price shock, and we have only allowed initial price increases above that in cases where the ongoing price increases in years two to five are beyond 10%.
- F115 Regarding the step off into DPP5, we agree that increased revenues in the out years may cause a step down in revenue for some EDBs in the early years of DPP5. However, the size of any step down is difficult to forecast accurately, given uncertainties about costs and demand over the next five years.
- F116 EDBs have substantial flexibility to shape their revenue path through DPP4. If an EDB is concerned about the step off into DPP5, it can choose to not drawdown existing wash-up balances or to accumulate additional amounts via under-charging. These can then be drawn down over time to smooth the transition into DPP5.
- F117 As submitted by Orion, consumers have less flexibility in the short term.<sup>76</sup> We consider that this further reinforces the importance of mitigating the initial price increases. By mitigating the initial price increases, consumers are protected when they have lower flexibility. As the ongoing price rises begin to occur, consumers have greater opportunity to take steps to manage or reduce their electricity use.

#### Financeability considerations

- F118 Given the importance stakeholders have placed on financeability in previous consultations, and because of the potential impact on incentives for EDBs to invest, we have applied a financeability sense check to our final revenue smoothing decisions. This sense check serves as a support tool for making decisions, not a deterministic test with thresholds and prescriptive responses.
- F119 Our approach is to leverage the established Standard & Poor's (S&P) credit rating methodology. We have assessed core S&P financial metrics using a notional analysis against the levels consistent with a BBB+ credit rating for each EDB. We present this approach in detail in **Attachment G**, and note the broad support its introduction, design and application received in submissions on the draft decision.<sup>77</sup>

---

<sup>76</sup> [Orion "Submission on EDB DPP4 draft decisions" \(11 July 2024\)](#), p. 19.

<sup>77</sup> For example [Electricity Networks Aotearoa \(ENA\) "Submission on EDB DPP4 draft decisions" \(12 July 2024\)](#), p. 6.

- F120 Informed by submissions on the IM Review and DPP4 financeability issues paper, and approaches in other jurisdictions, we have evaluated various Standard & Poor's (S&P) ratios. The two core S&P metrics we considered are:
- F120.1 funds from operations as a percentage of notional debt; and
  - F120.2 notional debt to EBITDA.<sup>78</sup>
- F121 We also evaluated:
- F121.1 FFO interest cover ratio; and
  - F121.2 notional leverage based on forecast free cashflows.
- F122 We took the results of our financeability sense check into account in our final decisions on alternative rates of change, set out in the section *Balancing estimated initial price increases versus year-on-year increases*.
- F123 We took financeability sense check results into account in our final decisions on alternative rates of change, set out in the section 'Balancing estimated initial price increases versus year-on-year increases'. We have considered allowing a greater than 20% initial level of revenue uplift where we were satisfied that doing so would better promote the Part 4 purpose.
- F124 We've done this with a full-period view of financeability which looks through year to year variations. Financeability metrics generally improve over the DPP4 period: after the adverse impact from limiting price shocks in year 1, they improve in subsequent years on the compounding effects of alternate X-factors on revenue.
- F125 The final results of our notional financeability sense check, after year 1 price shock limits and alternate X-factors have been applied, are presented in Attachment G, Table G3:
- F125.1 all EDBs met the BBB+ reference level for our primary metric (FFO/Debt > 13%); and

---

<sup>78</sup> Earnings Before Interest Tax Depreciation and Amortisation, calculated as revenue less opex.

F125.2 Alpine, Firstlight, Orion and Powerco do not meet the BBB+ reference level for our second metric, Debt/EBITDA = 4. Their Debt/EDBITDA values are between 4.1 and 4.4, corresponding to a BBB level.<sup>79</sup>

F126 Ultimately, we have not adjusted any alternative rates of change due to financeability considerations. Adopting an alternative revenue profile would not change this result for these four EDBs. With part of the issue being large negative IRIS balances, we do not consider that making additional changes would better promote the Part 4 purpose and we have not made adjustments on financeability grounds.

F127 Final starting prices and final alternate X-factors for each EDB, incorporating our approach to alternative rates of change, are set out in Table F1.

### **Decision R1.2: Rate of change in CPI**

F128 **Decision R1.2** is to forecast CPI based on the four-quarter average change in CPI between the first year of the regulatory period and the current year. This is an implementation decision that gives effect to the IMs.

F129 This is the approach we have used in the past, and in DPP3. We consider this method for calculating forecast CPI remains appropriate for modelling current and projected profitability for each supplier using the “building blocks” approach.

F130 Our final decision is therefore to confirm this approach for DPP4, consistent with the intent in our decision-making framework to retain approaches from DPP3 where they remain fit for purpose.<sup>80</sup>

### **Revenue path over the regulatory period**

F131 Some aspects of how the revenue path will operate are provided for by the specification of price IMs but leave certain matters to be determined by the Commission in a DPP (or CPP) determination. These include:

F131.1 the revenue smoothing limit;

---

<sup>79</sup> These results partly reflect substantial negative IRIS balances, and large capex expenditure programs. Alpine is currently under investigation in relation to historical depreciation errors, the outcome of which may impact its notional financeability sense check results.

<sup>80</sup> [Commerce Commission, “Default price-quality path for electricity distribution businesses from 1 April 2025 – Issues paper”, \(2 November 2023\), Attachment A, paragraph A17.](#)

F131.2 implementation of the wash-up mechanism, including the undercharging limit; and

F131.3 implementation of our decision, as part of the IM Review, to apply IRIS in real (CPI-adjusted) terms.

### **Decision R1.1: Apply a revenue cap with wash-up as the form of control**

F132 As a result of the IM Review in 2016, we changed the form of control for distributors from a weighted average price cap to a revenue cap, including a wash-up for over and under-recovery of revenue. This form of control was implemented for the DPP3 regulatory period, and was retained in the 2023 IM Review.<sup>81</sup>

F133 As provided for in the IMs, we are applying a revenue cap with wash-up as the form of control for DPP4. This is consistent with the form of control currently applying to EDBs under DPP3.

### **Decisions R2.1 and R2.2: Form and size of the “Revenue Smoothing Limit”**

F134 Our final decision is to set a revenue smoothing limit (RSL) for DPP4 for the purpose of smoothing volatility in recoverable costs over the regulatory period. This confirms our draft decision.

#### *Nature of these decisions*

F135 The annual ‘forecast revenue from prices’ an EDB is allowed to earn comprises forecast net allowable revenue plus forecast recoverable costs, forecast pass-through costs, and revenue forecast to be received under large connection contracts.<sup>82</sup> The IMs provide that the Commission may specify a RSL in a DPP or CPP determination,<sup>83</sup> to smooth year-on-year fluctuations in these annual revenues.

---

<sup>81</sup> [Commerce Commission “Input methodologies review decisions: Report on the IM review” \(20 December 2016\), p. 78](#); [Commerce Commission “Default price-quality paths for electricity distribution businesses from 1 April 2020” \(27 November 2019\), p. 91](#).

<sup>82</sup> [Commerce Commission “Input methodologies review 2023 - \[Final\] Electricity Distribution Services Input Methodologies \(IM Review 2023\) Amendment Determination 2023 \[2023\] NZCC 35” \(13 December 2023\), clause 3.1.1\(3\)](#).

