

Final Decision

**Power and Water Corporation
Electricity Distribution
Determination 2024 to 2029
(1 July 2024 to 30 June 2029)**

**Attachment 6
Operating expenditure**

April 2024

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List of attachments

This attachment forms part of the AER's final decision on the distribution determination that will apply to Power and Water Corporation for the 2024–29 period. It should be read with all other parts of the final decision.

As a number of issues were settled at the draft decision stage or required only minor updates, we have not prepared all attachments. The final decision attachments have been numbered consistently with the equivalent attachments to our draft decision. In these circumstances, our draft decision reasons form part of this final decision.

The final decision includes the following documents:

Overview

Attachment 1 – Annual revenue requirement

Attachment 2 – Regulatory asset base

Attachment 4 – Regulatory depreciation

Attachment 5 – Capital expenditure

Attachment 6 – Operating expenditure

Attachment 7 – Corporate income tax

Attachment 9 – Capital expenditure sharing scheme

Attachment 13 – Classification of services

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6 Operating expenditure

Operating expenditure (opex) refers to the operating, maintenance and other non-capital costs incurred in the provision of standard control services. Forecast opex for standard control services is one of the building blocks we use to determine a service provider's total regulated revenue requirement.

This attachment outlines our assessment of Power and Water Corporation's (PWC) proposed opex forecast for the 2024–29 regulatory control period (2024–29 period).

6.1 Final decision

Our final decision is to accept PWC's total opex forecast of \$387.2 million (\$2023–24) for the 2024–29 period.¹ Our alternative estimate of \$385.6 million (\$2023–24) is not materially different (\$1.6 million (\$2023–24), or 0.4% lower) from PWC's revised proposal total opex forecast. Therefore, we consider PWC's total opex forecast reasonably reflects the opex criteria, having regard to the opex factors.²

Our final decision, which is the same as PWC's revised proposal total opex forecast is:

- \$13.0 million (\$2023–24), or 3.2% lower than the opex forecast we approved in our final decision for the 2019–24 regulatory control period³
- \$20.8 million (\$2023–24), or 5.7% higher than PWC's actual (and estimated) opex in the 2019–24 period adjusted for capitalisation backcast (which was discussed in our draft decision)⁴
- \$28.1 million (\$2023–24), or 6.8% lower than PWC's initial proposal
- \$22.8 million (\$2023–24), or 6.3% higher than our draft decision.⁵

Figure 6.1 compares the opex forecast we approve in this final decision for the next regulatory control period (the blue line), which is PWC's revised opex proposal (also the blue line), as well as PWC's actual and estimated opex in the current regulatory control period (the blue bars). We have also included the forecasts we approved in past decisions (the orange line), PWC's initial opex proposal for the 2024–29 period (the blue dashed line) and our draft decision (the orange dotted line). PWC's total opex over the period 2009–19 when PWC was regulated by the Northern Territory (NT) Utility Commission is also shown.

¹ PWC, *Revised proposal – 01 – Revised regulatory proposal*, 30 November 2023, p.31.

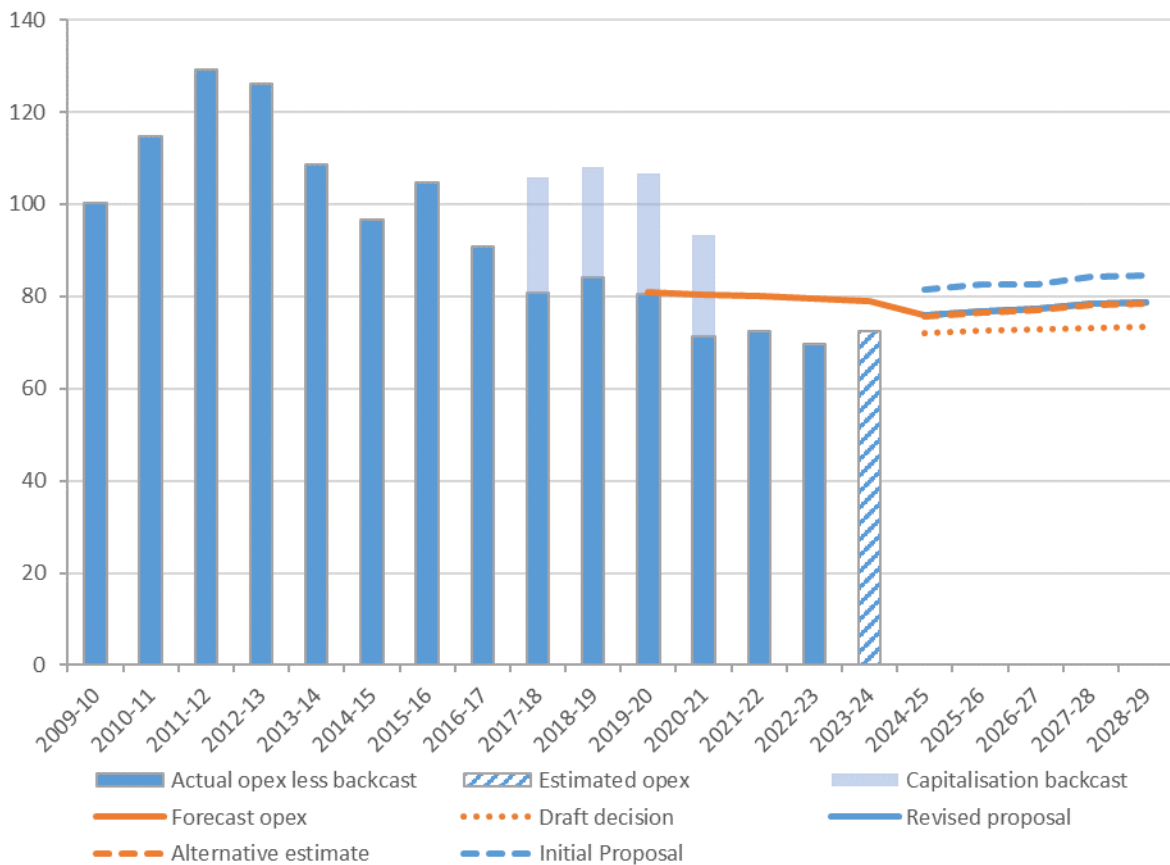
² NT NER, cl. 6.5.6(c) and cl. 6.5.6(e).

³ Difference is calculated based on the opex allowance for the five-year 2019–24 period converted to real 2023–24 dollars using unlagged inflation.

⁴ AER, *Draft Decision Attachment 06 – Operating expenditure – Power and Water Corporation 2024–29 Distribution revenue proposal*, September 2023, p.12.

⁵ Due to a change PWC made effective from 1 July 2021 to the way it capitalises network and corporate overheads, PWC's actual and estimated opex and the opex we forecast for the 2019–24 regulatory control period are not reported on a like-for-like basis with its forecast for the 2024–29 period. See the note in Figure 6.1.

Figure 6.1 Historical and forecast opex (\$million, 2023–24)



Source: PWC, Distribution economic benchmarking – regulatory information notice response (EB RIN) 2011–12 to 2022–23; PWC, 9.01 - Operating expenditure, January 2023, pp. 8-10; PWC, 9.03 - 2024–29 SCS Opex model, January 2023; PWC, RIN1.09 - 2024–29 Reset RIN Workbook 1 Forecast Data, January 2023; PWC, Revised Proposal – 5.03 - 2024–2029 SCS Opex Model, November 2023; AER analysis.