<sup>83</sup> [Commerce Commission “Input methodologies review 2023 - \[Final\] Electricity Distribution Services Input Methodologies \(IM Review 2023\) Amendment Determination 2023 \[2023\] NZCC 35” \(13 December 2023\), clause 1.1.4\(2\) & 3.1.1\(1\)\(b\)](#). The ‘revenue smoothing limit’ is defined as: “a maximum limit on revenue (excluding recovery of pass-through costs) specified by the Commission in a DPP determination or CPP determination”.

- F136 Under DPP3 this smoothing is implemented through a nominal limit of 10% on annual increases in forecast revenue from prices. That is, under DPP3 revenue smoothing applies to all forecast revenues – forecast net allowable revenue, forecast recoverable costs, and forecast pass-through costs.
- F137 Our final decisions on the 2023 IM Review included changes to this smoothing mechanism, to exclude pass-through costs (including transmission charges), and to provide more flexibility in how the RSL is specified.
- F138 The original intent of the RSL was to manage volatility in (total) allowable revenue and to protect customers from price shocks during a regulatory period. As a result of the Commission’s decisions in the 2023 IM Review, the RSL smooths the sum of forecast net allowable revenue and forecast recoverable costs.<sup>84</sup> As forecast net allowable revenue is already smoothed through the revenue path mechanism, in effect the RSL only smooths fluctuations in recoverable costs.
- F139 There is no explicit statutory requirement to consider price volatility outside the s 53P(8) discretion to determine alternative rates of change when resetting prices. However, price stability and predictability is generally valued by consumers. To the extent that we can achieve the Part 4 Purpose without creating volatility, we consider it worthwhile to do so.
- F140 Recoverable costs include IRIS amounts, quality incentive adjustments, and wash-up drawdown amounts.<sup>85</sup> These amounts have a substantial impact on revenue volatility during a regulatory period. In our final decisions on the 2023 IM Review, the Commission decided to address the cashflow impact of IRIS and quality incentives as part of the RSL.<sup>86</sup>

---

<sup>84</sup> This is because pass-through costs, including transmission charges, and revenue received under large connection contracts are now excluded from the revenue smoothing limit for EDBs. [Commerce Commission "Input methodologies review 2023 - \[Final\] Electricity Distribution Services Input Methodologies \(IM Review 2023\) Amendment Determination 2023 \[2023\] NZCC 35" \(13 December 2023\)](#), clause 3.1.1(1)(b).

<sup>85</sup> See [Commerce Commission "Input methodologies review 2023 - \[Final\] Electricity Distribution Services Input Methodologies \(IM Review 2023\) Amendment Determination 2023 \[2023\] NZCC 35" \(13 December 2023\)](#), clause 3.1.3.

<sup>86</sup> [Commerce Commission "Financing and incentivising efficient expenditure during the energy transition topic paper - Part 4 Input Methodologies Review 2023 – Final decision" \(13 December 2023\)](#), Chapter 3 (topic 3b), and Attachment D.

- F141 Our final decisions on alternative rates of change (discussed in the *Decisions P3, P4, and P5: Approach to determining alternative rates of change* section) take account of estimates for IRIS amounts and accrued wash-up amounts up to the beginning of DPP4. Our final decisions on the RSL relate to smoothing the impact of IRIS amounts, quality incentives, and wash-up drawdown amounts that occur during the DPP4 regulatory period.
- F142 Our final decisions on the RSL address two questions, which we discuss below:
- F142.1 The most appropriate form of any RSL; and
- F142.2 The level of the RSL. We have subsumed consideration of whether to set a RSL for DPP4 within this question.

*Final decisions*

- F143 Our final decision on the form of the RSL (**decision R2.1**) is:
- F143.1 to specify the RSL with reference to the sum of forecast net allowable revenue FNAR(t) and forecast recoverable costs for the previous year FRC(t-1), with adjustments to preserve the revenue path for forecast net allowable revenue and for CPI. This is unchanged from our draft decision.

F143.2 In formulaic terms, this means that:

$$FRP(t) - FPTC(t) - FRLCC(t) \leq ( FNAR(t) + FRC(t-1) \times (1+\Delta SFCPI) ) \times (1 + Y\%)$$

Where–

FRP(t) means forecast revenue from prices for year t;

FPTC(t) means forecast pass-through costs for year t;

FRLCC(t) means revenue forecast to be received under "large connection contracts" for year (t);

FNAR(t) means forecast net allowable revenue for year t;

FRC(t-1) means forecast recoverable costs for the previous year t-1;

$\Delta SFCPI$  is forecast CPI for revenue smoothing; and

Y% is the size of the RSL.

- F144 Our final decision on the size of the revenue smoothing limit (**decision R2.2**) is to set the RSL at the level of 10%. This is unchanged from our draft decision.
- F145 That is, in the formula above, Y = 10%. This means net allowable revenue for the current year plus real (CPI adjusted) forecast recoverable costs for the previous year may not increase by more than 10% each year.



## *What we heard from stakeholders*

- F146 Prior to the draft decision there was recognition, particularly from ENA, that some form of smoothing would be appropriate in DPP4.<sup>87</sup> However, EDBs expressed the firm view that the mechanism in DPP3 – which limited annual increases in forecast revenue from prices to 10%, without adjusting for CPI - was untenable.<sup>88</sup>
- F147 Regarding the form of the RSL, submitters on the issues paper strongly supported specifying any RSL in real terms.<sup>89</sup> They also submitted that the RSL should include an adjustment for volumes, ie, growth in units of electricity delivered<sup>90</sup> and/or in the number of connections,<sup>91</sup> on the basis that a volume-based adjustment would reflect changing circumstances as the economy electrified.
- F148 Wellington Electricity and ENA supported the form of the RSL proposed in the draft decision.<sup>92</sup> Wellington submitted it supported "using the most up-to-date CPI data and expressing the Revenue Smoothing Limit (RSL) in real terms. This approach is consistent with the intent of the smoothing mechanisms – to limit any real price shocks."<sup>93</sup>

---

<sup>87</sup> [Electricity Networks Aotearoa \(ENA\) "DPP4 Issues paper submission" \(19 December 2023\)](#), p. 3; [Wellington Electricity "DPP4 Issues paper submission" \(19 December 2023\)](#), p. 8, p. 71; [Major Electricity Users' Group "Cross-submission on DPP4 Issues paper" \(26 January 2024\)](#), p. 6.

<sup>88</sup> [Electricity Networks Aotearoa \(ENA\) "DPP4 Issues paper submission" \(19 December 2023\)](#), p. 6; [The Lines Company "DPP4 Issues paper submission" \(19 December 2023\)](#), p. 16; [Unison "DPP4 Issues paper submission" \(19 December 2023\)](#) p. 6; [Orion "Cross-Submission on DPP4 Issues Paper" \(26 January 2024\)](#), pp. 4-5.