Note: In June 2021, under its existing Cost Allocation Method, PWC changed its capitalisation approach to reallocate a higher proportion of corporate and network overheads opex to direct opex and capital project-related capex. PWC’s reported opex for 2021–22 and 2022–23, its estimated opex for 2023–24, and its opex forecast for the 2024–29 period are based on this approach. To provide an opex time series that could be used to compare historical and forecast opex on a like-for-like basis, PWC created a backcast of its actual opex from 2017–18 to 2020–21 on the same basis (these are the dark blue bars). The AER’s opex forecast for the 2019–24 period (the orange line) is not on a like-for like basis with PWC’s reported, estimated and proposed opex from 2021–22 onwards as we do not have sufficient information to adjust our 2019–24 forecast to account for PWC’s change to its capitalisation policy. The AER did not provide an opex forecast for the 2009–2019 regulatory control period as PWC was regulated by the NT Utility Commission.

Table 6.1 sets out PWC’s initial and revised opex proposals and our alternative estimates for the draft and final decision. The difference between PWC’s revised proposal and our final decision alternative estimate is also set out.

Table 6.1 Comparison of PWC’s revised opex proposal and our final decision (\$million, 2023–24)

| | PWC’s Initial proposal | AER Draft Decision | Revised Proposal (a) | Alternative Estimate (b) | Difference (b – a) |
|--|------------------------|--------------------|-------------------------|-----------------------------|-------------------------|
| Based on reported opex in 2021–22 | 366.7 | 361.4 | 361.4 | 360.4 | –1.0 |
| Output growth | 2.8 | 2.6 | 7.4 | 7.0 | –0.4 |
| Price growth | –0.7 | 0.4 | 2.1 | 1.9 | –0.2 |
| Productivity growth | –9.1 | –8.9 | –9.2 | –9.1 | 0.1 |
| Total trend | –7.0 | –5.9 | 0.3 | –0.2 | –0.5 |
| Cyber security | 4.4 | 4.4 | 5.0 | 4.9 | –0.0 |
| Insurance | 4.9 | – | 4.9 | 4.9 | –0.0 |
| Future Network | 14.1 | 1.1 | 4.9 | 4.9 | –0.0 |
| Operational Technology capability uplift | 18.8 | – | 3.9 | 3.9 | –0.0 |
| Cloud migration | 4.0 | – | 3.3 | 3.3 | –0.0 |
| Regulatory obligations | 6.0 | – | – | – | – |
| Total step changes | 52.2 | 5.5 | 22.0 | 21.9 | –0.1 |
| Debt raising costs | 3.3 | 3.5 | 3.5 | 3.5 | 0.0 |
| Total | 415.3 | 364.4 | 387.2 | 385.6 | –1.6 (–0.4%) |

Source: PWC, 9.03 – 2024–29 SCS Opex Model, 31 January 2023; PWC, Revised proposal – 5.3 – 2024–29 SCS Opex Model, 30 November 2023, AER analysis.

Note: Numbers may not add up to total due to rounding. Differences of '0.0' and '–0.0' represent small variances and '–' represents zero.

PWC applied our standard base-step-trend forecasting methodology in its revised proposal to forecast opex for the 2024–29 period. There is a minor difference of \$1.6 million (\$2023–24), or 0.4%, between PWC’s revised proposal, which we have accepted, and our alternative estimate. This is because we have used the most recently available data on actual and forecast inflation, wage price index (WPI) growth forecasts and our own debt raising cost forecast. We have assessed the step changes that were repropose with a revised, lower, total cost and found that they reflect prudent and efficient costs that PWC will incur.

The key drivers of the increase in opex in the next regulatory control period relative to actual (and estimated) opex in the current period are the inclusion of these step changes, which are for operational technology uplift, future networks integration, cyber security requirements, cloud computing and insurance premium increases. PWC's proposal did not include any opex linked to emissions reduction targets or actions, but did include emission reduction benefits as part of justifying its future network integration step change.

6.2 Power and Water Corporation's revised proposal

PWC included total forecast opex of \$387.2 million (\$2023–24) in its revised proposal for the 2024–29 period, as set out in Table 6.2. This is 5.7% higher than PWC's actual and estimated opex for the 2019–24 period, adjusted for the capitalisation backcast, 6.8% lower than its initial proposal and 6.3% higher than our draft decision.⁶

Table 6.2 PWC's proposed opex for the 2024–29 period (\$million, 2023–24)

| | 2024–25 | 2025–26 | 2026–27 | 2027–28 | 2028–29 | Total |
|--|---------|---------|---------|---------|---------|-------|
| Total Opex, excluding debt raising costs | 75.2 | 76.2 | 76.7 | 77.7 | 78.0 | 383.7 |
| Debt raising costs | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 3.5 |
| Total Opex, including debt raising costs | 75.9 | 76.9 | 77.4 | 78.4 | 78.8 | 387.2 |

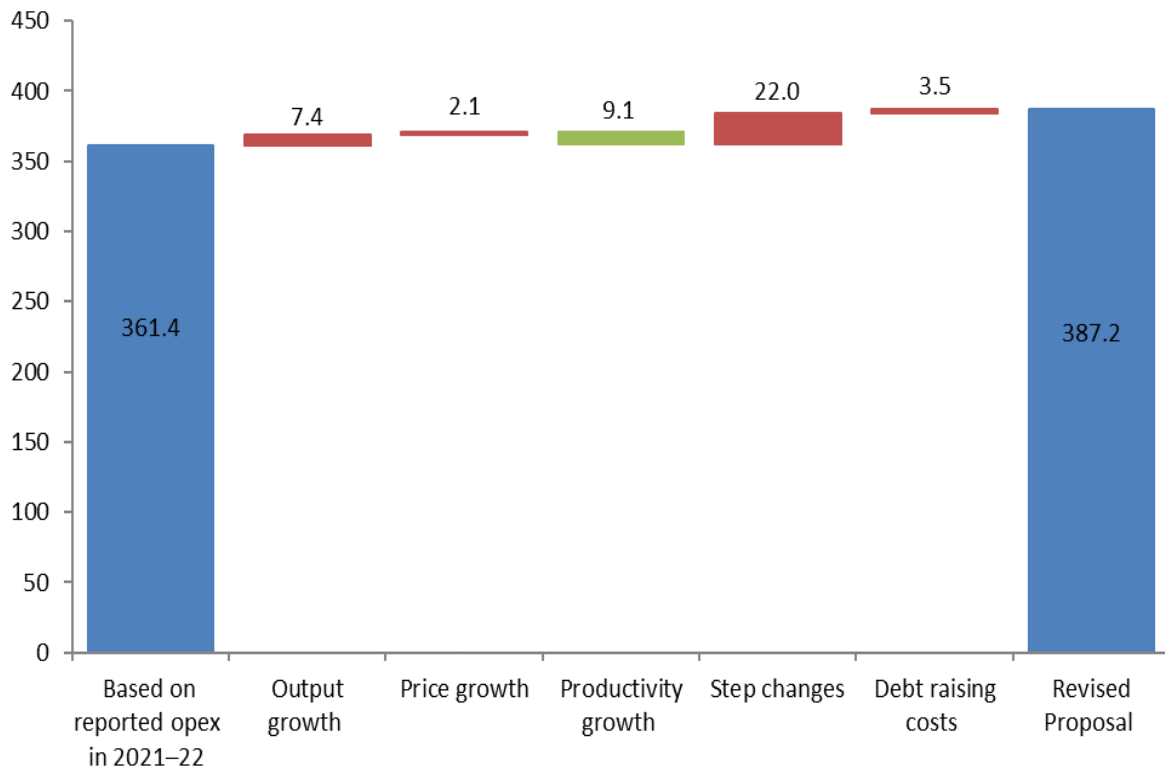
Source: PWC, *Revised proposal – 5.3 – 2024–29 SCS Opex Model*, 30 November 2023; AER analysis.

Note: Numbers may not add up to total due to rounding. Differences of '0.0' and '-0.0' represent small variances and '-' represents no variance.

Figure 6.2 shows the different components that make up PWC's revised opex forecast for the 2024–29 period.

⁶ Comparisons are inclusive of debt raising costs.

Figure 6.2 PWC’s revised opex forecast (\$million, 2023–24)



Source: PWC, *Revised proposal – 5.3 – 2024–29 SCS Opex Model*, 30 November 2023; AER analysis.

PWC’s continued to use our base-step-trend approach to forecast opex for the 2024–29 period in its revised proposal.⁷

In applying our base-step-trend approach to forecast opex, PWC:⁸

- used reported opex in 2021–22 of \$72.3 million (\$2023–24) as the base from which to forecast (\$361.4 million (\$2023–24) over the next regulatory control period)
- did not add an estimate of the difference between the base year opex and the opex it will incur in the final year of the current regulatory control period (i.e. a final year increment) given the Efficiency Benefit Sharing (EBSS) scheme does not apply to it in the current regulatory control period
- applied an overall rate of change forecast to its base year opex, increasing opex by \$0.4 million (\$2023–24). This included:
 - output growth (\$7.4 million (\$2023–24))
 - price growth (\$2.1 million (\$2023–24))
 - productivity growth (–\$9.1 million (\$2023–24))
- added five step changes totalling \$22.0 million (\$2023–24) for:
 - cyber security (\$5.0 million (\$2023–24))

⁷ PWC, *Revised proposal – 5.3 – 2024–29 SCS Opex Model*, 30 November 2023.

⁸ PWC, *Revised proposal – 5.3 – 2024–29 SCS Opex Model*, 30 November 2023.

- future network (customer energy resources (CER) integration) (\$4.9 million (\$2023–24))
 - insurance premiums (\$4.9 million (\$2023–24))
 - operational technology (OT) capability uplift (\$3.9 million (\$2023–24))
 - cloud migration (\$3.3 million (\$2023–24))
- added \$3.5 million (\$2023–24) of debt raising costs to arrive at a total opex forecast of \$387.2 million (\$2023–24) over the 2024–29 period.

The key changes in PWC's revised opex proposal relative to its initial proposal were a reduction in the total step change costs proposed, of \$30.3 million (\$2023–24), offset by slight increases of \$7.5 million (\$2023–24) in the output and price growth forecasts. In relation to the step changes, PWC did not repropose its regulatory obligation step change, and materially reduced the proposed costs associated with its future network and OT capability uplift step changes.

6.2.1 Stakeholder views

We received two submissions on PWC's revised proposal that discussed opex issues. We have taken these submissions into account in developing the positions set out in this final decision.

Table 6.3 summarises the stakeholder issues raised in the submissions in relation to opex.

Table 6.3 Submissions on PWC's 2024–29 opex proposal

| Stakeholder(s) | Issue | Description |
|---|--|--|
| Tesla Motors Australia (Tesla) | Various relating to step changes (future networks) | Tesla made a combined submission on Ausgrid, Endeavour Energy, Essential Energy, Evoenergy, TasNetworks and Power and Water Corporation's revised proposals. This emphasised the benefits of a uniform approach across jurisdictions to managing the energy transition and listed a range of general principles and policy positions on dynamic operating envelopes (DOEs), electric vehicle (EV) charging, two-way pricing and grid-scale battery tariffs it recommends the AER consider when making the final decisions for these networks. ⁹ |
| AER's Consumer Challenge Panel 27 (CCP27) | Step changes | CCP27 noted that PWC had undertaken some limited engagement on step changes to inform its revised proposal, including three People's Panel workshops (which it observed), and a series of one-on-one meetings with retailers, large business customers, generators, the NT Chamber of Commerce and the Northern Territory Council of Social Service (which it did not observe). CCP27 observations on the People's Panel workshops included that: |

⁹ Tesla, *Submission for the revised proposal and draft decision 2024–29*, January 2024, pp. 1–30.

| Stakeholder(s) | Issue | Description |
|----------------|---------------|--|
| | | <ul style="list-style-type: none"> • PWC had difficulty retaining workshop participants and providing sufficient information on the step changes to enable participants to provide informed views.¹⁰ • Workshop participants strongly supported PWC’s role in facilitating access to renewable energy, while also expressing a desire for more information on the proposed expenditures and restraint on costs that could increase customers’ bills.¹¹ • Workshop participants indicated general support for PWC actions to improve information and communication technologies (ICT) capabilities, such as those related to operational technologies used to communicate with customers.¹² |
| AER’s CCP27 | Affordability | <p>CCP27 noted that it did not observe PWC undertake any explicit discussions on affordability, cost to consumers or equivalent bill impacts of its proposed expenditures at the People’s Panel workshops.¹³</p> <p>CCP27 asked whether PWC could have done more to demonstrate a commitment to affordability concerns of its customers, such as absorbing the ‘low value’ \$3.3 million cloud migration opex step change.¹⁴</p> |

6.3 Assessment approach

Under the regulatory framework, a business must include a forecast of total opex that it considers is required to meet or manage expected demand, comply with all applicable regulatory obligations, and to maintain the safety, reliability, quality, and security of its network and contribute to achieving emissions reduction targets (the opex objectives).¹⁵

Our role is to decide whether to accept a business's total opex forecast. We are to form a view about whether a business's forecast of total opex 'reasonably reflects the opex criteria' including whether it is a prudent and efficient way of meeting the opex objectives.¹⁶ In doing so, we must have regard to the opex factors specified in the National Electricity Rules

¹⁰ CCP27, *Advice to the AER – 2024–29 Revised electricity determination and draft decision – Power and Water Corporation*, January 2024, pp. 10 and 12.

¹¹ CCP27, *Advice to the AER – 2024–29 Revised electricity determination and draft decision – Power and Water Corporation*, January 2024, pp. 17–19.

¹² CCP27, *Advice to the AER – 2024–29 Revised electricity determination and draft decision – Power and Water Corporation*, January 2024, p. 19.

¹³ CCP27, *Advice to the AER – 2024–29 Revised electricity determination and draft decision – Power and Water Corporation*, January 2024, pp. 10, 13 and 16.

¹⁴ CCP27, *Advice to the AER – 2024–29 Revised electricity determination and draft decision – Power and Water Corporation*, January 2024, p. 16.

¹⁵ NT NER, cl. 6.5.6(a).

¹⁶ NT NER, cl. 6.5.6(c).

(NER).¹⁷ We must make our decision in a manner that will, or is likely to, contribute to the achievement of the National Electricity Objective.¹⁸

The Expenditure forecast assessment guideline (the Guideline), together with an explanatory statement, sets out our assessment approach in detail.¹⁹ While the Guideline provides for greater regulatory predictability, transparency and consistency, it is not mandatory. However, if we make a decision that is not in accordance with the Guideline, we must state the reasons for departing from the Guideline.²⁰ Where relevant we must also assess opex associated with emissions reduction proposals taking into account our *Guidance on the amended National Electricity Objective*.²¹

Our approach is to assess the business's forecast opex over the regulatory control period at a total level, rather than to assess individual opex projects. To do so, we develop an alternative estimate of total opex using a 'top-down' forecasting method, known as the 'base-step-trend' approach.²² We compare our alternative estimate with the business's total opex forecast to form a view on the reasonableness of the business's proposal. If we are satisfied the business's forecast reasonably reflects the opex criteria, we accept the forecast.²³ If we are not satisfied, we substitute the business's forecast with our alternative estimate that we are satisfied reasonably reflects the opex criteria.²⁴

In making this decision, we take into account the reasons for the difference between our alternative estimate and the business's proposal, and the materiality of the difference. Further, we take into consideration interrelationships between opex and the other building block components of our decision.²⁵

Figure 6.3 summarises the 'base-step-trend' forecasting approach.²⁶

¹⁷ NT NER, cl. 6.5.6(e).