<sup>89</sup> [Aurora Energy "DPP4 Issues paper submission" \(19 December 2023\)](#), p. 4; [Electricity Networks Aotearoa \(ENA\) "DPP4 Issues paper submission" \(19 December 2023\)](#), p. 6; [The Lines Company "DPP4 Issues paper submission" \(19 December 2023\)](#), p. 16; [Horizon Networks "DPP4 Issues paper submission" \(19 December 2023\)](#), p. 22; [Powerco "DPP4 Issues paper submission" \(19 December 2023\)](#), p. 30; [Wellington Electricity, "DPP4 Issues paper submission" \(19 December 2023\)](#), p. 73; [Frontier Economics "A review of the limit on EDB price increases" \(report prepared for 'Big 6' EDBs', 19 July 2023\)](#), paragraph 290-294.

<sup>90</sup> [Aurora Energy "DPP4 Issues paper submission" \(19 December 2023\)](#), pp. 4, 18-19; [Electricity Networks Aotearoa \(ENA\) "DPP4 Issues paper submission" \(19 December 2023\)](#), p. 6; [The Lines Company "DPP4 Issues paper submission" \(19 December 2023\)](#), p. 16; [Unison "DPP4 Issues paper submission" \(19 December 2023\)](#), p. 25, [Unison "Cross-submission on the DPP4 Issues paper" \(26 January 2024\)](#), p. 4; [Wellington Electricity, "DPP4 Issues paper submission" \(19 December 2023\)](#), p. 73.

<sup>91</sup> [The Lines Company "DPP4 Issues paper submission" \(19 December 2023\)](#), p. 16; [Unison "DPP4 Issues paper submission" \(19 December 2023\)](#), p. 25.

<sup>92</sup> [Wellington Electricity "Submission on EDB DPP4 draft decisions" \(12 July 2024\)](#), p. 51; [Electricity Networks Aotearoa \(ENA\) "Submission on EDB DPP4 draft decisions" \(12 July 2024\)](#), p. 6.

<sup>93</sup> [Wellington Electricity "Submission on EDB DPP4 draft decisions" \(12 July 2024\)](#), p. 51.

- F149 Wellington Electricity went on to submit that "We are comfortable with the 10% limit not being adjusted for volume changes because the 10% limit is an implicit/high-level proxy of a price shock and is not an explicit estimation of when price increases might be unaffordable."<sup>94</sup> This is in contrast to Aurora and Powerco who disagreed with the specification of the RSL at the draft decision, and continued to consider that the RSL should account for changes in quantities of electricity supplied.<sup>95</sup>
- F150 During the IM Review and in submissions on the DPP4 Issues paper, EDBs submitted that any RSL be set at a level – a “high bar” – such that it will bind infrequently.<sup>96</sup> For example, ENA submitted that capping revenue increases at 10% per annum is not viable, or appropriate for DPP4.<sup>97</sup> Contact Energy stated it supports a 10%+CPI limit on total revenue as a “lenient estimate” of a price shock.<sup>98</sup>
- F151 In response to our draft decision, submitters, including ENA, considered that 10% was "workable and appropriate."<sup>99</sup>

#### *Analysis conducted*

- F152 Below, we set out our analysis on the form and size of the RSL.
- F153 Decisions on the form of the RSL include:
- F153.1 Whether to specify the limit in real or nominal terms;
  - F153.2 What reference to use in specifying the limit; and
  - F153.3 Whether to include an adjustment for growth in demand substantially greater than forecast.

---

<sup>94</sup> [Wellington Electricity "Submission on EDB DPP4 draft decisions" \(12 July 2024\)](#), pp. 51-52.

<sup>95</sup> [Aurora Energy "Submission on EDB DPP4 draft decisions" \(12 July 2024\)](#), p. 20; [Powerco "Submission on EDB DPP4 draft decisions" \(12 July 2024\)](#), p. 9

<sup>96</sup> [Vector "DPP4 Issues paper submission" \(19 December 2023\)](#), p. 12; [Wellington Electricity "DPP4 Issues paper submission" \(19 December 2023\)](#), p. 73; [Frontier Economics "A review of the limit on EDB price increases" \(report prepared for 'Big 6' EDBs', 19 July 2023\)](#), para 26(b) and para 315(b); [Powerco "Cross-submission on IM Review 2023 Draft Decisions" \(9 August 2023\)](#), p. 2.

<sup>97</sup> [Electricity Networks Aotearoa \(ENA\) "DPP4 Issues paper submission" \(19 December 2023\)](#), p. 6.

<sup>98</sup> [Contact "DPP4 Issues paper submission" \(19 December 2023\)](#), p. 2. Contact's view was disputed in cross-submissions by ENA, Aurora & Vector ([Electricity Networks Aotearoa \(ENA\) "Cross-submission on the DPP4 Issues Paper" \(26 January 2024\)](#), p. 1-2; [Aurora Energy "Cross-submission on the DPP4 Issues Paper" \(25 January 2024\)](#), p. 2; [Vector "Cross-submission on DPP4 Issues Paper" \(26 January 2024\)](#), p. 5.

<sup>99</sup> [Electricity Networks Aotearoa \(ENA\) "Submission on EDB DPP4 draft decisions" \(12 July 2024\)](#), p. 26.

Whether to specify the limit in real or nominal terms

- F154 The IMs provide that the most up-to-date CPI inflation data is used when determining forecast net allowable revenue at the start of each regulatory year.<sup>100</sup> This reduces the delay for the wash-up for CPI to take effect and mitigates the risk of overpayment by consumers or financial pressure for suppliers.<sup>101</sup>
- F155 Setting a nominal RSL would undermine the intent of that amendment. Accordingly, we consider any RSL should be specified in real terms, using the same up-to-date CPI data used in calculating FNAR.<sup>102</sup>

What reference to use in specifying the limit

- F156 We have considered the merits of specifying the limit by reference to:
- F156.1 the previous year's forecast revenue from prices;
  - F156.2 the current year's allowable revenue; and
  - F156.3 the sum of the previous year's forecast net allowable revenue and forecast recoverable costs, with adjustments to preserve the revenue path.
- F157 The third option – specifying the limit with reference to the sum of the previous year's forecast net allowable revenue and forecast recoverable costs – most closely targets the purpose of the RSL and so is our preferred option. This approach was supported by Wellington Electricity following our draft decision.<sup>103</sup>

---

<sup>100</sup> [Commerce Commission "Input methodologies review 2023 - \[Final\] Electricity Distribution Services Input Methodologies \(IM Review 2023\) Amendment Determination 2023 \[2023\] NZCC 35" \(13 December 2023\)](#), clause 3.1.1(6).

<sup>101</sup> [Commerce Commission "Financing and incentivising efficient expenditure during the energy transition topic paper - Part 4 Input Methodologies Review 2023 – Final decision" \(13 December 2023\)](#), paragraph 4.181.

<sup>102</sup> This approach was supported by ENA, Powerco, and Vector in submissions on the Financeability Issues Paper. For a full discussion of our reasons for using the most up-to-date CPI inflation data when determining forecast net allowable revenue at the start of each regulatory year, see [Commerce Commission "Financing and incentivising efficient expenditure during the energy transition topic paper - Part 4 Input Methodologies Review 2023 – Final decision" \(13 December 2023\)](#), p. 224 and p. 371-375.

<sup>103</sup> [Wellington Electricity "Submission on EDB DPP4 draft decisions" \(12 July 2024\)](#), pp. 51-52.