¹⁸ NEL, s. 16(1)(a). The National Electricity Objective is set out in s. 7 of the NEL.

¹⁹ AER, *Expenditure forecast assessment guideline – distribution*, August 2022; AER, *explanatory statement – expenditure forecast assessment guideline*, November 2013.

²⁰ NT NER, cl. 6.2.8(c).

²¹ AER, *Guidance on amended National Electricity Objective*, September 2023.

²² A 'top-down' approach forecasts total opex at an aggregate level, rather than forecasting individual projects or categories to build a total opex forecast from the 'bottom up.'

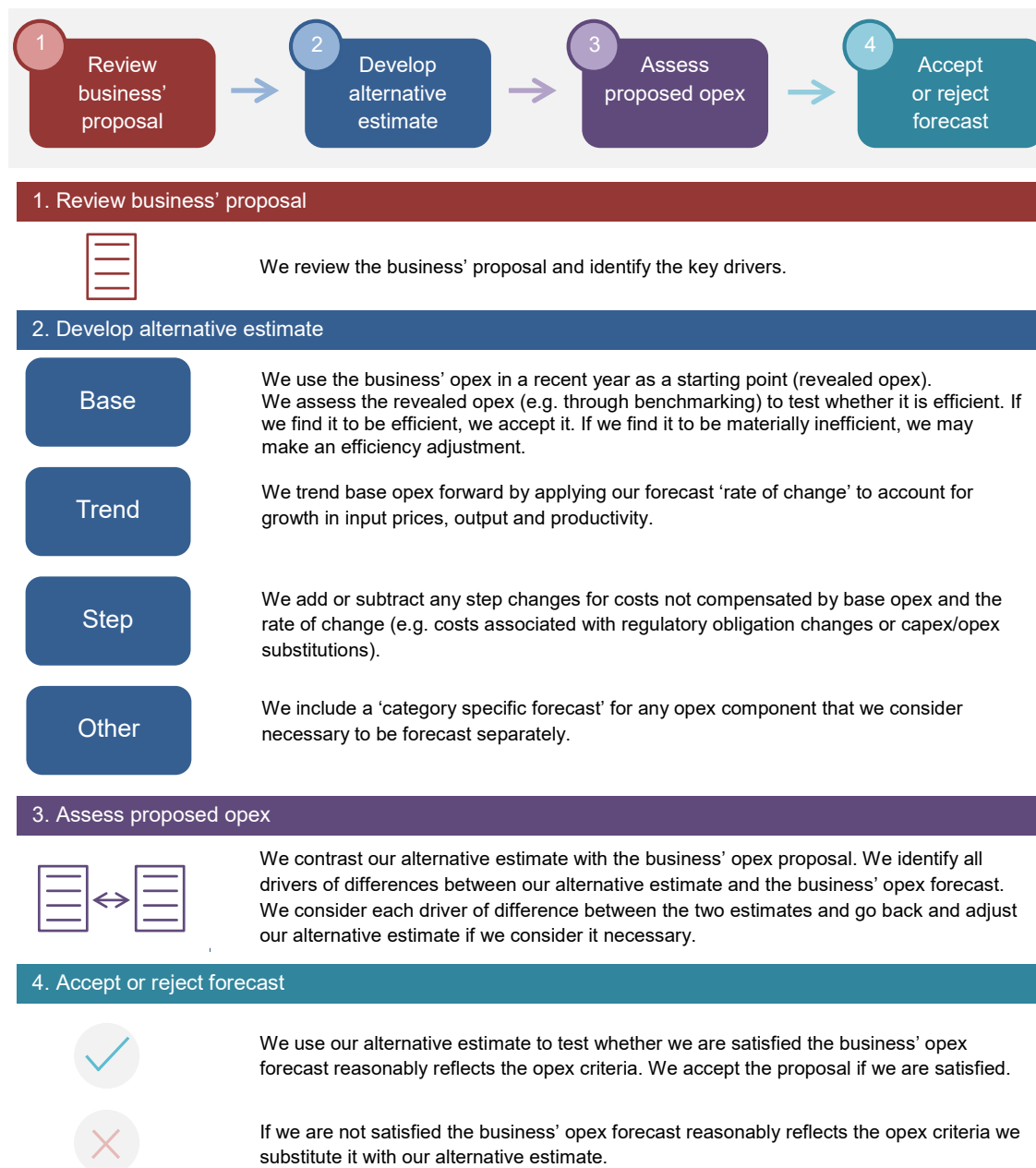
²³ NT NER, cl. 6.5.6(c).

²⁴ NT NER, cl. 6.5.6(d).

²⁵ NEL, s. 16(1)(c).

²⁶ Our base-step-trend approach is set out in our expenditure guideline. See AER, *Expenditure forecast assessment guideline – distribution*, August 2022, pp. 24–27.

Figure 6.3 Our opex assessment approach



6.3.1 Interrelationships

In assessing PWC's total forecast opex, we also take into account other components of its proposal that could interrelate with our opex decision. The matters we considered in this regard included:

- the impact of cost drivers that affect both forecast opex and forecast capital expenditure (capex). For instance, forecast labour price growth affects forecast capex and our forecast price growth used to estimate the rate of change in opex
- the approach to assessing the rate of return, to ensure there is consistency between our determination of debt raising costs and the rate of return building block
- concerns of electricity consumers identified during PWC's engagement with consumers.

6.4 Reasons for final decision

Our final decision is to accept PWC's total forecast opex of \$387.2 million (\$2023–24), including debt raising costs, for the 2024–29 period. We have tested PWC's revised proposal by comparing it to our alternative estimate of total opex forecast of \$385.6 million (\$2023–24),²⁷ which is not materially different (0.4% lower) from PWC's revised proposal. Therefore, we are satisfied that PWC's revised forecast reasonably reflects the opex criteria.²⁸ On this basis we accept PWC's updated revised total opex proposal.

Table 6.1 above sets out PWC's revised proposal, our alternative estimate that is the basis for the final decision, and the difference between our alternative estimate and the revised proposal. We discuss the components of our alternative estimate below. Full details of our alternative estimate are set out in our opex model, which is available on our website.

6.4.1 Base opex

This section provides our view on the prudent and efficient level of base opex that we consider PWC would need for the safe and reliable provision of services over the 2024–29 period.

6.4.1.1 Proposed base year and efficiency of base year opex

Consistent with our draft decision, and PWC's revised proposal, we have used PWC's 2021–22 opex as the base year for forecasting our alternative estimate of opex. This is because, as set out in our draft decision, 2021–22 is based on actual opex, reflects PWC's new approach to capitalisation, is not likely to be materially inefficient, and is likely representative of the base opex required for the next regulatory control period.²⁹ As set out below, we have also examined the possible use of 2022–23 as an alternative base year. We do not consider this is appropriate, particularly given the lower costs in 2022–23 do not appear to be representative of ongoing recurrent costs.

We have used 2021–22 opex of \$72.1 million (\$2023–24), net of movements in provisions, as the starting point for our alternative estimate of total forecast opex (or \$360.4 million (\$2023–24) over 5 years). This is slightly lower than PWC's revised proposal of \$72.3 million (\$2023–24) (or \$361.4 million (\$2023–24) over 5 years) due to us using the latest consumer price index (CPI) estimates available from the Reserve Bank of Australia.

Consideration of 2022–23 as an alternative base year

In its revised proposal, PWC reported actual opex for 2022–23 of \$67.7 million (\$2023–24), which is \$4.6 million (\$2023–24) less than the 2021–22 base opex included in PWC's revised proposal. We considered whether 2022–23 would be a more appropriate choice of base year instead of 2021–22. We sought information from PWC on why its 2022–23 opex was lower than 2021–22, if the decrease was due to recurrent or non-recurrent factors, and whether

²⁷ Including debt raising costs.

²⁸ NT NER, cl. 6.5.6(c).

²⁹ AER, *Draft Decision Attachment 06 – Operating expenditure – Power and Water Corporation 2024–29 Distribution revenue proposal*, September 2023, pp. 11–12.

2022–23 would better reflect the level of recurrent base opex PWC would need over the next regulatory control period.

PWC stated that its 2022–23 opex was ‘artificially low’ due to the impact of non-recurrent drivers of opex in that year, which it did not expect to continue over the 2024–29 period. The non-recurrent drivers included:

- Labour costs being lower in 2022–23 due to ‘under resourcing’ that resulted from an unplanned decrease in full time equivalents (FTEs) relative to 2021–22, and a skill labour shortage preventing the recruitment of new staff to meet targeted resourcing levels.
- A decrease in planned maintenance undertaken in 2022–23 due to these limited resources, which resulted in lower maintenance costs.
- An increase in capitalised overheads and a reduction in corporate and network overhead opex resulting from the business’ decision to prioritise capital projects over 2022–23 in place of the planned maintenance.³⁰

PWC stated that because of these non-recurrent factors, 2022–23 is not representative of its ongoing opex needs and so would not be an appropriate choice for base year. PWC noted that its future recurrent opex requirements will be higher than the actual 2022–23 amount, as recruitment increases staffing levels to targeted levels and delayed and recurrent maintenance work is performed.

Taking into account the above information, we agree that PWC’s 2022–23 opex would not be an appropriate representation of its recurrent opex needs over the 2024–29 period. As a result, we do not consider it would be an appropriate choice for base year.

6.4.2 Adjustments to base year opex

PWC did not propose any adjustments to its base opex. We agree with this approach.

6.4.2.1 Final year increment

Our standard practice for calculating final year opex when the EBSS is in place, is to add the estimated change in opex between the base year (2021–22) and the final year (2023–24) of the current regulatory control period to the base year opex amount.³¹

In the current regulatory control period, PWC does not have an EBSS in place. The final year increment aligns the EBSS and opex calculations. However, in the absence of an EBSS applying to PWC in this regulatory control period, it is not necessary to calculate the final year increment. This is consistent with our draft decision, PWC’s revised proposal and the approach we have applied to other distribution network service providers (DNSP’s).

6.4.3 Rate of change

We have included a rate of change that increases opex, on average, by 0.3% each year in our alternative estimate. This is consistent with PWC’s average annual rate of change.

³⁰ PWC, *Response to AER information request, IR#029 – Base, Trend, Step Changes*, 12 January 2024.

³¹ AER, *Expenditure forecast assessment guideline – distribution*, August 2022, pp. 24–25.

PWC’s revised proposal made some minor updates to its trend inputs and adopted our standard approaches for forecasting input price growth, output growth, and productivity growth. These changes, which we have included in our alternative estimate, and AER updates made for this final decision include:

- PWC updated its WPI forecast (a component of the input price growth forecast) using our standard approach of averaging its consultants’ (Oxford Economics Australia) WPI forecast with that of the AER’s consultant (KPMG) used in our draft decision.³² We have further updated our alternative WPI forecast for the final decision with the latest KPMG WPI forecast.³³
- PWC updated the 2022–23 customer numbers and circuit line length forecasts used in its initial proposal (both components of the output growth forecast) with actual data for that year, and its customer number forecast for the years 2024 to 2029.³⁴ We consider the updated forecasts are reasonable and have used these in our alternative estimate. In line with our standard approach, we also updated the output weights used in our draft decision that were based on the 2022 Annual Benchmarking Report with those from the 2023 Annual Benchmarking Report.

Table 6.4 shows both PWC’s revised proposal, our final decision alternative estimate for each component of the rate of change, and the minor differences.

³² PWC, *Revised Proposal – 5.3 – 2024–29 SCS Opex Model*, 30 November 2023.

³³ KPMG, *Wage Price Index Forecasts – Australian Energy Regulator*, 8 April 2024, p. 10.

³⁴ PWC, *Revised Proposal – 5.3 – 2024–29 SCS Opex Model*, 30 November 2023.

Table 6.4 Forecast annual rate of change in opex (%)

| | 2022– 23 | 2023– 24 | 2024– 25 | 2025– 26 | 2026– 27 | 2027– 28 | 2028– 29 |
|---------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| PWC's proposal | | | | | | | |
| Price growth | –1.8 | 0.3 | 0.8 | 0.8 | 0.5 | 0.5 | 0.6 |
| Output growth | 1.2 | 0.4 | 0.0 | 0.2 | 0.2 | 0.2 | 0.2 |
| Productivity growth | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| Rate of change | –1.2 | 0.2 | 0.3 | 0.5 | 0.2 | 0.2 | 0.3 |
| AER alternative estimate | | | | | | | |
| Price growth | –1.8 | 0.4 | 0.7 | 0.8 | 0.6 | 0.6 | 0.6 |
| Output growth | 1.1 | 0.4 | 0.0 | 0.2 | 0.2 | 0.2 | 0.2 |
| Productivity growth | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| Rate of change | –1.3 | 0.3 | 0.2 | 0.5 | 0.3 | 0.2 | 0.3 |
| Difference | 0.1 | –0.0 | 0.1 | 0.0 | –0.0 | –0.0 | –0.0 |

Source: PWC, Revised proposal – 5.3 – 2024–29 SCS Opex Model, 30 November 2023; AER analysis.

Note: Numbers may not add up to totals due to rounding. Amounts of '0.0' and '–0.0' represent small non-zero values and '-' represents zero.

6.4.4 Step changes

We have included \$21.9 million (\$2023–24) for step changes in our alternative estimate of total forecast opex. This is consistent with PWC's revised proposal, and \$16.4 million (\$2023–24) higher than our draft decision. Our alternative estimate reflects that we are satisfied following our assessment that the proposed step changes and their associated costs are prudent and efficient and are required in the 2024–29 period.³⁵

As set out in Table 6.5, in its revised proposal, PWC:³⁶

- did not include the regulatory obligation step change it included in its initial proposal, as it did not believe it should be included in its opex forecast³⁷
- proposed revised business cases for the operational technology uplift and future network (CER integration) step changes, which were significantly reduced in scope and cost relative to its initial proposal
- made minor updates to, and provided additional supporting information for the cyber security, cloud migration and insurance step changes.

³⁵ NT NER, cl. 6.5.6(c).

³⁶ PWC, *Revised proposal – 01 – Revised regulatory proposal*, 30 November 2023, p. 34.

³⁷ PWC, *Revised proposal – 01 – Revised regulatory proposal*, 30 November 2023, p. xxiv.

Our alternative estimate of total opex for the final decision includes the 5 step changes PWC proposed, updating for inflation where relevant. This is also set out in Table 6.5.

Table 6.5 Step changes (\$million, 2023–24)

| Step change | PWC's Initial proposal | AER Draft decision | PWC's Revised proposal | AER Final decision alternative estimate | Difference |
|------------------------|------------------------|--------------------|------------------------|---|------------|
| Cyber security | 4.4 | 4.4 | 5.0 | 4.9 | -0.0 |
| Future Network | 14.1 | 1.1 | 4.9 | 4.9 | -0.0 |
| Insurance | 4.9 | – | 4.9 | 4.9 | -0.0 |
| OT capability uplift | 18.8 | – | 3.9 | 3.9 | -0.0 |
| Cloud migration | 4.0 | – | 3.3 | 3.3 | -0.0 |
| Regulatory obligations | 6.0 | – | – | – | – |
| Total step changes | 52.2 | 5.5 | 22.0 | 21.9 | -0.1 |

Source: PWC, 9.02 – *Opex step changes*, 31 January 2023; PWC, *Revised proposal – 01 – Revised regulatory proposal*, 30 November 2023, pp. 34–38; AER analysis.