- F158 In implementing this option, we have specified the RSL with reference to forecast net allowable revenue for the current year, plus real (CPI adjusted) forecast recoverable costs for the previous year. This is to preserve the rate of change applied to forecast net allowable revenue in each year of the regulatory period, for each EDB.
- F159 Any revenue deferral arising from the revenue smoothing limit would be present-value neutral to EDBs and consistent with the FCM principle.<sup>104</sup> However, as we have noted elsewhere, extended and significant revenue deferral could lead to financeability constraints on EDBs, reducing incentives to invest (inconsistent with s 52A(1)(a) of the Act).
- F160 Our preferred option avoids this outcome; using forecast net allowable revenue for the current year, plus real (CPI adjusted) forecast recoverable costs for the previous year, as the reference for the RSL will smooth volatility in recoverable costs, without deferring recovery of forecast net allowable revenue.
- F161 Powerco suggested a similar approach in its submission on the Financeability Issues Paper, proposing that the reference should be the previous year's forecast allowable revenue, and stating:<sup>105</sup>
- “This will eliminate the concern of undercharging leading to a lower revenue limit in the future. This is consistent with having a limit that is less likely to bind in most cases and doesn't lead to excessive value in the wash-up account.”
- F162 Vector submitted an alternative methodology in its submission on the Financeability Issues Paper, based on “determining all revenue accruals from DPP3 and DPP4 that are due to be drawn down within DPP4 in the absence of revenue capping or smoothing” and setting the revenue cap and RSL to allow these accruals to be recovered within the DPP4 regulatory period.<sup>106</sup>
- F163 Our view is that Vector's proposal is not practical, as the necessary data (for example wash-up balance for the 2025 regulatory year) will not be available until after the revenue path is set.

---

<sup>104</sup> This is because under the wash-up mechanism EDBs accrue a time-value of money adjustment, see [Commerce Commission "Input methodologies review 2023 - \[Final\] Electricity Distribution Services Input Methodologies \(IM Review 2023\) Amendment Determination 2023 \[2023\] NZCC 35" \(13 December 2023\)](#), clause 3.1.4(1)(b).

<sup>105</sup> [Powerco "Submission on Financeability issues paper" \(15 March 2024\)](#), p. 3.

<sup>106</sup> [Vector "Submission on Financeability issues paper" \(15 March 2024\)](#), p. 14.

F164 Conceptually, our final decision is similar to what Powerco recommends, but adjusted to remove pass through costs, consistent with the IMs.<sup>107</sup>

F165 With respect to the other options above:

F165.1 Specifying the limit with reference to the previous year's forecast revenue from prices would potentially create a "ratchet effect" – should an EDB set forecast revenue from prices below forecast allowable revenue in any given year, this would reduce the level of the RSL in future years. This has a compounding effect and could lead to substantial build-up of unrecovered revenue.<sup>108</sup>

F165.2 Specifying the limit with reference to the current year's allowable revenue does not provide for year-on-year smoothing, and so would not accomplish the purpose of the limit.

Whether to include an adjustment for growth in demand

F166 In submissions on the IM Review, on the DPP4 issues paper, and in response to the draft decision, submitters suggested the idea of including a 'quantity' adjustment to the smoothing limit, citing the principle that prices are a function of revenue and demand, so any assessment of price shocks must account for changes in demand.<sup>109</sup>

F167 As we have discussed above, we have accounted for changes in quantities in our approach to assessing price shocks and specifying alternative rates of change.<sup>110</sup> We do not consider it appropriate to also include a quantity adjustment in specifying the RSL, as:

F167.1 under the IMs, the focus of the RSL is limited to the impact of regulatory mechanisms that are not directly correlated with changes in demand (IRIS, quality incentives, and recovery of wash-ups); and

---

<sup>107</sup> [Commerce Commission "Input methodologies review 2023 - \[Final\] Electricity Distribution Services Input Methodologies \(IM Review 2023\) Amendment Determination 2023 \[2023\] NZCC 35" \(13 December 2023\)](#), clause 3.1.1(b).

<sup>108</sup> While our preferred option could create a similar "ratchet effect", the potential impact is smaller as the option effectively only smooths the recoverable cost component of the revenue path.

<sup>109</sup> For example, [Aurora Energy "Submission on Commerce Commission Part 4 Input Methodologies Review 2023 - Draft Decision" \(19 July 2023\)](#), Section 4.3, and [Aurora Energy "DPP4 Issues paper submission" \(19 December 2023\)](#), paragraph 72.

<sup>110</sup> See *Decisions P3, P4, and P5: Approach to determining alternative rates of change*.

F167.2 the form of control applying to EDBs is a revenue cap. Within that context it is appropriate to smooth for year-on-year fluctuations in revenue, including a demand adjustment as part of the RSL mechanism would increase complexity.

F168 Submissions on our draft decision from Powerco and Aurora reiterated that they considered the RSL should include an adjustment for changes in quantities.<sup>111</sup> However, these submissions did not contain new arguments and have not persuaded us to include an adjustment for quantity in our final decision.

Other options considered for the form of the RSL

F169 We have considered the other options submitted by Frontier Economics during the 2023 IM Review.<sup>112</sup> Frontier's suggestion of limiting the RSL to shorter, defined period of time (e.g., one or two years) would not accomplish the objective of smoothing for year-on-year fluctuations in recoverable costs such as IRIS, quality incentives, and wash-up. This approach, and the suggested sliding scale, would add considerable additional complexity in implementation of, and compliance with, the limit. For these reasons we have not adopted these options.

Size of the RSL

F170 To arrive at final decisions on the level of the RSL, we reviewed information disclosure data for the past 5 available disclosure years (2019 to 2023),<sup>113</sup> to estimate the variation in net allowable revenue plus recoverable costs (NAR + RC), in real terms.

F171 The data shows substantial real year-on-year swings in NAR + RC, ranging between - 27% and + 25%. This variability arises primarily from the impact of IRIS amounts.

---

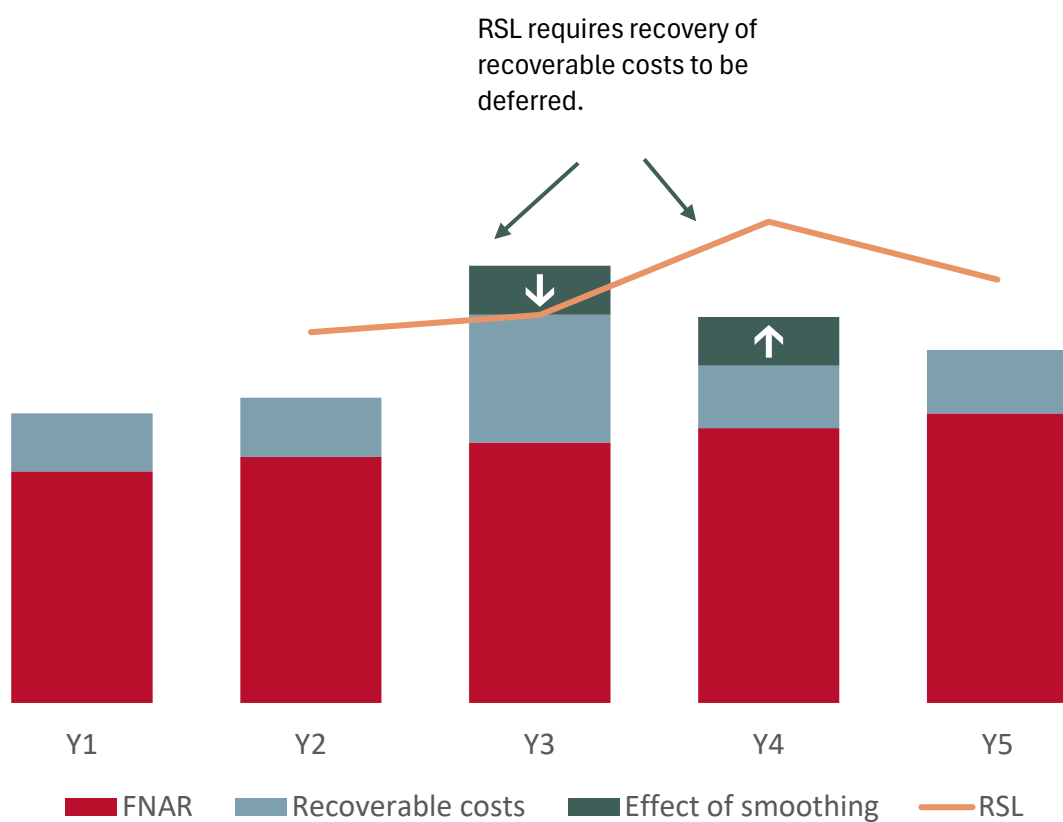
<sup>111</sup> [Aurora Energy "Submission on EDB DPP4 draft decisions" \(12 July 2024\)](#), p. 20; [Powerco "Submission on EDB DPP4 draft decisions" \(12 July 2024\)](#), p. 9.

<sup>112</sup> [Frontier Economics "A review of the limit on EDB price increases" \(report prepared for 'Big 6' EDBs', 19 July 2023\)](#)

<sup>113</sup> We have selected 5 years, as historic data prior to 2019 is less directly comparable due to changes in the composition of recoverable costs.

F172 The RSL acts to smooth for “outlier” spikes due to volatility in recoverable costs (primarily IRIS and wash-up amounts). Where the RSL binds in one year, the deferred revenue helps mitigate downswings in distribution revenues in future years. The hypothetical illustration in Figure F11 shows how a spike in revenues in a particular year – for example arising from higher than usual wash-up accruals - is smoothed. The portion of revenue above the RSL in one year (the green shaded portion in Year 3 in the illustration) is deferred for recovery in the following year (the green shaded portion shown in Year 4). The net present value of total revenue over the regulatory period remains the same.

**Figure F11 Illustration of the ‘spike’ recoverable cost scenario**



F173 In arriving at our final decision on the size of the RSL, we have weighed this intent alongside the impact on revenue paths, and prices to consumers, of the RSL combined with above CPI year-on-year revenue increases (see **decisions P4** and **P5**, on alternative rates of change).

- F174 Based on our analysis of historical data, a RSL of 10% equates to the 60th percentile of annual real changes in net allowable revenue plus recoverable costs, across non-exempt EDBs over the period. That is, over time a 10% limit could be expected to bind in 4 out of 10 years. In response to the draft decision, submitters considered that an RSL set at 10% per annum was "workable and appropriate" and we received no submissions proposing a different value.<sup>114</sup>
- F175 We also considered the option of using the 90th percentile of annual real changes in net allowable revenue plus recoverable costs (The 90th percentile is consistent with the event occurring once in every 10 years for an EDB, and so smooths for large, infrequent spikes in recoverable costs).
- F176 The 90th percentile, based on our analysis of historic data, is 21%. Were we to set the RSL at this level the compounded impact on revenues over the regulatory period - when combined with higher than CPI rates of change – could result in significant year-on-year increases.
- F177 As we've already noted,<sup>115</sup> any revenue deferral arising from the RSL would be present-value neutral to EDBs and consistent with the FCM principle. Further, our decision on the form of the RSL means that, even though a 10% limit will bind more frequently, EDBs can expect to recover their full BBAR over the DPP4 regulatory period.<sup>116</sup> Should the RSL bind for an EDB, in any given year, the effect will be limited to deferring a portion of the EDB's recoverable costs, to be recovered in the future (including a time value of money adjustment) through the wash-up mechanism.

### *Conclusions*

- F178 Our final decisions on the RSL reduce the potential for significant swings in the size of recoverable costs to cause year-on-year volatility in EDB revenues and prices to consumers, while balancing financeability concerns with the compound effect of real increases in consumer prices.

---

<sup>114</sup> [Electricity Networks Aotearoa \(ENA\) "Submission on EDB DPP4 draft decisions" \(12 July 2024\)](#), p. 26.

<sup>115</sup> See paragraph F159.

<sup>116</sup> Should the RSL bind in the final year of DPP4, some or all of the EDB's recoverable costs would be deferred to DPP5. Our final decision on the form of the RSL preserves EDBs' ability to recover their forecast net allowable revenue within DPP4.



F179 In particular, our final decisions preserve:

F179.1 the underlying building blocks allowable revenue; and

F179.2 the intent of the recent change in the IMs, to ensure the most up-to-date CPI inflation is used when determining FNAR at the start of each regulatory year.

## Implementation of amendments to the wash-up from the IM Review

### *Nature of the decisions*

F180 As part of the 2023 IM Review, the Commission decided on a package of changes to the wash-up mechanism for EDBs. These decisions are reflected in clause 3.1.4 of the EDB IMs Amendment Determination 2023, which specifies:

F180.1 the formula for calculating the ‘wash-up account balance’ for each disclosure year;

F180.2 specific adjustments required for the calculation of ‘actual allowable revenue’, to be accomplished by re-running the relevant components of the DPP financial model; and

F180.3 transitional provisions for all non-exempt EDBs.

F181 In response to our draft decision, submitters such as ENA identified that the transitional arrangements provided in the IMs did not work as assumed in the draft decision.<sup>117</sup> They identified that there was no WAB 2024 term, which would prevent EDBs from drawing down the accrued balance in DY2026 as intended. We have published IM amendments alongside the DPP final decision to address this issue and allow EDBs to draw down their accrued balance in line with the policy intent.<sup>118</sup>

F182 Schedules 1.6 and 1.7 of the DPP4 determination implement the wash-up provisions in the IMs (**decision R3.1**). We intend to release a demonstration wash-up model to assist understanding and compliance with the revised wash-up mechanism during DPP4.

---

<sup>117</sup> [Electricity Networks Aotearoa \(ENA\) “Submission on EDB DPP4 draft decisions” \(12 July 2024\)](#), p. 5.