Note: Numbers may not add up to totals due to rounding. Values of '0.0' and '-0.0' represent small non-zero amounts and '-' represents zero.

As noted in Section 6.2.1, the AER's CCP27 noted that after undertaking no consultation on the step changes included in its initial proposal, PWC undertook some useful but limited engagement on the operational technology uplift, cyber security and future networks (CER integration) step changes. This provided high level support for action to improve PWC's capacities in these areas, while also highlighting affordability concerns of its customers.³⁸

Our assessment of these step changes, including the views expressed in the submissions around customer consultation, is set out in the following sections.

6.4.4.1 Cyber security step change

We have included a step change of \$4.9 million (\$2023–24) for cyber security in our alternative estimate of opex for the final decision. This is \$0.5 million (\$2023–24) higher than our draft decision, and consistent with the amount PWC included in its revised proposal.³⁹ PWC's cyber security proposal also included \$11.5 million (\$2023–24) in capex.

PWC's initial proposal included a cyber security step change of \$4.4 million (\$2023–24) to uplift its cyber security maturity to Security Profile 2 (SP–2) of the Australian Energy Sector Cyber Security Framework (AESCSF). In our draft decision, we found it was prudent for PWC to uplift its cyber security maturity to SP–2, and provisionally included its proposed opex in our alternative estimate. This was because although PWC provided sufficient

³⁸ CCP27, *Advice to the AER – 2024–29 Revised electricity determination and draft decision – Power and Water Corporation*, January 2024, p. 10.

³⁹ PWC, *Revised proposal – 01 – Revised regulatory proposal*, 30 November 2023, p. 37.

information to demonstrate the prudence of the proposal, it did not demonstrate the efficiency of the proposed costs. Our draft decision specified the type of information we sought in PWC's revised proposal for us to finalise the assessment on this step change.⁴⁰

In its revised proposal, PWC included \$5.0 million (\$2023–24) for the cyber security step change, and stated that the higher amount is principally due to the correction of a transcription error from its cyber security business case to its initial opex model.⁴¹ PWC also provided, through its updated business case and subsequent AER information requests and consultation, further supporting information on the proposed step change. This included a detailed itemised breakdown of the step change's proposed actions, cost components and documentation of how these costs were estimated, drawing on market information where possible to demonstrate the efficiency of its step change amount.⁴² We have reviewed the information provided by PWC, and conclude that the proposed step change amount, including the increase due to the transcription error, are reflective of current market prices and are efficient.

For the final decision, and consistent with our draft decision and PWC's revised proposal, we consider it prudent for PWC to uplift its cyber security maturity. We have included PWC's proposed step change of \$4.9 million (\$2023–24) (adjusted for the latest inflation data) in our alternative estimate, as we are satisfied that the information provided by PWC demonstrated that the step change and costs are prudent and efficient.

6.4.4.2 Future network step change

We have included a step change of \$4.9 million (\$2023–24) for future network (CER) integration in our alternative estimate for the final decision. PWC proposed to incur these costs over the 2024–29 period to better enable dynamic management of solar photovoltaics (PV).⁴³ It also proposed an associated \$3.7 million (\$2023–24) in capex.

In the draft decision, we included a \$1.1 million (\$2023–24) opex step change, and a similar amount in capex, for improved inverter compliance. This was considered a more prudent and efficient option for enabling higher static export limits compared to the \$14.1 million (\$2023–24) in opex (and \$13.2 million (\$2023–24) in capex) PWC proposed to implement a full customer-wide DOE system and undertake other CER related activities.⁴⁴

We did not include the DOE-related opex and capex in our draft decision, because PWC had not provided a sufficiently thorough analysis demonstrating the investment need. In particular, it had not considered alternative smaller scale options that better reflected the size of its network, number of customers and observed solar penetration. We sought in the draft

⁴⁰ AER, *Draft Decision Attachment 06 – Operating expenditure – Power and Water Corporation 2024–29 Distribution revenue proposal*, September 2023, pp. 21–23.

⁴¹ PWC, *Revised Proposal – 01 – Revised Regulatory Proposal*, 30 November 2023, p. 37.

⁴² PWC, *Response to AER information request, IR#028 – cyber security proposal – Confidential*, 10 January 2024; PWC, *Email to AER – Cyber Security Program – cost estimate – Confidential*, 12 February 2024.

⁴³ PWC, *Revised proposal – 01 – Revised regulatory proposal*, 30 November 2023, p. 34.

⁴⁴ AER, *Draft decision Attachment 06 – Operating expenditure – Power and Water Corporation 2024–29 Distribution revenue proposal*, September 2023, pp. 31–35.

decision additional information on some non-DOE related components of its proposed future network step change.⁴⁵

In its revised proposal and future network business case, PWC proposed significantly smaller CER integration expenditures of \$8.6 million (\$2023–24) (\$4.9 million (\$2023–24) in opex and \$3.7 million (\$2023–24) in capex). It explained this was to implement ‘core infrastructure to enable dynamic management of solar PV’ and provide a base level of capability to manage compliance risks and improve network visibility. PWC detailed that the opex included:⁴⁶

- compliance-related costs accepted by the AER in its draft decision
- software licensing, maintenance and support costs associated with a network state estimator and constraints engine
- maintenance and support costs for the development and deployment of a communications upgrade
- costs for improvements to its existing CER Register.

PWC provided in its updated business case, and subsequent information request responses, further supporting information. This included a more detailed itemised breakdown of the cost components, documentation of how these costs were estimated to demonstrate their efficiency, and an explanation of how costs in its proposed 2021–22 base year associated with the existing CER register have been accounted for in the step change.⁴⁷ We have reviewed the information provided by PWC, and conclude that the proposed future network step change costs are prudent, including as they are not already accounted for in PWC's 2021–22 base year opex. Further, that as they are reflective of current market prices they are efficient. In this regard, we consider PWC's revised business case demonstrates significant benefits and is consistent with the scaled, staged, preparatory approach proposed by other networks which we consider prudent.

PWC's scaled back proposal also aligns with feedback from its stakeholders. CCP27 noted in its submission that PWC's People's Panel workshop participants strongly supported PWC's role in facilitating access to renewable energy, while also expressing a desire for restraint on the speed of implementing new systems and costs that could increase customers' bills.⁴⁸

On this basis, and consistent with PWC's revised proposal and the capex position in Attachment 5, we have included this step change of \$4.9 million (\$2023-24) (adjusted for the

⁴⁵ AER, *Draft decision Attachment 06 – Operating expenditure, Power and Water Corporation 2024–29 Distribution revenue proposal*, September 2023, p. 35.

⁴⁶ PWC, *Revised proposal – 01 – Revised regulatory proposal*, 30 November 2023, p. 34; PWC, *Revised proposal – 3.1 – RBC DER Integration*, 30 November 2023.

⁴⁷ PWC, *Revised proposal – 3.1 – RBC DER Integration*, 30 November 2023; PWC, *Response to AER information request, IR#029 – Opex base, trend, step changes – Q3 DER*, 19 January 2024, Questions 3.1–3.7, pp. 2–8.

⁴⁸ CCP27, *Advice to the AER – 2024–29 Revised electricity determination and draft decision - Power and Water Corporation*, January 2024, pp. 17–19.

latest inflation data) in our alternative estimate. This is because we consider it is prudent and efficient.