<sup>118</sup> Commerce Commission “Amendments to input methodologies for electricity distribution businesses - wash-up amounts - Final decision reasons paper” (20 November 2024)

- F183 The wash-up provisions in the IMs provide for the following specific matters to be determined in DPP determinations:<sup>119</sup>
- F183.1 calculation of the CPI adjustment for year 1 of DPP4, for the purpose of the new wash-up for inflation in the first year of a regulatory period;
  - F183.2 whether to set a “base wash-up drawdown” for EDBs, for the purpose of returning wash-up account balances to zero over time;
  - F183.3 the level of the undercharging limit for the DPP regulatory period;
  - F183.4 the time value of money adjustment for the opening wash-up balance; and
  - F183.5 an adjustment for allowable revenue from large connection contracts.

**Decision R3.2: Calculation of the Y1 inflation wash-up based on the four-quarter average change in inflation between Y0 and Y1.**

*Nature of the decision*

- F184 As part of the 2023 IM Review, the Commission decided to amend the EDB IMs to wash-up allowable revenue for the first year of a regulatory period, to account for any variation between predicted and outturn inflation for the first year of a regulatory period.<sup>120</sup>
- F185 The IMs specify the calculation of the new wash-up for inflation for the first year of the regulatory period at clause 3.1.4(4)(c), as:<sup>121</sup>
- (4) For the purposes of subclause (3), and subject to subclause (10), ‘actual allowable revenue’ for a disclosure year means an amount calculated on the same basis as the forecast allowable revenue for the disclosure year, adjusted (as specified by the Commission in a DPP determination or CPP determination) by substituting:
- ...
- (c) in respect of the first disclosure year of the regulatory period:

---

<sup>119</sup> [Commerce Commission "Input methodologies review 2023 - \[Final\] Electricity Distribution Services Input Methodologies \(IM Review 2023\) Amendment Determination 2023 \[2023\] NZCC 35" \(13 December 2023\)](#), clause 3.1.4.

<sup>120</sup> [Commerce Commission "Financing and incentivising efficient expenditure during the energy transition topic paper - Part 4 Input Methodologies Review 2023 – Final decision" \(13 December 2023\)](#), Topic 4b paragraphs 4.79.2 and 4.111-4.116.

<sup>121</sup> [Commerce Commission "Input methodologies review 2023 - \[Final\] Electricity Distribution Services Input Methodologies \(IM Review 2023\) Amendment Determination 2023 \[2023\] NZCC 35" \(13 December 2023\)](#), clause. 3.1.4(4)(c).

(i) the amount determined in accordance with the formula—  
forecast net allowable revenue for the disclosure year /  
(1 + forecast CPI change) x (1 + actual CPI change)

Where—

‘forecast CPI change’ means the derived change in the forecast CPI for the disclosure year, calculated in accordance with a DPP determination or CPP determination; and

‘actual CPI change’ means the derived change in the CPI for the disclosure year, calculated in accordance with a DPP determination or CPP determination; for

(ii) forecast net allowable revenue for the disclosure year;

F186 This formula has the effect of “backing out” the forecast CPI change used by the Commission in setting forecast net allowable revenue (‘FNAR’) for the first year of the regulatory period, and instead applying the actual change in CPI for that year. This allows the impact on allowable revenue of any variation between predicted and outturn inflation, to be reflected in the wash-up accrual amount for year 1.

F187 To implement this IM provision, the DPP4 determination must specify the ‘forecast CPI change’ and ‘actual CPI change’.

#### *Final decision*

F188 Our final **decision R3.2** is that, for the purpose of calculating the wash-up for inflation for the first year of the regulatory period under clause 3.1.4(4)(c) of the EDB IMs:

F188.1 ‘forecast CPI change’ is 2.27%. This is the value for “forecast changes in the CPI element of the price path” for regulatory year 2026, used in the DPP4 financial model; and

F188.2 ‘actual CPI change’ is specified 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: CPI<sub>q,t-n</sub> is the CPI for the quarter year ending q in the 12-month period n years prior to the year t; and t is the year 2026.

#### *Analysis*

F189 ‘Forecast CPI change’: The Commission’s financial model for DPP4 includes an input term “Forecast changes in the CPI element of the price path”, which is used in calculating forecast net allowable revenue for each year of the regulatory period. The value for this term, for regulatory year 2026, is the ‘forecast CPI change’ for the purpose of the inflation wash-up for year 1 of the regulatory period. For the purpose of our final decisions, this value is 2.27%.

F190 'Actual CPI change': The formula for calculating 'actual CPI change' for the purpose of wash-ups was specified in Schedule 1.6 of the DPP3 determination as:

$$\Delta CPI = \frac{CPI_{Jun,t-1} + CPI_{Sep,t-1} + CPI_{Dec,t-1} + CPI_{Mar,t}}{CPI_{Jun,t-2} + CPI_{Sep,t-2} + CPI_{Dec,t-2} + CPI_{Mar,t-1}} - 1$$

Where: CPI<sub>q,t-n</sub> is the CPI for the quarter year ending q in the 12-month period n years prior to the year t; and t is the year in which the assessment period ends.

F191 We have retained this formula in the final DPP4 determination, as it remains fit for purpose.

F192 The same calculation applies when calculating the actual CPI change from the last year of DPP3 to the first year of DPP4. Accordingly, our decision is to use the above formula for ΔCPI for the calculation of "actual CPI change", in washing up for inflation in year 1 of DPP4, where the year t is 2026 (the first year of the DPP4 regulatory period).

### **Decision R3.3: Base wash-up drawdown**

#### *Nature of the decision*

F193 The IMs provide a discretion for the Commission to specify for each year of the regulatory period:

"an amount to be drawn down by the EDB in the disclosure year, as determined by the Commission for the purpose of returning the wash-up account balance towards zero over time and specified in a DPP determination or CPP determination"<sup>122</sup>

#### *Final decision*

F194 Our final decision is not to specify a base wash-up drawdown amount for non-exempt EDBs, in DPP4. This is unchanged from our draft decision.

#### *What we heard from stakeholders*

F195 We received no submissions with regards to **decision R3.3**

---

<sup>122</sup> [Commerce Commission "Electricity Distribution Services Input Methodologies \(IM Review 2023\) Amendment Determination 2023 \[2023\] NZCC 35" \(13 December 2023\)](#), cl. 3.1.4(5)(b)(i).

## *Analysis*

F196 Our final decisions on assessing price shocks and specifying alternative rates of change already account for estimated accrued wash-up amounts up to the beginning of DPP4.<sup>123</sup>

F197 Accordingly, there is no reason to set a base wash-up drawdown for DPP4.

### **Decision R1.3: Level of the undercharging limit for DPP4**

#### *Nature of the decision*

F198 The IMs provide for an ‘undercharging limit’ (UCL) as part of the wash-up mechanism. In setting the DPP4 determination, the Commission is required to specify the level of that undercharging limit.

#### *Final decision*

F199 Our final decision is to set the undercharging limit for DPP4 as 90% of a non-exempt EDB’s forecast allowable revenue for a year (subject to the application of the revenue smoothing limit).<sup>124</sup> This is unchanged from our draft decision.

#### *What we heard from stakeholders*

F200 In response to our issues paper we received one substantial submission on this topic, from Network Tasman, who submitted that the Commission should remove the undercharging limit as there is:<sup>125</sup>

“no basis for the Commission to cap the value of an EDB’s wash-up balance because the risk of an EDB accruing a large wash-up balance and then subsequently creating a price shock for consumers is either non-existent or immaterial.”

---

<sup>123</sup> See paragraph F74.

<sup>124</sup> We have corrected an error in the drafting of the determination, that incorrectly excluded pass-through costs from the ‘revenue smoothing limit’ limb of the undercharging limit.

<sup>125</sup> [Network Tasman “DPP4 issues paper submission” \(19 December 2023\)](#), pp. 1-2.

- F201 In response to the draft decision, we received multiple submissions on the undercharging limit, mostly from trust-owned EDBs including Top Energy and The Lines Company.<sup>126</sup> Historically it has been community owned EDBs that have utilized the ability to undercharge their allowed revenue to mitigate the impact of price increases on their customers.
- F202 Some submitters considered that the UCL was not appropriate given the large increase in allowable revenues and considered that we should not specify an undercharging limit.<sup>127</sup>
- F203 Submitters who considered the UCL should be removed, cited the revenue smoothing limit (**decisions R2.1 and R2.2**) as a tool to prevent the sudden drawdown of large washup balances. For example, Top Energy submitted that "Consumers are protected from future price increases through the revenue smoothing limit of 10% real per annum. TEL believes this is an efficient control to protect consumers."<sup>128</sup>
- F204 In the case that we retained the UCL, submitters considered that the 90% limit was not appropriate, given the magnitude of the expected price rises. They submitted that an 80% UCL was more appropriate, citing that we were comfortable with a 20% initial price shock and so a 20% negative shock was also acceptable.<sup>129</sup>
- F205 Additionally, Network Tasman submitted that they considered that the UCL violated the principle of ex-ante FCM. They submitted:<sup>130</sup>

The Commission has long recognised the material and asymmetric consequences to consumers over the long term of setting an EDB's revenues too low compared to too high. This has been a long- standing economic principle used at the Commission to inform decision-making, most recently as a key economic principle guiding the analysis in the Cost of Capital topic paper of the 2023 IMs review (along with FCM).[..]

---

<sup>126</sup> [Top Energy "Submission on EDB DPP4 draft decisions" \(11 July 2024\)](#), pp. 1-2; [The Lines Company \(TLC\) "Submission on EDB DPP4 draft decisions" \(12 July 2024\)](#), pp. 4-5.

<sup>127</sup> [Top Energy "Submission on EDB DPP4 draft decisions" \(11 July 2024\)](#), pp. 1-2; [Aurora Energy "Submission on EDB DPP4 draft decisions" \(12 July 2024\)](#), p. 20; [Alpine Energy "Submission on EDB DPP4 draft decisions" \(12 July 2024\)](#), p. 3.

<sup>128</sup> [Top Energy "Submission on EDB DPP4 draft decisions" \(11 July 2024\)](#), p. 2.

<sup>129</sup> [Top Energy "Submission on EDB DPP4 draft decisions" \(11 July 2024\)](#), pp. 1-2; [Alpine Energy "Submission on EDB DPP4 draft decisions" \(12 July 2024\)](#), p. 3; [Electricity Networks Aotearoa \(ENA\) "Submission on EDB DPP4 draft decisions" \(11 July 2024\)](#), p. 26; [EA Networks "Submission on EDB DPP4 draft decisions" \(12 July 2024\)](#), p. 2; [The Lines Company \(TLC\) "Submission on EDB DPP4 draft decisions" \(12 July 2024\)](#), pp. 4-5.

<sup>130</sup> [Network Tasman "Submission on EDB DPP4 draft decisions" \(12 July 2024\)](#), p. 12.

Should the undercharging limit bind for an EDB, that EDB's forecast revenues will no longer be equal to its forecast costs. This outcome undermines the integrity of the Building Blocks Method to deliver an ex-ante expectation of real FCM. The risks of this are significant, self-evident and entirely outweigh the risks the Commission perceives with removing the undercharging floor."

### *Analysis*

- F206 The purpose of the 'undercharging limit' is to set a floor for the amount by which EDBs can voluntarily accrue under-recovered revenue to the wash-up balance in a given year. This limits the potential for an EDB to accrue a large wash-up balance by substantially under-recovering allowed revenue in one year, with the revenue being recovered (on a NPV-neutral basis) through the wash-up mechanism in future years.
- F207 Should an EDB voluntarily charge below this floor, the difference between the undercharging limit and its forecast revenue from prices is not accrued to the wash-up account, and is therefore foregone.
- F208 The DPP3 determination set this limit at 90% of forecast allowable revenue, subject to the 10% limit on annual increases in forecast revenue from prices for DPP3. The 90% limit for DPP3 was chosen to allow EDBs some flexibility to smooth their revenue recovery, while at the same time minimising the risk of future price shocks.<sup>131</sup>
- F209 Submitters considered that we should remove the UCL, however the requirement to set an undercharging limit is set out in the EDB IMs, which we reviewed in 2023. While we could set the limit at 0% as submitted by Network Tasman, we continue to consider it appropriate to set an UCL that could bind should an EDB choose to substantially undercharge.
- F210 We do not consider that a binding UCL "undermines the integrity of the Building Blocks Method to deliver an ex-ante expectation of real FCM."<sup>132</sup> Our final decision provides a 'corridor' within which an EDB can expect real FCM. Should the EDB choose to undercharge beyond the extent to which the UCL binds,<sup>133</sup> then the EDB has chosen to forgo its expectation of real FCM. The question therefore is what the level of the limit should be.

---

<sup>131</sup> [Commerce Commission "Default price-quality paths for electricity distribution businesses from 1 April 2020 – Final decision Reasons paper" \(27 November 2019\) \(27 November 2019\)](#), paragraph 6.34.

<sup>132</sup> [Network Tasman "Submission on EDB DPP4 draft decisions" \(12 July 2024\)](#), p. 12.

<sup>133</sup> As the UCL only relates to voluntary undercharging.

- F211 At the draft decision we considered that there was no evidence that the 90% undercharging limit under DPP3 was currently causing any detriment to suppliers or consumers. Accordingly, we decided to retain it for our draft decision. This was consistent with our decision to retain approaches from the DPP3 where they remain fit for purpose.<sup>134</sup>
- F212 Submitters considered that the 90% limit would not provide sufficient flexibility to suppliers to react to their firms' specific circumstances. There was concern that the 90% limit would not provide EDBs with sufficient ability to smooth the "step off" into DPP5, given the raised revenue in the out years of DPP4 that will arise from the use of alternate X-factors.<sup>135</sup>
- F213 We have assessed EDBs ability to smooth a potential drop of revenue between DPP4 and DPP5. Between the current washup balances that EDBs will carry into DPP4 and potential accruals to the balance through undercharging though the period, we consider that EDBs have sufficient ability to shape a revenue path that allows them a smooth transition into DPP5 if they are concerned that there will be a substantial drop in revenue.<sup>136</sup>
- F214 Additionally, for those EDBs who are concerned about the price shock that is expected in the transition between DPP3 and DPP4, the updated washup mechanism provides them with the ability to smooth the price path without undercharging below the 90% limit. EDBs can choose to not draw down on any accrued balance in a given year and the balance is carried forward in an NPV neutral way.
- F215 Forecast allowable revenues (and therefore prices) will increase substantially under DPP4. Our final decisions on alternative rates of change mitigate the impact of these increases, taking account of the Part 4 purpose. As a package, our final decisions give EDBs a degree of flexibility to adjust revenues – and consumer price impacts – during the regulatory period, without foregoing revenue in the long run.<sup>137</sup>

---

<sup>134</sup> [Commerce Commission "Default price-quality paths for electricity distribution businesses from 1 April 2025 – Issues paper" \(2 November 2023\)](#), paragraph A17.