6.4.4.3 Insurance premiums step change

We have included a step change of \$4.9 million (\$2023–24) for insurance in our alternative estimate for the final decision. This is consistent with PWC's initial and revised proposals.⁴⁹

Our draft decision did not include an insurance step change in our alternative estimate of total opex. PWC did not provide sufficient information to enable us to determine if it was prudent and efficient. In particular, PWC had not provided an independent forecast (such as an insurance broker's quote or a consultant's report) of the expected changes in its insurance premiums to the end of the next regulatory control period. We requested that PWC provide this type of documentation in its revised proposal.⁵⁰

PWC's revised proposal included a step change of \$4.9 million (\$2023–24) for an increase in insurance premiums over the 2024–29 period. This was supported by a report from Marsh consultants providing an independent forecast of PWC's insurance premiums over this timeframe.⁵¹

PWC's revised proposal also updated, without explanation, some input data it used to calculate the amount of its insurance step change, including its 2021–22 base year insurance premium expenditure and the cost allocation percentages it applied to its insurance expenditures.⁵² We sought information from PWC to understand the basis of these updates. PWC explained that its base year insurance premium expenditure increased relative to its initial proposal as PWC had identified and corrected accounting errors in its calculation. PWC further explained that the cost allocation percentages used in its revised proposal decreased relative to its initial proposal, due to a decrease in the proportion of total FTEs included in its Power Services business.⁵³ We are satisfied these updates reflect the best available data to forecast PWC's insurance premium expenditure.

More generally, PWC calculated the step change amount as the difference in the insurance premium payable each year against the insurance premium costs included in its base year (2021–22).⁵⁴ As noted above, PWC's forecast of insurance premiums over 2024–29 was prepared by its consultant, Marsh.⁵⁵

We engaged Taylor Fry to assess the prudence and efficiency of forecast insurance premiums for our 2023–28 ElectraNet and Transgrid revenue proposal determinations. We consider PWC's forecast insurance premiums, which reflect the Marsh forecasts, are largely

⁴⁹ PWC, *9.02 – Opex Step Changes*, 31 January 2023, p.14; PWC, *Revised proposal Attachment 01 – Revised regulatory proposal*, 30 November 2023, p. 36.

⁵⁰ AER, *Draft Decision Attachment 06 - Operating expenditure – Power and Water Corporation 2024–29 Distribution revenue proposal*, September 2023, p. 28.

⁵¹ PWC, *Revised proposal Attachment 01 - Revised regulatory proposal*, 30 November 2023, p. 36.

⁵² PWC, *Revised Proposal Attachment 5.4 – Opex step changes model – Confidential*, 30 November 2023.

⁵³ PWC, *Response to AER information request, IR#034 – Step change – insurance*, 30 January 2024, Question 3, p. 4.

⁵⁴ PWC, *Revised Proposal Attachment 5.4 – Opex step changes model – Confidential*, 30 November 2023.

⁵⁵ PWC, *Revised proposal – 01 – Revised regulatory proposal*, 30 November 2023, p. 36.

consistent with Taylor Fry's expectation of future premiums in that context, given prevailing market conditions.

Our assessment also considers the rate of change forecast, which includes an amount for non-labour price growth of CPI. This covers potential increases in existing costs like insurance. We expect some non-labour components in opex will increase by more than CPI and some less than CPI. Where insurance premiums rise by more than CPI, we expect this will to an extent be offset by other non-labour costs rising by less than CPI. However, there may be specific circumstances where it is appropriate to consider increasing costs of individual cost categories, particularly where they represent a material proportion of total opex.

In this case, we are satisfied PWC's proposed step change likely reflects a reasonable expectation of cost inputs, and is not likely to be captured in base opex or the rate of change. We consider the proposed costs represent a material proportion of total forecast opex and are materially above the non-labour price growth (CPI) included in the rate of change, and therefore less likely to be offset by lower growth in other non-labour costs.

For the final decision, and consistent with PWC's revised proposal, we have included PWC's proposed amount of \$4.9 million (\$2023–24) (adjusted for the latest inflation data) in our alternative estimate. This is because we consider these costs are prudent and efficient.

6.4.4.4 Operational technology capability uplift

We have included a step change of \$3.9 million (\$2023–24) in our alternative estimate for the final decision for OT capability uplift costs. PWC proposed to incur these costs over the 2024–29 period to upgrade its operating systems.⁵⁶ It also proposed an associated \$15.8 million (\$2023–24) in capex for this capability uplift.

Our draft decision did not include the \$18.8 million (\$2023–24) OT capability uplift opex step change (or the \$21.6 million (\$2023–24) in related capex) in PWC's initial proposal. This was because PWC advised in May 2023 that it was redesigning its initial proposal and would provide an updated business case in the revised proposal.⁵⁷ In our draft decision, we asked PWC to clarify the drivers of any new OT capability uplift expenditure, the options considered to meet any gaps in current capabilities, and to provide supporting information including a detailed cost estimate for the project.⁵⁸

In its revised proposal and related business case, PWC noted that it had scaled back its initial OT capability uplift business case to a more conservative and deliverable scope, significantly reducing its proposed expenditure.⁵⁹ PWC detailed the opex associated with the OT capability uplift program. This included opex for:

⁵⁶ PWC, *Revised proposal – 01 – Revised regulatory proposal*, 30 November 2023, pp. 35–36.

⁵⁷ PWC, *Response to AER information request, IR#011 – Question 6, Operational Technology Uplift - UPDATE*, 28 June 2023, p. 2.

⁵⁸ AER, *Draft decision Attachment 06 – Operating expenditure, Power and Water Corporation 2024–29 Distribution revenue proposal*, September 2023, p. 31.

⁵⁹ PWC, *Revised proposal – 01 – Revised regulatory proposal*, 30 November 2023, p. 35; PWC, *Revised proposal – 3.2 – RBC OT Capability Uplift*, 30 November 2023.

- geographic information system (GIS) licencing costs for a proposed upgrade
- data cleansing and migration costs associated with the proposed GIS upgrade
- costs associated with data corrections to address known gaps in the GIS data
- support and maintenance costs for base distribution management system functionality, including an estimate of licencing costs.⁶⁰

We sought additional information from PWC on the breakdown of these cost components, and evidence that the estimated costs reflected market rates and were efficient. We reviewed the further cost breakdown provided by PWC, and the explanation of how the amounts were estimated, and conclude that these costs represent a reasonable indication of current market rates for these types of services and systems.⁶¹

We also sought verification from PWC that licensing costs of its existing GIS system included in PWC's 2021–22 base year opex had been accounted for in the proposed step change amount. Specifically, that it had deducted GIS-related base year licencing costs from the step change amount. Additionally, we sought clarification on when the opex efficiency savings PWC included in its OT capability uplift business case would be realised and deducted from PWC's opex allowance.⁶²

PWC stated that its 2021–22 base year opex does include licensing costs associated with its existing GIS, but that it has not deducted these from the step change amount as it will continue to incur these costs over the first 4 years on the next regulatory control period, and possibly beyond. PWC noted that while it intends to update GIS functionality in year 3 of the 2024–29 period, it will continue to operate the existing and new systems during years 3 and 4 'to ensure that the new environments, data and legacy interfaces are robust' with complete cut-over occurring in year 5. PWC highlighted that while this timetable would allow for an opex saving in year 5 of the next regulatory control period when its existing licences are retired, there is a risk that delays in implementation may mean savings are not achieved until the end of the next regulatory control period.⁶³

We accept that the planned timing of the GIS upgrade, and uncertainties with implementation of the upgrade, mean that PWC will continue to incur its existing licencing costs over most, if not all, of the next regulatory control period. As a result, we agree that these costs do not need to be removed from the proposed step change amount. However, PWC should identify, in its next regulatory proposal, the decrease in opex from retiring these licenses to ensure these cost savings are passed onto consumers e.g. through explaining reasons for its lower proposed base opex.

Similarly, PWC noted that as the forecast opex efficiency savings included in the OT capability uplift business case from implementation of the project are not forecast to be

⁶⁰ PWC, *Revised proposal – 01 – Revised regulatory proposal*, 30 November 2023, pp. 35–36.