<sup>135</sup> [EA Networks "Submission on EDB DPP4 draft decisions" \(12 July 2024\)](#), p. 2.

<sup>136</sup> For the size of the wash-up balances we estimate EDBs will carry into DPP4, see Table F3.

<sup>137</sup> The exception being if, as noted above, an EDB voluntarily charges below the undercharging limit. In this case, the difference between the undercharging limit and its forecast revenue from prices is not accrued to the wash-up account, and is therefore foregone.



## Other technical matters for the calculation of the washup

### *Nature of the decision*

- F216 The revised EDB IMs provide that the DPP determination specify an adjustment for allowable revenue from large connection contracts.
- F217 At the DPP4 draft decision the IMs also required that we specify a time value of money adjustment for the opening wash-up balance. Following submissions on the DPP4 draft decision on the implementation of the wash-up, we have amended the IMs to include the time value of money adjustment rather than included as part of the DPP4 determination.<sup>138</sup>

### *Final decisions*

- F218 Our final decision on this matter is to include a large connection contract (LCC) wash-up term in the wash-up accrual formula, to avoid recovery of under-recovered LCC revenue from other consumers and correct over-allocation to LCC revenue from non-qualifying LCCs. This confirms our draft decision.

### *Analysis*

- F219 The 2023 IM Review also introduced an optional mechanism for large new customer-initiated and funded connections that meet certain criteria (large connection contracts, or 'LCCs').<sup>139</sup> **Attachment B** of this paper discusses the implementation of this mechanism in DPP4.
- F220 Revenues received under large connection contracts are incorporated in the revised wash-up mechanism. Clause 3.1.4(11) of the IMs requires us to specify in the DPP determination the calculation of allowable revenue in respect of a LCC, for the purpose of the wash-up. This avoids recovery of LCC under-recovered revenue from other consumers and correct over-allocation to LCC revenue from non-qualifying LCCs through the operation of the wash-up. Accordingly, we have included an adjustment in the wash-up accrual formula in the DPP4 determination.<sup>140</sup> **Attachment B** of this paper discusses how the monitoring of LCCs during DPP4 is enabled by the LCC adjustment in the wash-up.

---

<sup>138</sup> Commerce Commission "Amendments to input methodologies for electricity distribution businesses - wash-up amounts - Final decision reasons paper" (20 November 2024)

<sup>139</sup> [Commerce Commission "Input methodologies review 2023 - Final decision - CPPs and in-period adjustments topic paper" \(13 December 2023\)](#), Chapter 8.

<sup>140</sup> See Schedule 1.7, clause (9) of the DPP4 determination.

*Other matters affecting the revenue path (decision R1.5)*

F221 **Decision R1.5** regarding asset transfers is discussed in detail in **Attachment H** from paragraph H39.

**Decision I2: Implementation of amendments to the IMs to determine IRIS opex and capex forecasts in real (CPI-adjusted) terms**

*Nature of the decisions*

F222 As part of our final decisions on the 2023 IM Review, we amended the IMs to set inflation-adjusted IRIS allowances (based on actual CPI) for the purposes of calculating opex and capex incentive amounts.

F223 Schedule 2.2 of the DPP4 determination implements this change to the IMs.

*Final decision*

F224 Our final decision is to implement ‘real’ IRIS by:

F224.1 specifying in paragraph (1) and (2) of schedule 2.2 an adjustment for the difference between forecast CPI and actual CPI; and

F224.2 specifying in paragraph (3) of schedule 2.2 a definition for  $\Delta CPI_{Yt}$  in accordance with the following formula:

$$\Delta CPI_{Yt} = \frac{CPI_{Jun,Yt} + CPI_{Sep,Yt} + CPI_{Dec,Yt} + CPI_{Mar,Yt}}{CPI_{Jun,2025} + CPI_{Sep,2025} + CPI_{Dec,2025} + CPI_{Mar,2025}}$$

where:  $CPI_{q,y}$  is the CPI for the quarter year ending  $q$  in the relevant year,  $Yt$  is the assessment period, and 2025 is the disclosure year ending 31 March 2025.

*What we heard from stakeholders*

F225 Stakeholders engaged extensively on this topic in relation to the 2023 IM Review, where they considered that inflation adjusted IRIS allowances would protect consumers and suppliers from windfall gains and losses due to differences between forecast and actual inflation.<sup>141</sup>

---

<sup>141</sup> See [Commerce Commission “Financing and incentivising efficient expenditure during the energy transition topic paper - Part 4 Input Methodologies Review 2023 – Final decision” \(13 December 2023\)](#), topic 5c.

F226 In response to our draft decision, most submitters supported our approach.<sup>142</sup> Aurora disagreed with our draft decision to inflate IRIS allowances by CPI, as they considered that "CPI is unlikely to be the most accurate inflationary measure, especially for capex. The Commission should consider adopting the CGPI as a better measure of real capex increases."<sup>143</sup> They reiterated this position in their cross-submission.<sup>144</sup>

### *Analysis*

F227 Our final decision implements inflation adjusted IRIS allowances by providing an adjustment term to the IRIS allowances set in the determination. This term adjusts each year's allowances by the difference between forecast CPI and actual CPI with respect to the base year.

F228 Aurora submitted that we should use a different inflator for the allowances, submitting we should use CGPI for capex. The choice of inflator is set by the IMs, not the DPP determination. As discussed in the IM Review final reasons paper, we consider that CPI best represents uncontrollable economy wide inflation.<sup>145</sup>

F229 Following our draft decision, we identified an error with the formula for updating the IRIS allowances for actual CPI that meant that allowances were increased even when actual CPI matched forecast CPI. We have corrected this error in the final decision.

F230 We consider that specifying CPI changes compared to year 5 of DPP3 better promotes s 52A (1)(b) of the Act by ensuring that the IRIS incentives account for the differences between forecast and actual CPI that arise within the period, in keeping with the IMs.

---

<sup>142</sup> [Electricity Networks Aotearoa \(ENA\) "Submission on EDB DPP4 draft decisions" \(12 July 2024\)](#), p. 25; [Orion "Submission on EDB DPP4 draft decisions" \(11 July 2024\)](#), p. 20; [Wellington Electricity "Submission on EDB DPP4 draft decisions" \(12 July 2024\)](#), p. 51.

<sup>143</sup> [Aurora Energy "Submission on EDB DPP4 draft decisions" \(12 July 2024\)](#), p. 19.

<sup>144</sup> [Aurora Energy "Cross-submission on EDB DPP4 draft decisions" \(2 August 2024\)](#), p. 2.

<sup>145</sup> [Commerce Commission "Input methodologies review 2023 - Final decision - Financing and incentivising efficient expenditure during the energy transition topic paper" \(13 December 2023\)](#), p. 267.