⁶¹ PWC, *Response to AER information request, IR#029 – Opex – base, trend, step changes*, 12 January 2024, Question 4, OT capability, pp. 1–6.

⁶² PWC, *Response to AER information request, IR#035 – Operational Technology Capability Uplift*, 13 February 2024, Questions 1, 2, 3, pp. 2–4.

⁶³ PWC, *Response to AER information request, IR#035 – Operational Technology Capability Uplift*, 13 February 2024, Question 2, p. 3.

achieved until 2029–30 (after the end of the next regulatory control period), it has not included any associated reduction in its opex forecast for the next regulatory control period.⁶⁴ As with the costs savings from retiring licenses above, PWC should identify in its next regulatory proposal the decrease in opex from these efficiency savings to ensure the associated savings are passed onto consumers.

On this basis, and consistent with PWC’s revised proposal and the capex position in Attachment 5, we have included this step change of \$3.9 million (\$2023–24) (adjusted for the latest inflation data) in our alternative estimate. This is because we consider it is likely prudent and efficient.

6.4.4.5 Cloud migration step change

We have included a step change of \$3.3 million (\$2023–24) for cloud migration in our alternative estimate for the final decision. PWC proposed this step change to reflect its replacement of the existing retail management system (RMS) with a cloud based ‘meter to cash’ (M2C) project.⁶⁵ Our alternative estimate is consistent with PWC’s revised proposal, but \$0.7 million (\$2023–24) less than the \$4.0 million (\$2023–24) included in PWC’s initial proposal.⁶⁶

We did not include PWC’s proposed \$4.0 million (\$2023–24) step change in our draft decision. This was because while we considered it prudent for PWC to maintain vendor supported software solutions for any necessary IT capabilities, PWC did not provide sufficient information to satisfactorily demonstrate the step change was efficient. In our draft decision, we sought further information from PWC in its revised proposal to inform our assessment for the final decision, including:⁶⁷

- evidence that the IT systems PWC intends to migrate to the cloud are at ‘end of life’
- evidence of the options PWC considered to replace these IT systems, including documentation of how its costings were arrived at, and a net present value or benefit-cost analysis demonstrating that the preferred option was efficient.

PWC’s revised proposal noted that the \$0.7 million (\$2023–24) decrease relative to its initial proposal was due to updated cost estimates based on the outcome of a competitive tender process and changes to other published costs.⁶⁸

PWC provided in its revised proposal,⁶⁹ and through subsequent AER information requests and consultation,⁷⁰ further supporting information on the proposed step change. This included:

⁶⁴ PWC, *Response to AER information request, IR#035 – Operational Technology Capability Uplift*, 13 February 2024, Question 2, p.3.

⁶⁵ PWC, *Revised proposal – 01 – Revised regulatory proposal*, 30 November 2023, p. 38.

⁶⁶ PWC, *9.02 – Opex Step Changes*, 31 January 2023, p.19.

⁶⁷ AER, *Draft Decision Attachment 06 - Operating expenditure - Power and Water Corporation 2024–29 Distribution revenue proposal*, September 2023, pp. 28–30.

⁶⁸ PWC, *Revised proposal – 01 – Revised regulatory proposal*, 30 November 2023, p. 38.

⁶⁹ PWC, *Revised proposal – 5.2 – Cloud migration opex step change*, 30 November 2023.

⁷⁰ PWC, *Response to AER information request, IR#032 - step change - cloud - Confidential*, 25 January 2024.

- a detailed description of how the proposed cloud step change would enable the cloud based M2C systems to replace the existing RMS functionality, and to demonstrate that the proposed step change was funding 'like for like' functionality of similar scope⁷¹
- verification that the existing RMS systems were no longer supported and were coming to 'end of life'⁷²
- the process PWC undertook to select the proposed M2C, and the cloud solution to demonstrate that it was efficient
- an itemised breakdown of the cloud step change cost components,⁷³ and details of how these costs were estimated including evidence of the use of current market rates to demonstrate that the proposed costs are likely efficient⁷⁴
- confirmation that there are no costs related to the step change in PWC's 2021–22 base year, or in the capex proposed for the next regulatory control period.⁷⁵

We have reviewed the information provided by PWC, and conclude that the proposed cloud migration costs are reflective of current market prices and are efficient.

For the final decision, and consistent with PWC's revised proposal, we have therefore included PWC's proposed amount of \$3.3 million (\$2023–24) (adjusted for the latest inflation data) in our alternative estimate. This is because we consider these costs are prudent and efficient.

6.4.5 Category specific forecasts

PWC's proposal included one category specific forecast, which was not forecast using the base-step-trend approach. This was for debt raising costs. We have included a category specific forecast for debt raising costs in our alternative estimate of total opex that is consistent with PWC's revised proposal.

6.4.5.1 Debt raising costs

We have included debt raising costs of \$3.5 million (\$2023–24) in our alternative estimate. This is the same as the \$3.5 million (\$2023–24) proposed by PWC. This is set out in Table 6.6.

Table 6.6 Debt raising costs (\$million, 2023–24)

| | 2024–25 | 2025–26 | 2026–27 | 2027–28 | 2028–29 | Total |
|---------------------------------------|---------|---------|---------|---------|---------|-------|
| PWC's proposal and AER Final decision | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 3.5 |

⁷¹ PWC, *Response to AER information request, IR#032 - step change - cloud - Confidential*, 25 January 2024.

⁷² PWC, *Revised proposal – 5.2 – Opex step change cloud migration*, 30 November 2023, p. 6; PWC, *Response to AER information request, IR#032 – step change – cloud – Confidential*, 25 January 2024.

⁷³ PWC, *Revised Proposal – 5.4 – Opex step changes model – Confidential*, 30 November 2023.

⁷⁴ PWC, *Revised proposal – 5.2 – Opex step change cloud migration opex step change*, 30 November 2023, pp. 6–8; PWC, *Response to AER information request, IR#032 - step change - cloud - Confidential*, 25 January 2024.

⁷⁵ PWC, *Revised proposal – 5.2 – Opex step change cloud migration opex step change*, 30 November 2023, p. 8.

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| | 2024–25 | 2025–26 | 2026–27 | 2027–28 | 2028–29 | Total |
|--------------------------|---------|---------|---------|---------|---------|-------|
| AER alternative estimate | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 3.5 |
| Difference | – | – | – | – | – | – |

Source: PWC, *Revised proposal – 5.3 – 2024–29 SCS Opex Model*, 30 November 2023; AER analysis.

Note: Numbers may not add up to totals due to rounding. Values of '0.0' and '-0.0' represent small non-zero amounts and '-' represents zero.

Debt raising costs are transaction costs incurred each time a business raises or refinances debt. Our preferred approach is to forecast debt raising costs using a benchmarking approach rather than a service provider's actual costs in a single year. This provides consistency with the forecast of the cost of debt in the rate of return building block.

We used our standard approach to forecast debt raising costs.

Shortened forms

| Term | Definition |
|--------|---|
| AER | Australian Energy Regulatory |
| AESCSF | Australian Energy Sector Cyber Security Framework |
| capex | capital expenditure |
| CCP27 | Consumer Challenge Panel, sub-panel 27 |
| CER | Consumer energy resources |
| CPI | Consumer price index |
| DNSP | Distribution Network Service Provider |
| DOE | Dynamic Operating Environment |
| EBSS | efficiency benefit sharing scheme |
| EV | electric vehicle |
| FTE | Full time equivalent |
| IT | Information technologies |
| GIS | Geographic information system |
| M2C | Meter to cash |
| NER | National Electricity Rules |
| NT | Northern Territory |
| opex | operating expenditure |
| OT | Operational Technology |
| PV | photovoltaics |
| PWC | Power and Water Corporation |
| RMS | Retail management system |
| SCS | standard control service |
| SP-2 | Security profile 2 |
| WPI | Wage price index |